

# **From ICT to E-culture**

**Advisory report on the digitalisation of  
culture and the implications for cultural  
policy**

**Netherlands Council for Culture**

**Submitted to the Netherlands State Secretary for  
Education, Culture and Science, June 2003.**

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## Preface to the English edition

This publication by the Netherlands national Council for Culture is the English version of the Council's advisory report on e-culture, as submitted to the Dutch Secretary of State for Education, Science and Culture in June 2003 \*. Given the international, and indeed global, nature of cultural (policy) issues that are prompted by developments in digital media and communications, it was deemed important to make this report available to a wider international audience. The Council's advisory report underscored the importance of redefining and reassessing the future shape and direction of cultural policy in the light of the changing media landscape in the digital age – in relation to the creative arts, cultural heritage, as well as information and media policies. With this English publication, the Council for Culture wishes to further the international public and policy debate on the meaning of the digital domain for the future of arts and culture.

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Chairperson, Netherlands Council for Culture (Raad voor Cultuur).

The Hague, August 2004.

\* *eCultuur: van i naar e. Advies over de digitalisering van cultuur en de implicaties voor cultuurbeleid* (Raad voor Cultuur, Juni 2003, Den Haag). Editorial note: some minor sections of the advisory report have been slightly abridged in the English version (as indicated in the text by [...]).

*“If the medium is the message, the user is the content.”*

Marshall McLuhan, media guru, 1971. (1)

*‘Is the computer revolution more like a musical instrument or more like the printing press?’ ...If it’s like a musical instrument, then we don’t have to worry about it too much, because people who are tuned to the music will find it, and good things will happen as a result. But if it’s more like the printing press, then we absolutely have to understand what it is about the music and what it takes to learn that music.’*

Alan Kay, computer pioneer, 1997. (2)

(1) Letter to ‘The Listener’, 11 August 1971. In M. Molinaro, C. McLuhan and W. Toye *Letters of Marshall McLuhan* (Oxford University Press, Toronto, 1987).

(2) Alan Kay, ‘Why the computer revolution hasn’t happened yet.’ *If/Then 0.1 – Design implications of new media* (BIS/Netherlands Design Institute, Amsterdam, 1998).



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## 1. Introduction

A couple of years ago, ‘ICT and culture’ was the usual phrase in any discussion of policy relating to digitisation or new media in the field of arts and culture. By 2002, when the State Secretary for Education, Culture and Science (in charge of Culture and Media) submitted his request for recommendations on the subject, the term used was ‘e-culture’. This was no coincidence. The term *e-culture* implied the need for a new type of policy. The Council for Culture fully endorses this. In fact, we would strongly argue that, when it comes to cultural policy, developments surrounding ICT and digital media must be considered within a broad and integral perspective. E-culture is not just ‘something to do with computers.’ The cultural implications of digitalisation are far greater than the mere instrumental exploitation of technical opportunities. E-culture is all about a new, digital dimension; a new and - until recently - undreamt-of medium with which existing culture must seek to interact and in which new culture is being generated. But e-culture is also more than just a new medium. Digital technologies and the Internet are opening the door to new forms of expression, changing the roles played by cultural institutions, and placing the audience and user increasingly centre stage.\*

### 1.1. Outline

The Internet and digital media have an impact on how artists and culture-makers express themselves, how our cultural heritage is presented and made accessible, how libraries make information accessible to the public, and how the media present the news, public debate and culture. In short, digitalisation affects the entire spectrum of culture production, distribution and presentation. Moreover, it brings with it the promise of cultural renewal. The past five to ten years have shown that the digital domain gives rise to new forms of expression, reflection and exchange. In addition, digitalisation paves

\* Editorial note: in this English version edition, the Dutch term ‘digitalisering’ has been translated in most instances with the word ‘digitalisation’, denoting the nature and process of bringing activities and developments into the digital domain. The more restrictive and more common English word ‘digitisation’ has been limited in this edition to those cases where specific reference is made to the transfer of data and information sources into digital form.

the way for new interrelationships and cross-fertilisations between the different cultural domains (arts, media, information and cultural heritage), and between culture, education, the sciences, and the (knowledge) economy. And finally, digitalisation stimulates cultural institutions and culture-makers to reassess their work methods and roles.

In this document, we formulate a perspective on the development of cultural policy based on this challenge. In shaping its policy on e-culture, the government faces the task of recognising and supporting the inherent promise or 'added value' of digitalisation. This document offers the government a guideline, by outlining what core issues cultural policy should address in order to benefit from the opportunities e-culture offers.

### *Request for governmental advice*

The request for advice by the State Secretary for Education, Culture and Science was prompted by the policy document 'eCultuur in beeld' (Focus on E-culture)<sup>1</sup>, published in April 2002, and related letters on the digitalisation of heritage collections<sup>2</sup>, 'Bibliotheken in Beweging' (The Changing Role of Libraries)<sup>3</sup>, and new services offered by the public broadcasting organisations.<sup>4</sup> 2002 also saw the publication of a document on the development of content on the Internet. This document was one of the building blocks of the new Dutch cabinet-wide 'ICT agenda', for which joint responsibility is borne by the Ministry for Education, Culture and Science, the Ministry of the Interior and the Ministry of Economic Affairs.<sup>5</sup>

The Council for Culture [referred to in this report as 'the Council', for short] was asked to offer recommendations on the proposals outlined in the above documents and letters. [...] In addition, the Council was asked to respond to the action items listed in the e-culture letter, and to devise an approach to structuring and directing current and future policies on e-culture.

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<sup>1</sup> Kamerstukken II, 2001-2002, 27 432, no. 52 (22 April 2002) [English version: E-culture. See [www.minocw.nl/english/doc/2002/lettereculture.pdf](http://www.minocw.nl/english/doc/2002/lettereculture.pdf)]

<sup>2</sup> Kamerstukken II, 2001-2002, 27 432 no. 54 (27 May 2002)

<sup>3</sup> Kamerstukken II, 2001-2002, 28 330, no. 1 (3 April 2002)

<sup>4</sup> Kamerstukken II, 2001-2002, 28 000 VIII, no.19 (21 November 2001)

<sup>5</sup> Kamerstukken II, 2001-2002, 26 643, no. 37 (7 May 2002)

The Council has taken the latter request as its point of departure. All too often, policy documents on ICT and digitalisation are restricted to the level of specific, sector-related developments. However, the Council argues that the challenge of digitalisation lies not only in distinct sectors and disciplines, but at least as much in their interconnections. It therefore hopes that this document will serve as an impulse for the development of an integrated approach to e-culture policy, in which specific policy implications for various domains and institutions are considered within a broader frame. [...]

### *Scope*

The scope of the recommendations offered in this advisory report relate primarily to the government-funded cultural sector, including the public broadcasting organisations, because these are closely intertwined with the cultural sector, particularly when it comes to e-culture.

Although the private media and telecom companies, the ICT sector, and the cultural industry are not the focal point of this study, they are, of course, part and parcel of the digitising culture (see Chapter 2).<sup>6</sup> Links between e-culture policy and related policy domains, such as education and science, government information and public governance, and the development of the knowledge economy, will all be dealt with in passing. The same applies to copyright issues.<sup>7</sup> Although such issues have direct bearing on the development of e-culture and are touched upon in various sections of this study, it is beyond the scope of this study to review regulatory developments, assess the dilemmas surrounding implementation, and formulate possible policy solutions. [...]

### **1.2. Structure**

This study consists of five parts. Once the broader context for e-culture has been sketched in Chapter 2 (digitalisation, mediatisation, the network community, and the knowledge economy), the Council will formulate its perspective on e-culture in Chapter 3. It outlines the idea of the digitalisation of culture and lays out how the rise and use of digital media

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<sup>6</sup> Various issues within this broader context are relevant to e-culture, including the pace of digitalisation of the infrastructure, the degree of network access granted to providers, and the issue of rates. However, these issues are essentially the domain of competition, telecom and media policy.

<sup>7</sup> For archives, privacy legislation is also an issue. This legislation may sometimes restrict the accessibility of digital archives. In some instances, information is no longer stored at all, to prevent privacy infringements.

has had far-reaching impact on various key processes within the cultural sector. Chapter 4 deals with the practical consequences of this perspective for the cultural heritage sector, libraries, the arts, and public broadcasting organisations. This chapter will include recommendations for each sector. Chapter 5 concludes the study, sketching the policy implications of the Council's perspective and presents general recommendations for the development of policy on e-culture.

This advisory report was prepared by the Council's ad-hoc committee on e-culture, chaired by Michiel Schwarz (Sociologist of technology). Other members were Ineke Schwartz (Arts Writer), Riemer Knoop (Cultural Heritage Consultant), Bart Lootsma (Professor of Architectural History) and Dick Rijken (External expert consultant, Reader on information technology and society). The text has been drafted by the Council's secretariat; the translation was done by Cathy Brickwood and Richard de Nooy.

## 2. E-culture in the context of social development

Digitalisation is both a technological and a social development. Facilitated by advances in computer technology and telecom networks, the true relevance of digitalisation lies in the way new media and information technology are practically incorporated and utilised in society. Not only our technical infrastructure is becoming digitalised, but also our society and culture. In a recent study on ‘cultural change in the age of digitalisation’, conducted by the Netherlands Advisory Council for Science and Technology Policy (AWT), digitalisation was aptly defined as “the ongoing integration of information and communication technology into society.”<sup>8</sup>

The Council for Culture similarly does not limit the term ‘digitalisation’ to the application of ICT in the cultural sector. Digitalisation also encompasses the rise of new media, spearheaded by the Internet. The Council also applies the concept in reference to a broader social process, a plethora of developments in which ICT is not the sole catalyst, but does play an integral part. Four interrelated developments are germane within this plethora of developments: the mediatiation and rise of visual culture and ‘experience culture’, and the development towards a network and knowledge society.

### 2.1. Mediatiation

As the Council remarked in its Preliminary Recommendations for the Cultural Budget 2005-2008, our perception of the world and the way we experience it is becoming increasingly mediatized. The media are increasingly influencing our understanding and stance regarding what lies beyond our immediate surroundings. Directly and indirectly, and in combination with other factors, the media thus affect our behaviour and modes of action. Furthermore, the print media (newspapers, books etc.) have lost ground to the dominant audiovisual media in terms of the amount of time people devote to them; on average, Dutch people watch three hours of television a day.

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<sup>8</sup> Bijker, W. and B. Peperkamp (Eds.). *Geëngageerde geesteswetenschappen. Perspectieven op cultuurveranderingen in een digitaliserend tijdperk*, Rotterdam: Adviesraad voor het Wetenschaps- en Technologie-beleid (The Advisory Council for Science and Technology Policy, AWT) 2002, p.9.

The Internet may be seen as the new medium for information, communication, and entertainment. Between 1995 and 2002, the percentage of Dutch people connected to the Internet rose from 10 to 60 percent.<sup>9</sup> On average, people spend 20 to 30 minutes a day emailing and surfing the web.<sup>10</sup> The younger generation makes even more use of computers and the Internet, and this seems to have begun superseding other media, including television. Another striking feature of the younger generation is their extensive use of mobile phones, which has prompted changes in their social lives and the way they relate to their family.

Yet, we must also place things in proper perspective. At no time in recent history have novel forms of media replaced the old media. With the advent of radio, the demise of the book was predicted; film was expected to replace radio; and television was expected to replace film. But all these media still exist, and they will continue to coexist in the digital age, although their interrelationship will change. The development of the Internet, for instance, creates a media landscape in which the 'old media' gain new relevance. There are also more direct links between old and new media, such as online newspapers, internet radio, or interactive television. This underscores the extent to which the digital media have been incorporated into society within a relatively short space of time. Many cultural organisations will want to respond to these developments. Not only because the Internet is a medium offering access to existing and new audiences, but also because the way we experience art and culture is increasingly influenced by the mediatised context in which we encounter them.

## **2.2. Visual and experience culture**

Ours is a visual culture, owing largely to the dominance of television, film and advertising. Even Dutch political parties are increasingly making use of logos and images, and in the melee of competing journalistic media, the image of politicians is sometimes more important than their opinions or arguments.<sup>11</sup> The rise of the experience economy runs parallel

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<sup>9</sup> Ministerie Economische Zaken (November 2002). Internationale ICT benchmark.

<sup>10</sup> Sociaal en Cultureel Planbureau (Social and Cultural Planning Office. Trends in de tijd. Een schets van recente ontwikkelingen in tijdsbesteding en tijdsordening. (2001, pp.90-92) Den Haag.

<sup>11</sup> Raad voor Maatschappelijke Ontwikkeling (Netherlands Council for Social Development, RMO): Medialogica. Over het krachtenveld tussen burgers, media en politiek. Den Haag. See also Praag, Ph. van & K. Brants (Eds.)(2000) Tussen beeld en inhoud. Politiek en media in de verkiezingen van 1998, Amsterdam, Het Spinhuis.

to this development. Almost all consumer and leisure domains are to some extent affected by our growing desire for a swift interchange of stimuli, exciting stories, or thrilling experiences. In the real world, a visit to a shop seems to be gaining the same status as a visit to a funfair, museum or cinema. There are many that see all of these as leisure activities that are very similar in terms of status (cultural or otherwise) and experiential impact.

To this we can add multimediality within the digital domain. Everything can be expressed in bits and bytes and in combinations of text, images and sound. Once visual and other information exists in a digital format, it can be presented on various platforms and made accessible to many different categories of users. This partly explains the diminishing distinction between education and entertainment, and between art and popular culture, in terms of technology as well as content; the different disciplines are increasingly speaking the same language and, for users, they are only a mouse click away from each other.

Here, too, we need to put things in perspective. The rise of visual and experiential culture has gone hand in hand with a reassessment of tranquillity, tradition and originality. In short, there remains a need for experiencing a still exhibition, a live performance by a symphony orchestra, or a linear documentary – perhaps even more so than before.

### **2.3. The network society**

Digital technology also plays an important role in the development of networks between people and organisations, especially when it comes to the exchange of knowledge and information. This observation has prompted many authors to describe modern society as a network society.<sup>12</sup> The underlying idea being that there are ever-expanding opportunities for the ‘horizontal sharing’ of knowledge and information. Because this process is not bound by space or time, national boundaries no longer play a role, which means digitalisation is a catalyst for the ongoing process of internationalisation. Furthermore, communication within networks is relatively free of hierarchical structures. Within

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<sup>12</sup> Examples include Castells, M. (1996). *The rise of the network society*. Cambridge: Blackwell Publishers. Shapiro, A. (1999) *The Control Revolution. How the Internet is putting individuals in charge and changing the world*. Public Affairs/Century Foundation. Dijk, J.A.G.M. van (1997) *De netwerkmaatschappij: sociale aspecten van nieuwe media*. Houten/Diegem: Bohn Stafleu Van Loghum. Infodrome (2001). *Controle geven of nemen. Een politieke agenda voor de informatiesamenleving*; Amsterdam.

digital culture, the question as to who exactly added the information to the network is becoming increasingly irrelevant.

From politics and trade to education and culture, in all fields we see the rise of network relationships between relatively autonomous, self-steering groups, with an ever-changing configuration. As this process progresses, it will exert increasing pressure on existing institutions, collective bodies and experts in all social domains. Moreover, the rise in cross-border communication and trade will also erode the operational authority and competence of the nation-state.<sup>13</sup>

Of course, this development allied to the longer-running process of individualisation. Whether it be politics or religion, lifestyle or consumption, post-modern people are flexible in the choices they make and move between various groups with increasing ease. The Internet, with its many niches, personalised and interactive services, and communities, both exemplifies and fuels this process.

Opinions vary as to whether the sum total of this development is negative (less social cohesion and control) or positive (more interaction and freedom of choice). Whatever the case may be, it is an inevitable process that has provoked its own response: owing to the growing flood of information, whose origin and value is increasingly difficult to assess, there is a growing need for authoritative mediators.<sup>14</sup> The desire to guarantee reliability and authenticity sometimes gives rise to self-regulation, as is the case at internet auctions where participants mutually rate each other's reliability. In other instances, the 'old' institutional experts – museums, libraries, publishers and art dealers – may be consulted to establish the origin or relevance of specific information.<sup>15</sup>

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<sup>13</sup> Wetenschappelijke Raad voor het Regeringsbeleid (The Netherlands Scientific Council for Government Policy, WRR) (1998): *Staat zonder land. Een verkenning van bestuurlijke gevolgen van informatie en communicatietechnologie*. Den Haag: SDU Uitgevers.

<sup>14</sup> Also see WRR, Hoefnagel, F.J.P.M. (2002). *Internet en cultuurbeleid. Over de gevolgen van ICT voor het cultuurbeleid van de Nederlandse overheid*. Den Haag: SDU Uitgevers.

<sup>15</sup> In the media and communications market another counterforce is in action: the concentration of ownership and market power in the hands of an ever-diminishing number of global concerns that have the opportunity to control information flows. See, among others: Rathenau-instituut (2002): *Marktontwikkelingen in de digitale infrastructuur. Knelpunten bij de toegankelijkheid en de pluriformiteit van de digitale snelweg*. Den Haag. Commissariaat voor de Media (2002, 2003): *Monitor mediaconcentratie 2001 en 2002*. Hilversum; Leurdijk, A. (2001). *Verkeersdrempels en tolpoorten in het digitale domein*; In: *Informatie en Informatiebeleid*, 19<sup>e</sup> jaargang, 2001, no.6., Amsterdam: Otto Cramwinkel.

## 2.4. The knowledge society and economy

The application of digital technology has become a crucial factor in all fields working with information and knowledge. Digital media and the Internet allow different information sources to be linked with one another and made accessible to various categories of users. In the knowledge economy, this is of particular importance for knowledge sharing; i.e. the exchange and joint utilization of knowledge and information to the benefit of public services, education, economic growth, job opportunity, and welfare. This is where the digitalisation of culture affects our economy and society as a whole.

More than ever before, subsidised cultural organisations are interacting with a broader knowledge network, with schools and educational publishers (via Kennisnet), with universities (particularly the social sciences), and with ICT companies (for the purpose of software development and web design).<sup>16</sup> The cultural sector is also unmistakably contributing to the broader creative and content industry in the Netherlands. The power of the digital media is that a shared core of skills and instruments is promoting, and in some instance even necessitating, the cross-fertilisation and interconnection of these different fields.<sup>17</sup>

## 2.5. Conclusion

The digitalisation of society and culture is an ongoing process with which all artists and cultural organisations will be confronted, whether they want to or not. The same applies to cultural policy. In fact, the Council argues that policy should be designed to support this process, because this is the only way we can access the added value of digitalisation.

Looking at cultural policy from the confined and accepted sense, as policy that has bearing on the domains of cultural heritage, libraries, the arts, and public broadcasting organisations, we can clearly see that digitalisation has made inroads into all these sectors. Chapter 3 will show that digitalisation is at work in the pragmatic heartland of each of these sectors. That is why e-culture policy is essential at the governmental

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<sup>16</sup> Wetenschappelijke Raad voor het Regeringsbeleid (WRR): Van Oude en Nieuwe Kennis. De gevolgen van ict voor het kennisbeleid. Den Haag: SDU Uitgevers. The WRR (The Netherlands Scientific Council for Government Policy) has argued in favour of more cooperation between different actors and knowledge sectors, as well as delimiting government policy and more space for experimentation in a 'socio-technical' environment, whereby not only formal and documented knowledge is exchanged and developed, but also informal and undocumented knowledge (i.e. the personal knowledge of experts).

<sup>17</sup> Digital Media Alliance (1999) Recommendations for Growth: UK Digital Media. London: DMA. Commissioned by the British Ministry of Culture, Heritage and Sport.

level, but also in relation to the majority of cultural institutions. The next chapter outlines a conceptual frame, a perspective from which e-culture policy can be developed.

### 3. A perspective on e-culture

As outlined in the introduction, e-culture entails far more than the mere instrumental application of ICT in the cultural domain. It may be more accurately defined as a new ‘cultural arena’ featuring old and new players.<sup>18</sup> Moreover, the use of digital technology not only alters the content and form of cultural expression and presentation, but also their meaning.<sup>19</sup> When formulating policy for digital media and technology, it is therefore important to consider the cultural implications of digitalisation within a broad and integral perspective. This broad outlook on e-culture – which the Council has encapsulated in the phrase “From ICT to E-culture – will be formulated here, before we move on to a discussion of sector-specific policy issues.

#### 3.1. Three guises of e-culture

The Council for Culture argues that, within the context of the ‘digitising society,’ e-culture should be seen as *the integration of ICT into the primary processes of production, distribution, presentation, preservation and (re)utilization of cultural expression*. In addition to processes relating to cultural expression and reflection, e-culture also encompasses the provision of information on culture and, in the case of libraries and the public broadcasting organisations, the more general provision of information.

This ‘definition’ marks out the required scope of issues relating to e-culture. In terms of scope, the Council’s outlook differs from that of the State Secretary for Education, Culture and Science, as outlined in his 2002 paper on e-culture (see note 1), which is restricted to a description of the role of e-culture in various sectors; digital arts and design, digitalisation of heritage collections, access to information, and new services offered by the public broadcasting sector. The Council takes in a broader horizon. This makes it possible to study the more general lines along which e-

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<sup>18</sup> Schwarz, M. (1999). Digitale media in de technologische cultuur. Perspectieven voor een kunst- en cultuurbeleid. English version: Digital Media in the Technological Culture — Perspectives for arts and cultural policy (Ministry of Education, Science and Culture, Zoetermeer 2000).

<sup>19</sup> Also see the report by the Taskforce eCultuur: Druk op Start. Ministry of Education, Culture and Science, Zoetermeer 2001.

culture is currently developing and to assess the implications of integration of digital technology and the Internet into the cultural sector. In its assessment, the Council distinguishes three aspects or guises of e-culture.

(1) Firstly, there is the instrumental application of ICT within the existing framework. This will be referred to as 'digitisation of information'.

(2) Then there is the aspect of cultural innovation, where digital technology gives rise to new forms and combinations of content and presentation.

(3) And finally, there is the fact that digitalisation can prompt cultural organisations and culture makers to take on new roles, adopting new tasks and work methods.

The key message of this study is that cultural institutions will increasingly be confronted with all three guises of e-culture, partly because changing social realities demand this, and partly because the added value of digital developments can only be fully exploited when taking account of all three guises of e-culture.

#### *(1) Digitisation of information*

The instrumental aspect of e-culture is currently the most dominant, with digital technology and the Internet being incorporated into the existing activities of cultural institutions. This technological aspect of e-culture now has a place in almost every organisation. ICT enables institutions to simplify and improve their primary activities. This goes for all cultural domains, although not always in the same way. By digitising information and presenting it in a digital format, museums, archives, libraries, broadcasting organisations, publishers etc. can conduct their activities and render services faster, better, more efficiently, and sometimes at a lower cost. Especially in the heritage sector, the digitisation of collections and related information can make them a lot more accessible. Information technology can also be used to link local library catalogues to a central web portal. Other examples include: internet bookshops; the presentation of animated films, music, poetry, and other forms of artistic expression on the web; and the digitalisation of the entire broadcasting process, from production and broadcasting to distribution and reutilization. On top of all this, the internet has been instrumental in making culture and cultural education more appealing to the younger generation.

## *(2) Cultural innovation*

Digitalisation also gives rise to new forms of expression, reflection and exchange within and between existing cultural fields. This second aspect of e-culture has more to do with imparting meaning, than with information technology. Digital technology has immense potential in terms of intermediality (the combination of text, images and sound), intertextuality (hyperlinking), and interactivity (interaction with users), which in turn presents great opportunities for cultural innovation, new content and new forms of expression - on condition that these opportunities are explored and developed in deliberate ways.<sup>22</sup>

The main opportunities for cultural innovation lie in (a) the potential to link, share and make information accessible to the public; (b) the emergence of crossovers and cross-fertilisations between disciplines and domains; and (c) medium-specific innovations that give rise to forms of expression and reflection that are unique to the digital domain. These three developments, which sometimes overlap in the digital domain, lie at the heart of the transition 'from ICT to e-culture'.

### *a. Information sharing*

One of the key features of digitalisation is that it enables cultural organisations to more easily share content and information with each another and jointly make it accessible to users, such as researchers, artists, students, teachers and the general public. Institutions are able to share their knowledge and collections with one another via the Internet, via search engines and hyperlinks. Moreover, the content generated by one party may be placed in a new context on the website of another party, thus adding new meaning or making it accessible to a different or larger audience. The Internet also presents greater opportunities for contact with users. In principle, users could link their own knowledge and collections to those of professional organisations.

One example of this form of digitalisation is the cross-sector virtual exhibition 'Digitale Kanalen' (Digital Canals) created by 'Stichting de Museumserver' (the Museum Server Foundation). This exhibition about Amsterdam and the history of its waterways combines material from various museums and archives with knowledge and information from municipal services, forming a narrative and interactive whole, featuring

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<sup>22</sup> Johnson, S. (1997) *Interface Culture : How new technology transforms the way we create and communicate*. San Francisco: HarperEdge.

moving images and 3-D maps. Similarly, there are archives that link the research results of amateurs with the sources on which they are based, enabling future researchers to dig even deeper. Another intriguing project involves the storage of fragments from (Dutch) Radio 3 in the online encyclopaedia of the National Pop and Rock Institute, which features information about bands and artists. And then there are the dossiers on the central library portal 'bibliotheek.nl', which gather selected information from various internet sources in a journalistic manner. It goes without saying that this sharing of information does not stop at our national borders. This is exemplified by Poetry International Web, a digital platform or magazine that brings poets and critics from different countries into contact with one another.

### *b. Crossovers*

The new technology stimulates the blending of various forms of presentation. On the Internet, disciplines such as visual arts, animation, audiovisual production and advertising have more in common with one another than ever before, because they 'speak the same language.' Even museums, archives and newspapers have begun using digital media, not only as an extra platform or distribution channel, but also as a means to get the general public involved as an information provider or producer. This again fuels the rise of a new and potentially endless variety of forms of expression, reflection and exchange. It makes the boundaries between disciplines and domains more permeable and gives rise to new crossovers. There are myriad examples, from the performer Eboman, who combines music with video fragments, to the interactive TV and internet game Crisis, produced by the NPS broadcasting organisation, which combines infotainment and role-playing, and involves television participants, professional crisis experts and the general public. The key to these crossover media productions lies in combining various media and forms of expression. An excellent example of a crossover media production in the field of cultural heritage is the Teylers' Adventure Game (produced by Teylers Museum in Haarlem). This interactive quest is aimed at school children in the 13-18 age category and is partly set in the halls of the museum and partly on its computers. This adds new meaning to the museum's objects, placing them in the context of an exciting story and bringing them to life. And it shows that digitalisation can also bring art and education closer together. [...]

### *c. Medium-specific innovation*

This brings us to medium-specific innovation in the digital domain. In short, the advent of new forms of expression, exchange and reflection that could not exist outside the digital domain. In such instances, the potential of the digital domain is fully exploited and the boundaries of the different media are intentionally explored and extended. One intriguing and entertaining example is the 'Identiteitsfabriek Zuidoost' (Identity Factory South-East) in Eindhoven, which allows local inhabitants to 'read' the 'cultural biography' of their surroundings. Users are presented with collected traces of humanity – memorial plaques, monuments, archaeological remains, objects in private and public collections, contemporary art, stories, customs, rituals, and topographical sites – which are made accessible in such a way that users are challenged to combine these traces in a personal and ever-changing manner.<sup>23</sup> Other examples include digital media productions in which elements of animation, digital video, web art, and multimedia design are presented as a single multimedia experience. And then there are the multi-user computer games, which are sometimes played over a period of several days or even months by countless people who have no further knowledge of one another.

### *(3) The changing role of cultural organisations*

The dynamic nature of e-culture lies not only in the way digital media and technology give rise to innovative forms of culture and art, but can also be seen in the way digitalisation changes the practical realities of cultural organisations in terms of their internal functioning, as well as their position in the field. This third aspect of e-culture is the furthest removed from the technological aspect, from ICT, even extending beyond the digital domain. We are referring to the broader process of change that organisations undergo when they opt to set a new course facilitated by ongoing digitalisation. The underlying idea being that organisations which begin making use of the Internet and digital media, ultimately also start functioning differently. Gradually, cultural organisations and artists will be required to adopt new skills and knowledge, other work methods and organisational structures. They will have to reassess their role in the cultural sector and society at large. In this case, e-culture is a means of thinking, acting and observing.

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<sup>23</sup> [www.idzo.nl](http://www.idzo.nl)

This fundamental shift may be explained as follows: in the digital age, the value of many cultural institutions lies increasingly in their role as mediators between networks that produce culture and impart meaning. Until now, institutions were primarily starting points or end points; they were makers, owners or publishers of end products (books, exhibitions, documentaries etc.). However, institutions are now also increasingly taking on the role of intermediaries in the process of imparting meaning. They will progressively find themselves contributing their knowledge and content within in a cultural arena where a host of highly diverse players are in action, including institutions from outside the sector, as well as the audience or users.

In this guise, digitalisation is a crucial factor in the changing role of cultural organisations. The reason being that the added value of such organisations within the virtual domain is highly dependent on the extent to which they are able to make knowledge sharing, crossovers, and structural cooperation part of their 'core business'. Digitalisation in this guise implies the redesign of their own activities within the e-cultural context. This is exemplified by the VPRO public broadcasting organisation, which has taken on the role of a knowledge centre that offers its 'tools' and journalistic skills to contemporary music venues in The Hague, enabling them to produce local versions of the internet music radio station '3 voor 12'. Another example is the Leidse Poort project, which has ensured the accessibility of the highly diverse heritage collections (archaeology, ethnography and natural history) of the national museums for antiquities, ethnology and natural history. In this case, the content – i.e. focal points and themes – predominates (rather than the institution) and knowledge sharing is leitmotiv. Meaningful links can be laid between diverse objects via an open, web-like architecture, in the form of a single reference list with clear place and time variables. The open approach, the autonomy of the participants, and the freedom of choice have proved to be a great success. This constitutes a new means of cooperation and gives rise to a new form of knowledge production.

### **3.2. Reorientation of institutions**

The above developments may be seen as divergent, yet closely interrelated aspects of e-culture. All three are equally essential and significant and, in the Council's opinion, form an inextricable and dynamic whole. As the above examples illustrate, cultural institutions

approach digitalisation in different ways. While one organisation strives to digitise existing functions, another sets out to explore new forms, roles and cultural tasks.[...]

The digitalisation of culture demands recognition of the features and dynamics of the digital media (interaction with users, intertextuality etc.) as well as the intrinsic potential this has for cultural innovation.

Furthermore, audiences and the general public not only want original artists and curators, there is also a growing need for makers and institutions that serve as mediators, forging links with other organisations that cooperate, experiment and adopt a flexible and creative approach to the reutilization of their content.

In the Council's opinion, e-culture policy is generated when institutions start out by engaging in mental reconnaissance, exploring the line of reasoning sketched above, assessing what the shift from instrumental ICT to e-culture (particularly in the guise of cultural innovation) could mean for them. Based on this assessment, they could return to the outset and decide what they would require in the way of hardware, software, digital collections or content, expertise, projects, partnerships etc.

The Council is not suggesting that all cultural institutions should necessarily make inroads into the digital domain. It is also not a question of replacing existing tasks and methods with new alternatives. In the heritage sector, traditional conservation tasks and physical confrontations with objects remain of vital importance; art is still created with pen and brush; and public television channels will still attract the most viewers. The Council also recognises that e-culture presents opportunities as well as risks, and may even be restrictive - theatre and dance productions may flounder due to the contrived use of digital projections; fixation on computer-based design in architecture may lead to 'unconstructable' and 'dehumanised' buildings; and the use of screens and palmtop computers in museums can diminish the impact of interaction between visitors and objects.

In short, the Council has no desire to place e-culture on a pedestal. Yet, we point at the importance for cultural institutions to address the question they wish to relate to digitalising society, and by explicitly assessing what the digital media could offer. Some cultural organisations will swiftly conclude that digitalisation has little relevance for them, others may opt to take on a limited number of digital projects. But in many instances cultural institutions are expected to make e-culture an integral part of their policy and organisation.

## 4. E-culture in practice

In this chapter, the Council's general perspective on e-culture, as outlined in the previous chapter, will be more specifically applied to the four key sectors of cultural policy: cultural heritage, libraries, the arts and public broadcasting. The discussion will encompass three guises of e-culture (information technology, cultural innovation, and changing roles) in each sector, as well as specific issues and recommendations.

### 4.1. Cultural heritage

Digitalisation has had a far-reaching and complex impact on the handling of cultural heritage. The more striking forms of cultural heritage, such as two-dimensional art works in museums, have an obvious potential for digital translation. However, this is less evident for three-dimensional objects and information carriers like those we find in our archives. And things get even more complicated when it comes to more general tangible culture, particularly immovable heritage such as monuments, archaeological remains, and the cultural-historical landscape. In the latter two categories, it is not the heritage objects themselves that are digitised as images, but rather the secondary data relating to such objects, including descriptions, contexts, and ensembles, and their specific meanings.

#### 4.1.1. Cultural heritage – From ICT to E-culture

##### *Digitisation of heritage collections*

Primary digitisation of heritage data has been reasonably successfully implemented as a new institutional process over the past decade.<sup>24</sup> Museums and archives, in particular, have gone to considerable lengths in this regard and have also made good progress in terms of sector-wide cooperation. The sector has, to a certain extent, adopted professional protocols and standards for digital knowledge management and internet access, owing largely to its alert international orientation and the exchange of knowledge and initiatives within cooperative bodies such as

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<sup>24</sup> IBM/PWC Consulting (2002). ICT gebruik in musea. Een internationale vergelijking. 2002. Almere. Report commissioned by the Dutch Ministries of Economic Affairs and Education, Culture and Science).

the ‘Vereniging DEN’ (Dutch Digital Heritage Association) and DIVA (Netherlands Association for Record Management and Archives).

### *Links between networks*

The links between heritage institutions are already moving beyond the instrumental level. Data and knowledge gleaned from various institutions and sources in different sectors are increasingly being combined with one another. This has seen museums in different disciplines jointly producing combined thesauruses, regional clusters jointly making their collections accessible (as is this case in Delft)<sup>25</sup>, and institutions presenting themselves as virtual information centres on the internet (as is the case with the Leidse Poort project). This opens the door to all sorts of interesting opportunities for convergence, cooperation and integration with other knowledge sectors. Partners outside the heritage sector are ready and waiting. [...] Some museums have allied themselves with non-museum players operating in the same discipline, and have adopted the role of public digital showcases for that discipline [...].

### *Public involvement in cultural heritage*

The extent to which the public is involved in knowledge networks is becoming more and more important. Cultural heritage is increasingly being made accessible via a bottom-up procedure, where the public helps to decide what should be digitally accessible, as is the case with the ‘Nederlands Instituut Beeld en Geluid’ (Netherlands Institute for Sound and Vision, NIBG). Some archives have similarly adopted a very user-friendly approach, whereby access to the available information (read: a specific topic) is organised in such a way that visitors can, with a single click, find all relevant information in whichever database it is stored.<sup>26</sup> Furthermore, the public is playing an increasingly important role in establishing the meaning of our cultural heritage. Curators and other administrators are no longer the sole source of knowledge and imparters of meaning. Their contribution is now supplemented by those of academic knowledge workers and amateurs operating outside the

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<sup>25</sup> Integrated and thematic showcasing of the Delft Collection, a cooperative venture between the local municipal archives, museums, and archaeological services. See <http://collectie.delft.nl>. Or museum partnerships for specific types of objects or materials. See [www.aziatischekeramiek.nl](http://www.aziatischekeramiek.nl).

<sup>26</sup> One example of this one-stop-shopping model is the Family Names section of the Centraal Bureau voor Genealogie (Netherlands Centre for Genealogy and Heraldry).

institutions.<sup>27</sup> These people are not just users or consumers, they forge new links and create new contexts and meanings. As users, historians and professional and amateur genealogists create digital links between their own research results, those of fellow researchers, and the sources upon which they base their work, thus adding a new layer of meaning to the original source material. [...]

This presents new challenges: amateurs must be assisted, motivated and trained, and the validity and status of user-generated content must be ascertained and preferably explained by a professional.

### *Crossovers*

At some institutions, cultural innovation takes the form of crossovers to other disciplines. As mentioned earlier, Teylers Museum has an adventure game that links the tangible reality of the museum and its objects with the 18<sup>th</sup>-century origins of the institution, placing it within the context of a sci-fi crime adventure. The recently renovated Boijmans van Beuningen Museum in Rotterdam offers visitors virtual access to the museum's actual depot. They are presented with a wide range of works and objects, as well as background information about specific pieces, the museum, the collection, and art institutions in general.

### *Architectural conservation and archaeology*

In contrast to the museums' and archives sector, digitalisation has only just begun in the architectural conservation and archaeology sector. This applies both in terms of basic digitisation of data (i.e. in an open, coherent manner, based on nationally-accepted standards) and in terms of crossover experiments, reutilisation and knowledge sharing. It has taken this sector some time to make the transition from an intrinsic to a functional value paradigm, with an interactive and audience-oriented cultural approach. This echoes the rather centralistic tradition that has hampered these heritage sectors in the past. However, the immovable heritage sector is catching up, recently undertaking a comprehensive update of its conservation registers, supported by digital technology. Digital crossovers and interactivity have also made inroads into this sector, as is borne out by the 'Identiteitsfabriek Zuid-Oost' project

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<sup>27</sup> In its study titled 'Van Oude en Nieuwe Kennis(2002), the Netherlands Scientific Council for Government Policy (WRR) sketches more general underlying trends, remarking that knowledge transfer and development is no longer solely the domain of scientific and other experts, but is increasingly being influenced by a wide variety of intermediaries, including the media, corporations, special interest groups, and amateur experts.

mentioned earlier. Although it must be said that private initiatives have outstripped the authorities here.

Furthermore, market liberalisation in the archaeological sector, in anticipation of the Malta Convention, has led to greater professionalism and stricter quality control. These are important impulses for accelerated digital innovation and standardisation of various archaeological processes, which in turn is an important prerequisite for the realisation of the recently formulated, ambitious programme to work through the immense backlog in uncompleted excavations.

And thus, slowly but very surely, the immobile heritage sector is moving closer to the archives sector, generating heritage information in digital format.

#### *The changing role of heritage institutions: both depot and way station*

The above examples reflect a broader development 'from ICT to E-culture' in the cultural heritage sector. One of the characteristic features of cultural innovation in the digital domain is that the traditional function of heritage institutions, as terminals for 'rounded' knowledge and experiences, has been superseded by their role as mediator. Heritage institutions are increasingly becoming way stations for semi-finished products, public reference points for other suppliers of knowledge, and partners in broader, multidisciplinary networks that are partly steered by users.

#### **4.1.2. Cultural heritage - issues and recommendations**

The above developments are, however, still highly unstructured and uncoordinated, and the most promising initiatives are taking place in the margin, outside the established framework, where they are not visible to all. This is understandable considering the experimental nature of these initiatives, the pace of technological development, and the dominance of other interests at larger institutions, which are focused primarily on continuity. The main concern, however, is the absence of a firm foundation.<sup>28</sup>

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<sup>28</sup> The Council's recommendations are intended to strengthen the foundations and may thus be seen as a response to action items 5, 6, 9 and 10 in the 'Cultuurbrief' (April 2002) and the letter 'Digitalisering van het cultureel erfgoed' (May 2002), Kamerstukken II, 2001-2002, 27 432, no. 54.

### *(1) Orchestration of ICT-related projects*

The sector has failed to work towards an enduring, standardized and interoperable digitisation of heritage data, because it lacks a critical mass of participating institutions and their materials. Moreover, the administrative fragmentation in the heritage sector, particularly among the archives, has resulted in major differences in the form and execution of digitisation projects. There is little interplay and alignment between private, municipal, provincial and state-funded institutions, which means there is little sharing and feedback on ‘best practices’.<sup>29</sup>

It is therefore of great importance to launch initiatives whereby all digitalisation efforts contribute to an enduring and open ‘Digitale Collectie Nederland’ (Digital Netherlands Collection), based on individual and collective long-term policy.<sup>30</sup>

The Council therefore recommends a norm-based, self-regulating quality control system, which is standardized, interoperable and capable of interfacing with international counterparts. The government should facilitate this system and ensure its sustainability. This demands a far greater and more strategic input from knowledge centres in various sectors, mostly government services and agencies.<sup>31</sup> Standardised working procedures (‘production infrastructure’) are also vital. Expertise on copyright is a key factor in this regard.<sup>32</sup>

- In addition, it is crucial that digital sustainability be placed high on the agenda. More and more information is being digitally produced,

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<sup>29</sup> In those areas of the archives sector where international standards have been set, it is complicated and/or costly to adjust archive inventories accordingly. Moreover, when institutions are subject to (varying) digitalisation policy at various administrative levels, this leads to fragmentation.

<sup>30</sup> In this regard, the Council fully agrees with prevailing perspectives in this area and with the majority of the detailed recommendations in the report issued by IBM/PWC Consulting in 2002 – ‘ICT-gebruik in musea. Een internationale vergelijking’, 2002. Almere – commissioned by the Dutch Ministries of Economic Affairs and Education, Culture and Science. This Council also underscores the recommendations on museums outlined in the report of the Telematica Instituut (2002) – ‘Inventarisatie Infrastructuur Digitaal Erfgoed. Een onderzoek naar visies, belemmeringen en oplossingen’ – commissioned by the Ministry of Education, Culture and Science.

<sup>31</sup> The Netherlands National Archive, and national institutions responsible for archaeological examination, monuments, art-historical documentation and the Instituut Collectie Nederland (Netherlands Institute for Cultural Heritage, ICN).

<sup>32</sup> The new European copyright guidelines propose further restrictions on duplication rights when it comes to the digital preservation of cultural heritage; authors are to be compensated for such duplication. This is not only costly, but also demands a great deal of time and effort in tracing the entitled parties. In this regard, the Council refers to action item 17 of its Letter on E-culture, recommending the creation of a depot of copyright-free content. A possible alternative would be a database indicating which material is copyright free and which is not, also specifying how and whom they should approach to obtain permission for reutilization.

especially in the archives sector. This goes for the data produced by the government,<sup>33</sup> but also for a growing range of heritage-related data in the immobile heritage and arts sectors (see 4.3), which is being generated in the digital domain itself. One acute problem is that of maintaining the accessibility of digital and digitised (formerly analogue) archives for newer versions of software and hardware. These developments demand special attention, as stated by the Council in its Preliminary Recommendations for the Cultural Budget 2005-2008. However, sustainability and digital quality are two areas in which the heritage sector has only taken its first, faltering steps. [...]

- If no efforts are undertaken to ensure digital sustainability, it is likely that the results of costly digitisation projects and highly creative experiments will go down the drain. This risk is heightened by the absence of successful business models in the non-profit sector. Furthermore, the heritage sector sometimes lacks a sense of proportion. The idea of moving cultural heritage into the digital domain often results in paralysis, owing to the sheer volume involved.<sup>34</sup> There are also instances where comprehensive digitisation projects are launched for collections, without knowing for whom and for what purpose. A more effective, audience-oriented and sector-specific approach is therefore required. [...] The government has a general responsibility to stimulate primary digitisation at institutions, particularly archives, that have not yet initiated this process.

## *(2) Prerequisites for cultural innovation*

The above recommendations facilitate the coordination of digitisation efforts, but they do not provide a sufficient basis for cultural innovation. The Council recommends that e-culture policy in the heritage sector should focus on two key issues: (a) The sector should develop its knowledge of e-culture in order to structure the initiatives launched by

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<sup>33</sup> Digital archives demand a different approach than paper archives. To begin with, it would be advisable to replace the traditional 'records lifecycle model' with the 'records continuum model', which does away with classification of archives according to time and place. (See Preliminary Recommendations for the Cultural Budget 2005-2008, Council for Culture, 2003)

<sup>34</sup> In its first policy plan (1999), the 'Vereniging DEN' (Dutch Digital Heritage Association) calculated that it would take 100,000 person-years and around NLG 10 billion (€4.5 billion) to complete audience-accessible digitalisation of 32 million museum objects, 600 km of paper archives, a half million hours of audio-visual archives, hundreds of kilometers of photo archives, and around 100,000 listed buildings and archeological monuments.

various organisations, and (b) experimentation and interdisciplinary cooperation should be more actively stimulated.

*a. Knowledge development*

- First and foremost, the government could refine its existing funding by imposing additional conditions, particularly at the Mondriaan Foundation (national funding agency for visual art projects), but also in the case of one-off project subsidies directly granted by the government.<sup>35</sup> Institutions applying for such funding should be obliged to outline their digitalisation policy. This could then be aligned with existing general quality control systems.<sup>36</sup> [...] The applicants should also formulate a long-term vision on cultural innovation, which is the crux of e-culture.
- The Council argues that the requirement to formulate digitalisation policy should apply to all heritage institutions that are funded via the government's Cultural Budget and which finance heritage digitisation via their regular exploitation subsidies. Institutions will, however, have to be assisted in acquiring basic expertise and stimulated to actually embark on intra- and interdisciplinary knowledge sharing. To this end, relevant government services and agencies will have to develop their role as centres of knowledge and expertise. These organisations should, both individually and collectively, acknowledge and structure the cross-sector consequences of ongoing digitalisation. The executive institutions in the cultural heritage sector [...] should be better equipped – especially financially - to handle their role as e-culture knowledge centres.
- The Council also recommends that the sector should be stimulated to bring about a more transparent division of labour. At present, too many institutions are doing their own thing and gaining too little profit from each other's efforts. [...]

*b. Stimulating experimentation and creativity*

- Larger institutions, such as the 'Instituut Collectie Nederland' (Netherlands Institute for Cultural Heritage, ICN), should be

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<sup>35</sup> In recent years, for example, these were financed via supplementary investment funds for culture ('Voorjaarsnota 2001') and via the interdepartmental budget for the 'Nationaal Actieprogramma Elektronische Snelwegen' (National Programme for Electronic Highways), coordinated by the Ministry of Economic Affairs.

<sup>36</sup> This could have a similar status as the existing collection plan for museums.

facilitated in creating extra opportunities for e-culture development and research throughout the sector, preferably in collaboration with much smaller pioneer organisations. Older institutions as well as younger players and project-based consortiums should be stimulated to undertake new, cross-sector initiatives.

- Interdisciplinary cooperation – between the arts, public broadcasting and libraries, but also with the education and science sectors – would greatly benefit from a temporary central project office serving multiple sectors (see Chapter 5 - E-culture Project Office).

### *(3) Funding*

E-culture policy would have little or no effect in the heritage sector if efforts are not undertaken to ease the dire financial predicament in which heritage institutions find themselves, particularly when it comes to current plans for digitisation activities. Even the simplest approach – basic digital reproduction and the application of metadata, without further complex meaning structures – would involve millions of objects and millions of euros in funding.<sup>37</sup>

- The Council therefore advises the Ministry of Education, Culture and Science to engage in close cooperation with the field in drafting a coherent funding plan for digitisation and digital media initiatives, encompassing all existing and new projects. Although an investment programme for the heritage sector would be the focal point of funding, the plan should also take into account the financing of related (cooperative) initiatives in the libraries, public broadcasting, and arts sectors. (also see Chapter 5).

## **4.2. Libraries**

More than four million people in the Netherlands are registered members of a local public library. Libraries are thus an important, easily accessible arena for the dissemination of culture and information, governmental and otherwise. Library services have always focused on physical materials

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<sup>37</sup> Berg, J. van de, e.a., (1998) Alles uit de kast: op weg naar een nationaal investeringsprogramma digitale infrastructuur cultureel erfgoed. Report by the Wetenschappelijke Technische Raad and Stichting SURF, commissioned by the ministry of Education, Culture and Science. This report estimated that the cost of digitising cultural heritage in the Netherlands would, depending on the degree of ambition, range from NLG 50 - 150 million (€ 23 - 68 million).

such as books, magazines and newspapers, but ongoing digitisation has far-reaching consequences for the collections and services of libraries.

#### **4.2.1. Libraries – from ICT to E-culture**

##### *Digitisation of catalogues and collections*

The websites of most libraries – also accessible via the national portal ‘bibliotheek.nl’ – now offer automated and linked catalogues of their collections, allowing the public to reserve books online 24 hours a day. More and more libraries are also offering digital news clippings services and databases that were previously only accessible from within the library itself. In due course, libraries may even add the paid downloading of computer games, music and films to their range of services. However, the library sector’s involvement in e-culture starts at a different level, with more fundamental questions as to the role of libraries in the digital age.

##### *New information requests from the public*

Contrary to what one might expect, the advent of the Internet has not made libraries quieter and emptier. The volume of information requests has, in fact, gradually increased. Visitors ask staff to help them search the Internet, just as they would ask them in which books or other references they can find information on a specific topic. Generally speaking, the ever-expanding mass of information also fuels a growing need for structure and referencing within the available material. Libraries have responded by organizing courses in media education and Internet use, geared to specific target groups.

The ever-growing body of web-based information raises the question as to whether libraries should include websites in their collections, just as they previously did with videos, CDs and databases. The sector has already affirmed that this should be the case. The national library portal ‘bibliotheek.nl’ not only offers access to its analogue and digital collections, but also directs users to other interesting web content. Users can access all of these internal, as well as selected external, sources by means of an associative browser.

##### *Innovation and cooperation*

The library project ‘Hoe zit het nou eigenlijk?’ (What does this mean?) takes things a step further, creating thematic dossiers and discussion

threads dealing with twenty to thirty major social topics. This illustrates how boundaries between disciplines fade within the digital domain. In this case, libraries not only serve as neutral guides, but are also developing functions that closely resemble those of broadcasting organisations and other journalistic media.

Another role that borders on that of other sectors is that of publisher. The 'Vereniging van Openbare Bibliotheken' (the Netherlands Public Library Association, VOB) is striving to incorporate original content (i.e. not hyperlinks to websites, but text, images and radio fragments) into the range of information accessible via the central portal 'bibliotheek.nl'. This demands intensive cooperation with third parties, including publishers, music and film distributors, broadcasting organisations, museums, universities, consumer organisations, and government bodies. That means libraries are likely to become a portal to a highly diverse range of cultural, informative and educational content. In addition, users can be offered tailored services, nationally as well as per region or city.

### *The changing role of libraries – from lender to guide and portal*

Digitalisation is a further extension of a task shift that libraries have been undergoing for some time. In addition to their traditional cultural and educational purpose, libraries are increasingly taking on the role of information provider and even social centre.<sup>38</sup> One remarkable development is the current interest in the *Kulturhaus* concept, with a single centre serving a variety of social-cultural purposes. This may be seen as the physical counterpart of e-culture, because it gathers functions that were previously separate in a single network, which in this case is located at a physical venue, rather than in the virtual domain.

The Council has previously argued, in recommendations issued in 2000 and 2001, that libraries should evolve into guides and easily accessible portals helping visitors sift through the ever-increasing flood of information<sup>39</sup> [...]. Compared to commercial search engines and index pages, libraries distinguish themselves by pursuing their own, autonomous selection policy, in which reliability and quality of content are also taken into account, in addition to relevance and popularity.<sup>40</sup>

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<sup>38</sup> Also see the sector analysis on libraries in the Council's Preliminary Recommendations for the Cultural Budget 2005-2008.

<sup>39</sup> Cyberpolis. De elektronische toegang tot overheidsinformatie. Raad voor Cultuur, Den Haag 2001. About the role of libraries in controlling the abundance of information.

<sup>40</sup> Some commercial search engines and index pages charge suppliers of web content or services a fee to gain a higher ranking in the overview of search results.

Moreover, libraries can help the public to make the connection between physical information sources (those they find in libraries, archives and museums) and virtual information sources (databases that can be consulted via the virtual library or elsewhere on the Internet). These developments, however, will not take place of their own accord.

#### **4.2.2. Libraries – issues**

First and foremost, the library sector as a whole is in need of a coherent directive framework. Because libraries are decentralized institutions, there are many local and regional digital initiatives, which are highly diverse and do not always contribute to the basic development of (digital) facilities. In addition, the libraries too seldom appraise each other of the success or failure of these initiatives. The ICT expertise centre LAURENS, jointly established by the ‘Vereniging van Openbare Bibliotheken’ (Netherlands Public Library Association, VOB) and the ‘Nederlandse Bibliotheek Dienst’ (Netherlands Library Service, NBD), is a step in the right direction. However, the libraries should also join forces to more efficiently procure telecom services, equipment and licenses. In addition, more active guidance is required in bringing about the standardisation and interoperability of central systems, thus ensuring that information is accessible and can be exchanged.

Secondly, libraries will only become true portals if they strengthen their ties with other sectors. There are currently many cooperative links between libraries and primary education institutions, but there are still many opportunities for libraries to broaden their scope as digital service providers within the ‘lifelong learning’ context (e.g. in the field of adult education). When it comes to other sectors, such as cultural heritage, the arts and the media, libraries should at least strive to ensure the best possible interface with technical and content initiatives undertaken in these sectors. The key here is to link content as much as possible, thus increasing the chance that people can find what they are looking for. In this regard, the Council is not referring to a general, combined portal, but rather to smart links via the Internet. [...]

This cross-fertilisation between sectors may give rise to cultural innovation, such as the thematic dossiers that several libraries jointly compile for the Internet. At present, the specific nature of the source discipline is still clearly evident in these dossiers (i.e. medium-specific innovation and crossovers are rare). However, such web-based thematic dossiers could also incorporate the insight that libraries have into the

information requirements of the public; broadcasting organisations could add journalistic analyses of developments; organisations such as De Balie (Centre for Culture and Politics) could contribute models for public debate; and an organisation such as the Waag Society (for Old and New Media) could offer expertise on broader social application of innovative web design.

Funding is another concern. The Council concludes that extra funds are not only needed to acquire network capacity, hardware, software and licenses, but also to invest substantially in the training of personnel (who require new skills and knowledge to meet the demands of e-culture) and bring into play (or hire) people whose primary task is to forge links with other disciplines.

#### **4.2.3. Libraries – recommendations**

The Council offers the following concrete recommendations:

- A more influential role for the VOB as stimulator and coordinator of digital initiatives. [...]
- The acquisition of rights to digital information is often costly. It would be very helpful if lending rights were bought off, as was the case at university libraries. As the Council remarked in its Preliminary Recommendations (Vooradvies 2005-2008, Raad voor Cultuur), it might be an option to stop charging users a public lending fee and cover these costs from general funds, as is the case in countries where such rights have been bought off by the government.
- E-culture is a further reason to redouble efforts to bring about administrative and organisational innovation. In its Preliminary Recommendations, the Council already indicated that the innovation of libraries will flounder if the required funds (€ 200 million, including € 95 million for ICT) are not made available.

#### **4.3. Arts and creative industry**

Digital media influence the existing structures of production, presentation and distribution in almost all fields of art. Key developments include the unprecedented opportunities for multimedia production and crossovers between various disciplines. In addition, the fact that users can influence digitally stored products

(literature, film, visual arts) offers the makers a variety of opportunities and leads to new results.

This section will focus on the production of original art and culture.

The more informative and heritage-related aspects of artistic disciplines, which are especially relevant to the Film Museum, the 'Nationaal Pop Instituut' (Dutch Rock & Pop Institute), and the 'Digitale Bibliotheek voor de Nederlandse Letteren' (Digital Library for Dutch Literature, DBNL), have been dealt with in the section on cultural heritage.

#### **4.3.1. Creative arts – from ICT to e-culture**

##### *ICT and digitisation*

The initial instrumental application of ICT in the arts has proved highly fruitful. Digitisation of information and data has made things possible that were previously impossible or done less quickly, less accurately or less efficiently. Apart from the application of computer-based tools in general artistic endeavour or in the tracing of stolen art works via electronic networks, computers have had an impact on fields such as design, facilitating the use of complex three-dimensional forms that were previously impossible to calculate.

Furthermore, the rapid rise of increasingly cheap computers, software, cameras and peripherals for data storage, crafting and presentation of images and sound has boosted production enormously, not only among artists, designers and other creative professionals, but also among the general public. Makers are no longer dependent on publishers, editors, broadcasting organisations, galleries, museums, and other distributors. They can now relatively simply and cheaply create new platforms and present their ideas and products to the world, either individually or in groups. However, the past decade has shown that this new-found freedom is relative, because most of the traditional distribution channels and platforms still exist and the majority still enjoy greater renown among the general public. On the other hand, the parallel existence of old and new channels also presents opportunities: many artists now exploit various media simultaneously, with projects on traditional platforms and others on television, in the print media, and on the Internet.

ICT also offers new opportunities for cultural education at schools and for amateur artistic endeavour. Many youngsters who previously had

no affinity with traditional art forms, develop an interest in the visual arts, design or musical composition via their computer.<sup>41</sup>

### *Crossovers*

Crossovers are a common phenomenon in the arts and creative industry. They lie at the heart of cultural innovation in the arts sector. Artists are using digital media to reinvent their own works and work methods. There are numerous examples. Artist Geert Mul is developing a search engine for images in collaboration with the V2\_ new media lab in Rotterdam. Steim, a studio for electro-instrumental music in Amsterdam, is developing software that links images and sound. Choreographer Krisztina de Chatel has derived a whole new range of movements and choreographies from Tomb Raider, the computer game featuring Lara Croft. Director Alex Vermeulen and composer David Shea are creating a new form of opera featuring a combination of video and sampling techniques. Architect Kas Oosterhuis creates buildings that respond to 'data' such as the weather and the number of people present. And poets like Tonnus Oosterhof and Mark Boog are weaving a new type of poems, combining text with the dynamism of the Internet (images, movement, sound, graphics and animation).

Generally speaking, the distinction between artists, on the one hand, and designers and software developers, on the other, is starting to fade in the digital domain.

Apart from crossovers within the arts spectrum, artists are more easily crossing over to popular culture and other sectors outside the arts. The most striking example is the rise of DJ's and VJ's who have attended art academies and now perform at major dance festivals.

Crossovers in the arts and creative industry are also taking place within and between sectors, giving rise to new, hybrid forms in the zone between the arts and other cultural sectors.<sup>42</sup>

### *Medium-specific innovation*

We have also seen the rise of new, media-specific art forms, such as web design, net art, and experimental forms of hypertext.<sup>43</sup> However,

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<sup>41</sup> However, centers for the arts offer only a limited range of courses in this field.

<sup>42</sup> M. Schwarz (1999), *Digitale Media in de technologische cultuur; perspectieven voor een kunst- en cultuurbeleid*, Zoetermeer: English edition: The Hague 2000, see also note 18.

<sup>43</sup> Bruinsma, M. (2003), *Deep Sites: Intelligent Innovation in Contemporary Design*. London: Thames & Hudson.

these forms of niche art are interesting to specialists, but are not particularly appealing to the broader public who have no knowledge of the medium in question. What is interesting is the way in which ICT and e-culture have influenced the conceptual perspective of artists and others. This has resulted in a great deal of attention for the real-virtual dichotomy, for systems, chaos theory and fuzzy logic.

#### *New links between art, society and the economy*

The opportunities that digitalisation has to offer artists coincides with their desire to break out of the isolation of the art world and communicate more directly or even seek collaboration with a potential audience. There is an ever-stronger tendency to involve the public in the artistic process, either through direct interaction or by expanding experience through multi-media. Concepts such as networks, globalisation and mobility have therefore become an everyday part of the contemporary artist's vocabulary. Furthermore, contemporary art has substantially broadened its sphere of action. Web design, educational applications, or digital neighbourhood projects – artists are no longer concerned with the boundaries between art, design, popular culture, or even public debate and education. Artists and smaller creative companies are active in all these fields. Sometimes they work out of studios or subsidised cultural organisations, but just as many serve the commercial creative industry, either as freelancers or as employees.

#### *Changing role: mediator within society*

By 'designing' services and interfaces that are suitable for broader application, artists and designers have taken on a more influential role in the process of social and economic renewal. For instance, De Balie (Centre for Culture & Politics, Amsterdam) and the Waag Society (for Old and New Media, Amsterdam) have always stressed the link between e-culture and public issues. The Waag Society's 'Verhalentafel' (Story Table) was designed to counteract the looming social isolation of senior citizens in homes for the elderly. The Story Table gives these people access to historical audio-visual material and allows them to add their own stories. In addition, the Waag Society also cooperates with educational institutions.

### **4.3.2 Progress and constraints in the arts and creative industry**

Various organisations in the Dutch new media landscape continue to, serve as pioneers in the development of e-culture, exploring new possibilities within the digital domain, often on an international scale.<sup>44</sup> This includes numerous, relatively small and flexible organisations that have developed and shared a great deal of expertise and launched many initiatives. For example, V2\_ (New Media lab, Rotterdam), the Waag Society (for Old and New Media, Amsterdam), the Netherlands Institute for Media Arts (Montevideo, Amsterdam), Mediamatic, Steim (Studio for Electro-Instrumental Music, Amsterdam), the Virtual Platform, Doors of Perception, De Balie (Centre for Culture & Politics, Amsterdam), Paradiso (Pop and Rock Venue, Amsterdam), the digital unit of the VPRO broadcasting organisation, and festivals such as The Next Five Minutes and the Exploding Cinema programme of the International Film Festival Rotterdam. In their quest for better 'instruments' for creative production, these pioneers come up with new software and tools that sometimes prove to be highly suitable for application within the social and commercial context.<sup>45</sup> Furthermore, the majority of these organisations continue to play a part in crossover projects between various disciplines, sectors, domains and institutions. What is remarkable is that relatively many of these e-cultural organisations combine subsidised with commercial cultural activities. This blend is not unique, but it is characteristic of digital creative production. In recent years, few new organisations have joined these pioneers in the e-cultural arena. However, several interesting initiatives have been launched by organisations, including the Stimuleringsfonds Nederlandse Culturele Omroepproducties, a funding body for culturally related broadcasting productions, which teamed up with the Sandberg Institute (postgraduate art and design school, Amsterdam) and invited documentary makers to join new-media specialists in developing innovative products for the Internet or DVD (Stifo@Sandberg). The new media department of the Nederlandse Film en Televisieacademie (Netherlands Film & Television Academy) has been working on interactive television programs. And 'submarine.nl' is

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<sup>44</sup> Virtueel Platform (1999). *New Media Culture in Europe*. Amsterdam: Uitgeverij De Balie.

<sup>45</sup> The Stichting Nederland Kennisland (KnowledgeLand) which runs the Digital Pioneers Scheme is also a pioneering institution, but is not funded via the Cultural Budget.

the first Netherlands-based digital distribution and exhibition platform for short films made specifically for the Internet.

One of the main obstacles for further e-cultural development in the arts and creative industry sector is that many of the initiatives are small scale. Although this limited scale and the diversity that goes with it are beneficial for innovation, they are not conducive to continuity and knowledge sharing. The degree of cooperation between existing institutions leaves much to be desired, which means they regularly reinvent the wheel. The size of the individual new media institutions, and their limited workforce, also restricts the extent to which they can publicise (read: share) their knowledge. In short, their visibility is limited.

Furthermore, there is a looming shortage on the education front, where art academies and some universities require teachers with both theoretical and practical experience. The more traditional academies, in particular, are lagging far behind in terms of knowledge, compared to academies such as the Hogeschool voor de Kunsten (School of Arts) in Utrecht and professional organisations such as V2\_, Mediamatic and the Waag Society. The lack of expertise at art academies and universities has far-reaching consequences for graduates who end up in the educational or professional field. In addition, there is still a great deal of work to be done in the fields of cultural education and amateur art.

Lastly, few institutions in the art and creative industry sector seem to be aware of the fact that digitalisation presents opportunities to move our existing art and media heritage into a truly public domain. More intensive cooperation is required in this regard. Furthermore, there is far too little attention for the enduring conservation of transient, digital artistic endeavours.

#### **4.3.3. Arts and creative industry - recommendations**

- In the arts sector, the process of digitalisation and cultural innovation is largely spontaneous. It is fundamentally an autonomous development – not only in the more commercially oriented fields (film, music and literature), but also in the fields of visual art and design. The Council therefore recommends that these developments should be given as much latitude as possible, in terms of both funding and content.

- The worlds of culture and commerce are no longer as strictly segregated as they were in the past. They are inclined to interact more and more readily (as is the case in the creative industries). This has implications for the criteria for allocating cultural subsidies in the cultural field. Here, too, the Council recommends that latitude be given. The government should take a flexible approach to subsidy requests from institutions that operate in both the cultural and commercial sector.
- Apart from the latitude given for experimentation – which should perhaps even be increased – there should also be more latitude for cooperation and exchange of expertise. Existing organisations should be facilitated in this regard, so that they can be called on to give account at a later date. They should seek to more actively publicise their endeavours, via trade fairs and other events.<sup>46</sup> However, there is also a great need for a temporary expertise centre where knowledge and experience is promoted, gathered and publicised, especially from the arts to other disciplines. To this end, the Council recommends (in Chapter 5) the establishment of an E-culture Project Office whose scope is far broader than the arts alone. It seems logical that the Virtual Platform [network organisation of a number of Dutch e-culture organisations] should play a part in this organisation (on the grounds of its expertise and status in the field), as should umbrella organisations in other fields.
- In the 2002 Letter on E-culture<sup>47</sup> and in the report ‘Druk op Start’ by the E-culture Taskforce, it was suggested that central infrastructural facilities should be made available to smaller creative organisations and projects. Examples included workshops (laboratories), a culture server, open software, and even open content<sup>48</sup>. The Council argues that shared infrastructure does not have priority in and of itself. Ideally, technology should not be the starting point of e-culture. The opposite is certainly an option: content-based visions and endeavours may need, or benefit from, technological facilities. One

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<sup>46</sup> The Letter on E-culture of April 2002, action item 2. Action item 1 proposes that new media (arts) institutions should start arranging courses at other cultural institutions, such as museums and libraries. (see for reference: note 1). The Council welcomes this proposal, but would prefer more active stimulation of intersectoral and interdisciplinary knowledge exchange via a temporary e-culture project bureau.

<sup>47</sup> Action items 7, 8 and 25. (see note 1).

<sup>48</sup> The Council supports the endeavour to ensure that government-funded content is as freely accessible as possible, on condition that the copyrights of cultural products and individual creators are observed.

example is the scheme for the Residentienet in The Hague, where the hardware requirements of the 50 submitted projects were fulfilled by providing a single, centrally controlled server. This proved highly beneficial in financial, technical and practical terms. A similar set-up, with shared technical facilities and software tools, is currently being considered for the Digital Pioneers scheme (for private initiatives surrounding public debate and opinion). The E-culture Project Office (see Chapter 5) proposed by the Council would, if found culturally relevant, have to follow suit.

### *The role of cultural funding bodies*

In recent years, the scope of various existing cultural funding bodies has been broadened to incorporate the new media. In addition, a so-called 'Interregeling' (system of e-culture project grants) was launched to ensure that interdisciplinary art projects did not fall in between the cracks. The participating funding bodies are currently reviewing this scheme. [...]

- The Council strongly recommends that, during the coming budget period, cultural funds continue to clearly earmark a budget for incidental funding of e-culture. This budget should at least match the current budget.
- The Council recommends that, based on an evaluation of the 'Interregeling', the government should seek a better arrangement for the subsidization of incidental e-culture projects. This arrangement should encompass cultural funding bodies that are currently not involved, as well as cooperation with the E-culture Project Office.
- In view of the fact that the e-culture developments in various sectors and cultural funding bodies show major differences, it would also be advisable to strengthen the coordinating role of whatever combined arrangement may arise. Furthermore, a series of thematic focal points could be formulated.
- The Council argues that cultural funding bodies may be expected to take a more proactive approach to e-culture. [...] In addition, it is vital that cultural funding bodies should closely cooperate with umbrella organisations and institutes in the sector, with a view to contributing and acquiring knowledge. [...]

## 4.4. Public broadcasting

Just like the public libraries, the national public broadcasting organisations cater for a broad audience and serve a broad purpose: to offer a varied, top-quality range of information, culture and entertainment. The public broadcasting organisations not only disseminate but also produce content. In this regard, the broadcasting sector not only has a lot in common with the arts and creative industry sector, but is also one of this sector's main clients.

### 4.4.1. Public Broadcasting – from ICT to E-culture

#### *Digitisation of production, distribution and reutilisation*

The broadcasting sector has always been shaped by technological developments. The advent of commercial television may be partly attributed to the rise of cable and satellite technology. Today, digitalisation has contributed to an ever-increasing range of dissemination possibilities, ranging from more channels to (the reutilisation of) radio and television fragments on the Internet, and initial experiments with video on demand. These developments will, in due course, allow broadcasting organisations to reach more and more people. Until now, broadcasting organisations have mainly used the Internet to provide background information for their programs. Interesting experiments have also been conducted with extra or supplementary broadcasts (streaming audio and video) via the internet. The most notable example being the Pinkpop music festival. However, the greatest potential of digital media in this sector lies in exploiting digitalisation opportunities in a different way, as described below.

#### *Crossmedia and crossovers*

Digitalisation promotes innovation and media production by giving rise to crossovers between existing and new media, as well as between different journalistic and creative disciplines. The focus is increasingly on concepts and designs that are first devised and then developed for various media, moving away from the medium as primary concern (radio, television, internet).<sup>49</sup> A programme format may even combine media

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<sup>49</sup> The Media Academy runs workshops that experiment with this phenomenon. It is conceivable that crossmedia production would benefit if there were no longer separate editorial desks for radio, television and the Internet. Some broadcasting organisations are experimenting with this.

events and live performance. One of the first crossmedia experiments in the Netherlands was 'Het Rechte Pad' produced by the NCRV public broadcasting organisation. This programme combined traditional television drama with the form and interactivity of computer games. A more recent example is the programme 'Idols,' produced by one of the commercial broadcasting channels. In this case, there was no real programme in the traditional sense. Instead, viewers collectively shared and influenced the process of building stardom. This interactive process was then commercially exploited. The public broadcasting organisations also developed programs of this kind. One example is 'AVRO Tribunes' (broadcast by the AVRO public broadcasting organisation), where communities were formed around specific themes (from health to classical music). These communities were the focal point of the television program, but participants also interacted with each other via a website on these topics and went on excursions together, to concerts, art auctions etc.<sup>50</sup>

### *Interaction with the audience*

The advent of digital media goes hand in hand with a shift in the attitudes and wishes of the audience. More than any other medium, the Internet is capable of customising information for individual media consumers, who have become more demanding and have a highly diverse range of preferences. In first instance, there is the option of making (fragments from) radio and television programs accessible on demand. Taking things one step further, smart software can personalise information for recurrent visitors, presenting them with information selected on the basis of preferences expressed during previous visits. Dialogue can also be more easily organised. The website of the NOS Journaal (national news programme produced by the central public broadcasting service) allows visitors to express criticism and - in its response to such criticism - the service gives an account of the journalistic choices it has made.

### *Links between broadcasting organisations and other creative disciplines*

In the digital domain, the divide between broadcasting organisations and other disciplines is smaller than ever. Since the pioneering days of the

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<sup>50</sup> The main objective is to win new members. It bears mentioning, however, that public broadcasting organisations are subject to strict conditions when it comes to organising events outside the domain of radio, television and the Internet. One reason being that this might result in unfair competition.

Internet, there have been close ties between front runners in the broadcasting world and new media organisations such as 'De Digitale Stad' and later the Waag Society. Experiments thought up by artists and designers still contribute to the innovation of broadcasting. One example we already mentioned is the Stifo@Sandberg-project, where graphic and web designers collaborate with film and television makers. Multimedia production and software development are increasingly an extension of one another. The 'tools' that some broadcasting organisations have developed for their own purposes now prove to be ideally suited to the needs of other cultural organisations.

#### *Links with other information sources*

At the content level – websites, audiovisual fragments, databases – there are innumerable links to be made. Reading a newspaper and watching the television news are two different activities, but the related news sites are not very different in practice, apart from news content and style. Because broadcasting organisations and newspapers are in direct competition, cooperation is not really an option (although national daily De Volkskrant and the VPRO public broadcasting organisation do collaborate on 'cinema.nl'). However, the opportunities for synergy in adjacent fields are diverse. For instance, in the heritage project 'Geheugen van Nederland' (The Memory of the Netherlands), radio and television fragments supplied by the Netherlands Institute for Sound and Vision form an important part of the historical presentations. Is this broadcasting, or is this a museum on the Internet?

There is potentially an endless range of crossovers; with educational institutions, sciences, consumer organisations, and special interest groups. Broadcasting is subject to the same phenomenon as the cultural heritage and library sectors: broadcasting organisations can contribute information to a network of organisations developing digital initiatives in the same field.

#### *Role in informal internet communities*

A fifth development in this area relates to the (potential) links with informal networks. An abundance of specific communities make use of the Internet, ranging from patient support groups and local pop music aficionados to politically-active Moroccan youngsters. Programme makers can glean news and information from such groups. They can also take on a new journalistic task in this informal domain, by helping to

shape debate and assess opinions. This entails more than just generating editorial comment and prompting debate with thought-provoking propositions. The challenge lies in offering a context, a meaningful web environment where visitors can engage in debate, helped along by aptly-chosen content and journalistic mediation. Programme makers contribute added value by raising the standard of debate to a level above that currently encountered in unmediated discussions on websites and chat boxes. Programme makers may even decide not to construct their own website, in favour of intervening in existing discussion groups on the web. Similarly, the broadcasting sector could support cultural communities – such as local music venues or teachers of cultural studies – by offering them content that has been made copyright-free, or by supporting them with their software and expertise in multimedia and interactive productions.

All of these examples of cultural innovation using digital media demand new forms of conceptualisation and cooperation. In some instances, new links will have to be forged between the Internet and other broadcasting sectors, such as radio and television, in others, new working ties will have to be forged between people serving specific media and other institutions.

### *The changing role of broadcasting organisations: broadcaster and intermediary*

The public broadcasting sector could, in principle, take on a role similar to that of libraries in the digital domain, directing users to information and cultural products supplied by others. In its 1999 report, the McKinsey media consultancy described this as the ‘guiding role’, which is, to a certain extent, comparable to that played by commercial start pages, indexes and search engines.<sup>51</sup> The Council argues that this task description is far too general. The basic purpose of public broadcasting is still to produce (or commission) and disseminate its own journalistic and cultural products. This is the sector’s primary social task, on which grounds it receives government funding. Society will continue to require the sector’s end products, and public broadcasting organisations will continue to play a crucial role in this regard. However, a shift is taking

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<sup>51</sup> McKinsey & Company (2001). *Nieuwe Media Strategie*. Final report for the NOS public broadcasting organisation, STER (regulatory body for commercials on public television), the Ministry of Education, Culture and Science.

place. The public broadcasting sector will increasingly act as a mediator supplying intermediary products in a digital context shared with others. Or, alternatively, the sector will create an appealing and mediated context in which visitors can express themselves or engage in debate. The key potential lies not so much in supplying greater breadth (doing more and more), but in seeking greater depth (doing existing things better and differently). It bears mentioning that this development does jeopardise traditional content standards. Web content supplied by other organisations and amateurs does not always meet existing broadcasting standards in terms of aesthetics, journalistic precision and so on. Here again there are clear similarities with the cultural heritage sector, where ‘amateur experts’ are becoming increasingly important producers of meaning and the threshold for participation in creative production has been lowered.

#### **4.4.2. Public broadcasting – issues and recommendations**

Since the amendment of the Media Act in 2000, Internet activities are a recognized ancillary responsibility of the public broadcasting organisations and may be financed with public broadcasting funds. There has, in fact, been a special budget for innovation in this area since 2001, which will in principle be made available through 2005.<sup>52</sup> The authorities have insisted on greater cooperation between broadcasting organisations in this regard. This has resulted in better central navigation via ‘omroep.nl’, thematic web portals, and initial steps towards editorial cooperation.

- The Council argues that the Internet coordinator should strive for greater harmonisation and coordination of content, similar to that achieved in radio and television broadcasting. This does not imply that all Internet activities should necessarily be based on a predetermined ‘programme policy’. After all, there are no limitations on dissemination (i.e. organisations are not subject to restrictions in broadcasting slots) and the majority of websites cater for niche groups, rather than a broader audience. Decentralised production by a multiform broadcasting sector would therefore provide a rich substrate for digital innovation. However, this should be

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<sup>52</sup> The budget for 2003 amounted to € 30 million (plus another € 10 million from existing Internet budgets at broadcasting organisations). This was spent on the Internet, experiments with digital television, and the digitalisation of infrastructure for distribution, production and broadcasting.

accompanied by cooperation in the form of shared accessibility, exchange of content, alignment of tasks, and an inclination to learn from each other's experiences. E-culture is not limited to the production of websites. Equally important endeavours include experiments with interactive television, crossmedia productions, and, most importantly, crossovers and links with other (cultural) sectors and disciplines. It is in these areas of e-culture that public broadcasting is lagging. That is unfortunate, because it is at this interface between old and new media, and between various organisations and disciplines, that the most promising new forms of culture and cultural debate are developing.

- As is the case in other sectors, the time has come that public broadcasting organisations look outward and seek contact with other organisations and disciplines for the purposes of e-cultural development. The public broadcasting authorities could stimulate this by earmarking funds in the general programme development budget for this purpose. The 'Nederlands Instituut voor Beeld en Geluid' (The Netherlands Institute for Sound and Vision, NIBG), as guardian of the broadcasting sector's audiovisual archive, also has an important role to play in this regard. Because the NIBG is a neutral mediator, without a specific programme profile or audience, potential partners view the organisation as an interesting point of access for cooperation with public broadcasting organisations.<sup>53</sup> To fully accommodate this role, the NIBG would need to engage in cooperation and reach agreements with public broadcasting organisations.
- Digitalisation affects the core of broadcasting practice and has bearing on the future social status of the public broadcasting sector. The Council therefore argues that the Internet, interactive television and innovation via crossmedia and crossovers in the digital domain are core responsibilities of public broadcasting organisations, just like radio and television, and should be seen as such, also in terms of funding.
- The Council also ventures that it might be advisable to allocate, at the outset, a greater part of the public broadcasting budget<sup>54</sup> to a smaller

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<sup>53</sup> See the project 'NAA in de Klas' Naturally the Council would welcome a follow-up to this project, as outlined in action item 22 of the 2002 Letter on E-culture.

<sup>54</sup> Partly for the purpose of buying off copyrights.

range of original productions, which could subsequently be more intensively reutilized via existing channels and the new digital media.

#### **4.5. Convergence and differentiation**

Although this review of different sectors has made it clear that there are striking differences within and between sectors in the manner and degree to which digitalisation has been integrated into the process of production, distribution, presentation, and reutilisation of cultural expression, this exploratory study has also revealed the opportunities that the digital domain presents for the enrichment and broadening of culture.

The most striking development is the ongoing process of cultural convergence. In the digital domain, institutions and sectors that previously had little or nothing to do with one another are moving closer and closer together. Cultural sectors are converging. Museum presentations resemble computer games and television programs; libraries are taking on journalistic tasks; and public broadcasting and the visual arts are interacting in crossmedia productions. This process is echoed in the real world, where organisations from various sectors and disciplines are engaging in cooperation.

However, when viewed across the board, cultural innovation is not making speedy headway. There is insufficient expertise, and in areas where expertise is available, it is being insufficiently shared and capitalised. The degree of mutual cooperation also leaves much to be desired, especially when it comes to intersectoral and interdisciplinary cooperation. Cross-links are being explored, but the time, effort and money this costs institutions imposes limitations. Consequently, the transition from ICT to e-culture has not taken place throughout the cultural field. This is understandable considering that digital media and the Internet are relatively recent developments. In short, the true potential lies beyond the horizon. Given that e-culture is still in its infancy and given its great potential for the future, the Council feels it is vital that the government should actively stimulate and support the development of expertise and cooperation in the field of e-culture during the coming budget period.

As said, digitalisation within and between sectors does not always take the same form. This differentiation also has consequences for government policy in this field. Roughly speaking – because distinctions are fading in the current e-cultural context – one could make a distinction

between producing and mediating cultural organisations. Viewed from the angle of government policy, it is clear that digitalisation among 'mediators' is a less informal development than it is among 'producers'. Artists, radio and television makers, creative multimedia companies, designers and other producers have the choice of participating in digital media developments, depending on the creative challenge they expect to get from this. When it comes to cultural innovation and addressing a broader audience, the involvement of artists in digitalisation is important, but impossible to steer. The process has an autonomous character. Outstanding digital art cannot be coerced; and, conversely, a ballet company for example, will be able to continue to weave artistic wonders on stage without ever having given a thought to e-culture. The Council therefore argues that the government's task lies predominantly in enabling initiatives in the field of e-culture (through the arts funding agencies and within the national Arts Budget), rewarding experimentation, and encouraging the exchange of know-how. The situation is different for cultural organisations that have more distinct intermediary tasks, such as those established to conserve, select and/or present cultural heritage. This includes heritage institutions, libraries and public broadcasting organisations in their capacity as 'broadcasters'. These sectors are inexorably drawn into the process of digitalisation and the innovation of (digital) cultural networks, as described above. If these organisations wish to continue fulfilling their tasks satisfactorily, they will have to attune their activities to the new reality.

This also implies explicit obligations for government policy in this area. The Council argues that central institutions and umbrella organisations may be expected to take an active role in the field of e-culture and to learn from previous experiences. The government should provide the overall framework and furnish the basic prerequisites for stimulating mutual cooperation and cohesion, meanwhile acknowledging that variation and experimentation also stand to benefit the further development of e-cultural knowledge. Additionally, it is recognised that, as mediating institutions become more deeply engaged in the realities of the digital domain, cultural renewal becomes increasingly important.

## 5. Recommendations for integrated e-culture policy

The perspective on e-culture outlined in this study by the Council for Culture not only underscores the importance of forging links between cultural sectors and their specific institutions, but also shows how boundaries between sectors are fading. That is exactly why the Council argues for an integrated approach to policy on e-culture. In this chapter, we outline the key implications of such a policy perspective. These may be broadly summarised along the following three lines:

- Firstly, governmental policy for culture, as well as the digital activities of many cultural institutions should focus more on e-culture in the broadest possible sense; i.e. on digitisation of information, cultural innovation and changing roles in relation to digitalisation. Where possible, institutions should actively strive to deploy and develop digital media and technology in view of achieving what the Council has referred to as the shift ‘from ICT to e-culture’. In broad terms, the more institutions involve themselves with digital issues on the level of attributing meaning and the re-use of digital content in networks, the more organisational concerns will have to be addressed. This demands know-how beyond traditional ICT expertise; it requires knowledge management.
- The emergence of new opportunities for crossovers between various cultural domains is an essential feature in the development of e-culture. For cultural institutions, this implies, first and foremost, that they should develop a new way of thinking and doing. They need to look beyond the limited confines of their own organisations and disciplinary sectors, and to seek links with other institutions and initiatives in the field of e-culture. This not only extends to cooperation within sectors (e.g. between museums), but particularly to exchanges between sectors (e.g. archives with museums, libraries with broadcasting organisations, and the arts with museums) and to collaboration with organisations from other domains of society, e.g. education, science, and the ICT sector.<sup>55</sup>
- Thirdly, e-culture changes the functional role of cultural institutions. No longer do they serve solely as starting points or end points in the

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<sup>55</sup> In this regard, the Council supports action item 15 in the Letter on E-culture of April 2002, announcing support for experiments in which several parties jointly operate according to a set of standards, thus offering others the opportunity to link up later, gradually leading to more complex networks.

production of knowledge and culture, but they also take on the role of intermediary in a network, concerned with attributing meaning. In many instances, this will effectively change their status in the cultural domain. Admitted, the consequences of digitalisation will only become visible in the longer term; and of course the status of culture and cultural institution is influenced by a range of other developments. Yet, the Council deems it important that cultural institutions that are active in the digital domain should already begin experimenting with these new ‘roles’.

### **5.1. Recommendations**

In order to help shape e-culture in all its guises, the Council advances a number cross-sector recommendations, aimed at facilitating the transition from ICT to e-culture. As set out above, the development of e-culture is a process, which in many ways is still in its early phase. Hence it is emphasised that the policy recommendations outlined below explicitly have a temporary character. Within four to eight years these recommendations will have run their course, so the Council expects, and after evaluating their effects could be discontinued.

1. The Council recommends that all leading intermediary institutions funded via the 2005-2008 Cultural Budget should be asked to outline their views on e-culture, as well as their planned initiatives in this regard. This applies to national museums and archives, umbrella organisations in the cultural heritage and libraries sector, cultural funding bodies and sector institutes serving the creative cultural sector, as well as institutions for cultural education.<sup>56</sup> Other organisations may determine for themselves whether and how they wish to incorporate e-culture into their policy plans for the coming budget period. In this regard, the Council wishes to reiterate that not all cultural organisations are obliged to devote (equal) attention to e-culture. The majority of the cultural institutions, so it believes, would stand to benefit from reflecting on a future where digitalisation is a significant factor.

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<sup>56</sup> For larger institutions, it might be desirable to incorporate e-culture into the politically legitimised range of tasks. The development of new services at public broadcasting organisations only really took off after legislations was amended to offer them greater scope for such activities.

2. As developments and innovations in the cultural production sector (the arts and creative industry) often begin with small-scale, experimental initiatives, government policy in this regard should be to facilitate and enable, rather than to direct, such initiatives. A great deal has already been achieved through the broadened scope of arts project funding and financial support for new media institutions within the 'Cultuurnota' culture budget. Having said this, the Council is of the opinion that the research and development aspect of the new media institutions could be more intensively and broadly exploited both inside and outside the arts sector (see recommendation 5: E-culture Project Office). The same applies for intermediary cultural institutions (in the heritage, libraries and broadcasting sectors) in so far as they aim to establish crossovers with the arts sector — which will inevitably happen to an increasing extent.
3. Digitisation and cultural innovation demand professional knowledge, attitudes and skills. The Council argues that the intermediary cultural institutions themselves are responsible for making financial provisions for this purpose. Umbrella organisations and (ICT) sector institutes (such as DEN, DIVA, NMV and VOB) have a significant supporting role to play in this regard. The Council recommends that they should receive additional funding for this supporting role.
4. The Council recommends that the Ministry of Education, Science and Culture should stimulate efforts to bring about a more transparent division of labour in the heritage sector (which in this case includes the Royal Library). The heritage sector would also benefit from a self-regulated quality assurance system to promote standardisation and interoperability.
5. Knowledge of ICT and e-culture evidently should be widely applied and well embedded in organisations in all cultural sectors (see recommendations above). However, e-culture has currently evolved to a point where there is also a need for a separate entity where interdisciplinary expertise and other knowledge and know-how can be 'deposited' and 'withdrawn'. The Council proposes to fulfil this need by establishing a temporary project office for e-culture. This bureau would serve all sectors and strive to ensure that knowledge and

expertise on e-culture would be broadly shared (not only within but also between sectors) and explored in greater depth. The project office would also strive to promote and strengthen the connections with the fields of science and education,<sup>57</sup> and development of the 'creative industries'. It would be given a temporary role, possibly for a period of four years, which would see it serving as a catalyst and broker.

The bureau would serve three key purposes:

- (a) To gather and provide access to e-cultural knowledge for the entire cultural sector. The aim is to demonstrate and further develop the added value of e-culture. The project office could also add to the impact and scope of smaller and otherwise more dispersed initiatives.
- (b) To develop and stimulate crossovers between sectors, domains and disciplines towards developing e-culture projects. The aim is to stimulate innovation by forging links (between information sources) and encouraging crossovers (in modes of expression).
- (c) To support and stimulate existing cultural institutions, umbrella organisations and funding bodies in their efforts to develop e-culture projects. The aim is to (help) place digitisation efforts within the broader perspective of a transition from ICT to e-culture.

The Council stresses that it has no intention of building a (major) new knowledge institute that raises new walls, instead of breaking down the old. The task of the E-culture Project Office would be to promote knowledge exchange across the boundaries of sectors and disciplines. It is therefore important that the organisational structure of the project office should be well imbedded in the cultural field, both in terms of its staff and governance. One option would be a 'secondment model' where staff from existing pioneering institutions would be loaned to the project office, which would also have a steering body or sounding board consisting of representatives from various fields. Further attention would also be required to assess what kind of budget the bureau would require for its own activities. On the one hand, the E-culture Project Office should not become a funding body or subsidy desk competing with other funding bodies and desks. On the other,

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<sup>57</sup> The scope for cooperation with the education sector also depends on the continued subsidisation of Kennisnet (Knowledge Net) and the Cultuur en School (Culture & School) project run by the Ministry of Education, Culture and Science (action items 20 and 21 in the Letter on E-culture of April 2002). The Council is strongly in favour of researching the needs and wishes for e-culture projects at schools (action items 16 and 23, Letter on E-culture).

the bureau would require funds to spark interesting interdisciplinary and innovative projects.<sup>58</sup>

6. The Council strongly advises that the Taskforce Digitale Duurzaamheid (Digital Sustainability Taskforce) should be reinvigorated. A forum is required where knowledge of digital preservation can be gathered and disseminated, not only for the purpose of cultural heritage and government information, but also for the preservation of digital art. It is also important that (coordinated) research and experimentation on digital preservation should be pursued, and that the Netherlands should participate in international activities in this field.
7. The Council sees great importance for cultural funding bodies to be given a clearly earmarked grants budget for the incidental funding of e-culture projects. This budget should be at least equal to that which [the executive art funding agencies] currently receive, and should also be made available during the coming cultural budget period (2005-2008). The heritage scheme run by the Mondriaan Stichting should be continued and further developed. Cultural funding bodies participating in the 'Interregeling' could, via self-evaluation, devise a better organisational structure for this scheme for arts and creative industries. This would allow the participation of funding bodies that currently have no (clearly delineated) e-culture policy. The Council argues that cultural funding bodies should take a proactive approach towards e-culture. The funding bodies could improve the exploitation of their acquired knowledge by inducing institutions to launch new initiatives, and by raising these to a higher level.
8. Funding is a key issue. In its recommendations for the previous Cultural Budget (2001-2004), the Council projected that e-culture would require funding to the sum of € 90 million over a four-year period, covering all sectors. The Council sees this as a realistic estimate. In light of the current economic slowdown and ongoing budgetary cuts, the Council does not expect e-culture to be high on

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<sup>58</sup> The E-culture Project Bureau could have a similar structure and modus operandi as the SKOR ('Stichting Kunst in de Openbare Ruimte', Foundation for Art in Public Space), the Premisela Foundation for design, or Erfgoed Actueel (Focus on Heritage) in the heritage sector.

the priority list for the government. At the same time, however, the Council feels that the digitisation of cultural heritage and digital innovation of culture and knowledge production and distribution, are of great importance to the Dutch knowledge economy. It therefore recommends the following:

- The costs of basic knowledge infrastructure should, to the greatest possible degree, be covered within the regular budget of the national Cultural Budget, the cultural funding agencies and the cultural institutions.
  - Extra funds will be required for large-scale, coherent and integrated digitisation (specifically with a view to cultural innovation) at archives, museums and libraries. The Council advises the State Secretary for Education, Culture and Science to draft an integrated e-culture investment plan for digitalisation. Depending on its financial scope, this plan could be implemented in modules and phases during the 2005-2008 budget period. It is essential that this plan should also encompass heritage institutions that are currently not funded via the government's Cultural Budget. This includes municipal archives and most museums. The investment plan should also earmark funds for initiatives for cooperation, involving broadcasting organisations and art institutions.
  - The Council urges the government to make programme funds and subsidies for ICT and the knowledge economy widely available for projects launched by cultural institutions, libraries and public broadcasting organisations. This is necessary because, without e-cultural contributions, the immaterial dimensions of the knowledge society would not be able to advance sufficiently (citizens' social development, social cohesion, and cultural identity and reflection). In fact, the absence of cultural engagement would also affect the more material benefits of the knowledge economy (e.g. knowledge production, economic growth and welfare).
9. The integrated outlook on e-culture, which the Council deems imperative, also presupposes an integrated approach to policy within the government. This should be pursued within the Ministry of Education, Culture and Science (i.e. between the different cultural directorates and with the departments of Education and Science), as well as between the Ministry and its governmental counterparts, particularly the Ministry of Internal Affairs (in charge of government

information, public archives and libraries) and the Ministry of Economic Affairs (in charge of the cabinet's broader ICT agenda and the status of the Dutch knowledge economy). Although links have been forged between the different cultural directorates and with the departments of Education (Knowledge Net) and Science (Knowledge Link and the Royal Library), this seldomly results in joint governance in the field. Institutions therefore 'shop' for subsidies at various funding desks. Far too little they are urged to benefit from the knowledge and content gathered by others or from previous experiences. Better policy governance thus begins with better coordination within the ministry itself. Subsidies from various sources – which, apart from the ministry's budget, include the ICES and NAP budgets, as well as windfalls from the spring and autumn budgets and European subsidies – should if at all possible be invested from a single position, based on a single perspective.<sup>59</sup>

## 5.2 Final remarks

The e-cultural developments outlined here will, particularly in the long run, have a fundamental impact on the greater part of the cultural sector. We will see changes in both practical features and the cultural and social role of heritage institutions, libraries, public broadcasting organisations and the arts. Functions will intermingle and boundaries between disciplines will fade. Innovation will centre around the interfaces and crossovers. Meanwhile this neither implies that with the emergence of new links and networks everything will converge at a single point, nor that it will lead to concentration. On the contrary, institutions should look outward and explore the boundaries of their specific role, but they should not be tempted to do it all by themselves. The aim is to cross-fertilise, not to take over. This is one of the reasons why the government's policy on e-culture should offer (and demand) clarity on who has which role to play within the spectrum of publicly-funded cultural and public tasks.

To this the Council adds the following qualification. Technological developments offer almost unlimited prospects and often have their own dynamic logic; i.e. 'if it is possible, it must be done'. However appealing

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<sup>59</sup> This does not mean: appoint a project directorate and impose uniform funding criteria. The objective is to ensure that people throughout the organisation are aware of the overall objectives and know how various projects contribute to achieving such objectives.

this logic may be, the Council warns against losing sight of content in a blind devotion to the new media; or equally that the quest for new connections does not come at the expense of depth. The aim should be to strike a balance between innovation and continuity, metamorphosis and distinctiveness. Not everything has to be digitalised; crossovers are not needed everywhere; and not all crossovers are of equal value. It poses a challenge for the world of arts and culture, as well as for the public authorities who bear responsibility for the cultural infrastructures, to find a balance between creative exploration of the new digital domain and conscientious conservation of well-entrenched values in the cultural realm.

With this advisory report and the ensuing recommendations the Council for Culture aims to contribute to the development of a policy for e-culture, which is attuned to the 'new reality' to which reference was made at the outset of this study. As stressed in the Council's Preliminary Recommendations for the Cultural Budget 2005-2008, culture is playing an increasingly important part in that new reality. A reality increasingly dependent on interpretation and meaning, and thus on 'culture', as the social articulation of meaning. Hence the sphere of influence of e-culture is broader than the cultural sector. The knowledge economy benefits from the software developed by artists and designers, for example; and the democratic quality and transparency of the government are served by alternative forms of journalism and expressions of public opinion. Consequently, e-culture will inevitably extend to other areas of government policy. A joining of forces of the fields of culture and education could be an obvious first step, both at a ministerial level and in the field. But e-culture will and should also connect with other areas of public policy. Because it is in this connection, that e-culture stands to achieve its greatest added value to society.

## **SUMMARY**

### **From ICT to E-culture**

This advisory report by the Netherlands Council for Culture on policy development for 'e-culture' was submitted to the Dutch State Secretary for Education, Culture and Science in 2003. It responds to a number of governmental policy documents on digital media and digitalisation in relation to the arts, cultural heritage, libraries and public broadcasting, and it advances a conceptual perspective for developing current and future policies on e-culture.

### **Scope**

In this advisory report the Netherlands Council for Culture ('the Council', for short) examines developments surrounding ICT and digital media in the context of cultural policy and argues the need to position these explicitly within a broad and integral perspective. Underlying this perspective is the observation that the cultural implications of digitalisation go well beyond the mere instrumental exploitation of technical opportunities. The report underlines that digitalisation affects the entire spectrum of culture production, distribution and representation. The internet and digital media have an impact on how artists and culture-makers express themselves; how our cultural heritage is presented and made accessible; how libraries make information accessible to the public; and how information, public debate and culture is treated within media. Moreover digitalisation enables and gives rise to new interrelationships and cross-fertilisations not only between the different cultural sectors (arts, media, information and cultural heritage), but also between cultural development and education, science, and the knowledge economy. In addition to its scope for cultural innovation, the process of digitalisation will prompt cultural institutions and culture makers to reassess their working methods and their roles in the digital era. In designing its policy on e-culture, the challenge to government is to recognise the inherent promise or 'added value' of digitalisation in the cultural field and to develop structures and approaches to support the further development of e-culture.

This study advances a policy perspective on e-culture and reviews the implications of digital media and the process of digitalisation for key developments within the cultural sector. It formulates a number of policy recommendations arising from the Council's perspective in the fields of arts, cultural heritage and public broadcasting media, as well as for the development of e-culture policy.

### **Perspective on e-Culture**

The term 'digitalisation' — as used in this report — is not confined to the application of ICT or the impact of digital media on the cultural sector, but views developments in the cultural sector in relation to the process of the digitalisation of society. The fundamental significance of digitalisation for cultural developments lies in the way new media and information technology are embedded and utilised in social and cultural practices. Not only our technical infrastructure is becoming digitalised, but also our society. Digitalisation is part of a broader social process, a plethora of developments in which ICT is not the sole catalyst, but does play an integral part. Several interrelated developments are identified in this context: the mediatisation of social experience and daily life, the rise of visual culture and 'experience culture', and the development towards a network and knowledge society.

E-culture, as defined by the Council, encompasses the integration of ICT into the primary processes of production, distribution, presentation, preservation and (re)utilisation of cultural expression. In its assessment, the Council distinguishes three aspects or guises of e-culture.

(1) *'digitisation of information'*: the instrumental application of ICT within the existing frameworks and practices.

(2) *cultural innovation*: digitalisation giving rise to new forms and combinations of content and presentation.

(3) *changing roles of cultural organisations*: new institutional functions, roles and working modes prompted by processes of digitalisation.

Currently, the first, instrumental aspect of e-culture is the most dominant, concerned with how digital technology and the internet is being incorporated into the existing core activities of cultural institutions.

### **Cultural innovation**

The second aspect of e-culture, here referred to as 'cultural innovation' marks the heart of the transition 'from ICT to e-culture'. Whilst more

concerned with imparting meaning, rather than with information technology per se, here the process of digitalisation gives rise to new forms of expression, reflection and exchange within and between existing cultural fields. Three manifestations of cultural innovation lie at the heart of e-culture:

a. *information sharing*: the potential to link, share information and content and make these accessible to various kinds of users such as researchers, artists, students, teachers and the general public.

b. *crossovers*: the emergence of cross-fertilisations between disciplines and domains: On the internet, disciplines such as visual arts, animation, audiovisual production and advertising have more in common with one another than ever before. It makes the boundaries between disciplines and domains more permeable and gives rise to new crossovers;

c. *medium-specific innovation*: the advent of new forms of expression and reflection which are unique to the digital domain. Here the potential of the digital domain is fully exploited and the boundaries of the different media are explored and extended.

### **Changing roles for cultural institutions**

The third aspect of e-culture is concerned with the effects of digitalisation on the way cultural organisations function. Digitalisation will prompt cultural organisations to start functioning differently, as they reflect on the digitalisation of society and adjust themselves to the use of internet and digital media. Gradually cultural organisations and artists will be required to attain new skills and knowledge, different work methods and organisational structures. In the digital age cultural institutions will increasingly be valued for their role as mediator between networks that produce culture and impart meaning. They will progressively find themselves contributing their knowledge and content within in a cultural arena where a host of highly diverse players are operating, including institutions from outside the cultural sector, as well as the audience or users.

### **E-culture in practice**

The advisory report provides a brief review of the state of play in the development of e-culture in the key cultural sectors in the Netherlands — cultural heritage, libraries, arts and creative industries, and public broadcasting — and explores some of the implications of the e-cultural perspective advanced. Among its key observations are the following:

- digitalisation has enabled institutions concerned with cultural heritage to cooperate sector-wide in the exchange of knowledge;
- the involvement of the public in knowledge networks is becoming increasingly important;
- libraries are broadening their remit, serving not only as neutral guides but increasingly take on the role of information provider and portal, as they are developing functions which can be said to resemble those of broadcasting organisations and other journalistic media, and which imply intensive cooperation with third parties;
- in the domain of arts and creative industries, digital media affects the way institutions and practitioners are involved in production, presentation and distribution;
- multimedia productions and collaborations have given rise to different types of crossovers within the arts spectrum, whilst artists are more easily crossing over to popular culture and other sectors outside the arts;
- by 'designing' services and interfaces that are suitable for broader application, artists and designers have taken on a more influential role in the process of social and economic renewal and in the creative industries;
- digital developments enhance the dual role of public broadcasting organisations, involving not only the dissemination, but also the production of content;
- digitalisation has contributed to an ever-increasing range of dissemination opportunities, which in time will allow broadcasting organisations to reach more and more people;
- digitalisation promotes innovation and media production by giving rise to crossovers between existing and new media, as well as between different journalistic and creative disciplines;
- broadcasting institutions are exploring the opportunities for synergy in adjacent fields, encouraging a potential range of crossovers, with educational institutions, sciences, consumer organisations, and special interest groups;
- within e-culture, a changing role for broadcasting organisations can be discerned: the public broadcasting sector will increasingly act as a mediator, supplying intermediary products in a digital context shared with others.

## **Policy implications**

In the digital domain, institutions and sectors that previously had little or nothing to do with one another are moving closer and closer together. Cultural sectors are converging and giving rise to new linkages that become possible in the context of digitalisation. Yet, when viewed across the board, e-cultural innovation has (so far) not been making speedy headway in the (Dutch) cultural sector. One factor here is that there is insufficient (e-cultural) expertise within cultural organisations. And in areas where expertise is available, it is being insufficiently shared and capitalised upon. The degree of mutual cooperation both within cultural sectors and between different domains and disciplines also leaves much to be desired. Consequently, the transition from ICT to e-culture has as yet not taken place throughout the Dutch cultural field. Given that e-culture is still in its infancy and given its great potential for the future, the Council feels it is vital that the government should actively stimulate and support the development of expertise and cooperation in the field of e-culture during the coming (4-year) period.

From the point of view of government policy it is clear that digitalisation within cultural institutions which operate as ‘mediators’ is a more urgent issue in the development of e-culture than it is among ‘producers’.

Artists, radio and television makers, creative multimedia companies, designers and other producers face a choice about when and where to involve themselves with digital media developments, depending on their assessment of the creative potential of e-culture. In this domain, the government’s task lies predominantly in ‘creating space’ and in enabling initiatives in the field of e-culture, rewarding experimentation, and encouraging the exchange of know-how.

For cultural organisations with more distinct intermediary tasks the situation is different. This applies to heritage institutions, libraries and public broadcasting organisations in their capacity as ‘broadcasters’. These sectors are inexorably drawn into the process of digitalisation and the innovation of (digital) cultural networks. If these organisations wish to continue fulfilling their tasks satisfactorily in the context of e-culture, they will have to attune their activities to the new reality. This also has implications for government policy in this area. The Council argues that central institutions and umbrella organisations may be expected to take an active role in the field of e-culture and to build upon previous experiences in the Dutch e-cultural field. The government should

provide the overall framework and furnish the basic prerequisites for stimulating mutual cooperation and cohesion, in particular in fostering working relations between the three key cultural sectors addressed here, whilst acknowledging that variation and experimentation also stand to benefit the further development of e-cultural knowledge.

### **Integrated policy for e-culture**

The Council argues for an integrated approach to policy on e-culture of which the key implications are:

- Governmental policy for culture, as well as the digital activities of many cultural institutions should focus more on e-culture in the broadest possible sense; i.e. on digitisation of information, cultural innovation and changing roles in relation to digitalisation. Where possible, institutions should actively strive to deploy and develop digital media and technology in view of achieving what the Council has referred to as the shift ‘from ICT to e-culture’.
- The emergence of new opportunities for crossovers between various cultural domains is an essential feature in the development of e-culture. For cultural institutions, this implies, first and foremost, that they should develop new ways of thinking and doing. They need to look beyond the limited confines of their own organisations and disciplinary sectors, and to seek links with other institutions and initiatives in the field of e-culture. This not only extends to cooperation within sectors, but particularly to exchanges between sectors and to collaboration with organisations from other domains of society, e.g. education, science, and the ICT sector.
- e-culture changes the functional role of cultural institutions. No longer do they serve solely as starting points or end points in the production of knowledge and culture, but they also take on the role of intermediary in a network, concerned with attributing meaning. In many instances, this will effectively change their status in the cultural domain.

### **E-culture policy recommendations**

In order to help shape e-culture in all its guises, the Council advances a number of cross-sector recommendations, aimed at facilitating the transition from ICT to e-culture.

1. All leading intermediary institutions funded via the 2005-2008 Cultural Budget should be asked to outline their views on e-culture, as well as their planned initiatives in this regard.
2. Government policy in this regard should be to facilitate and enable, rather than to direct, such initiatives. A great deal has already been achieved through the broadened scope of arts project funding and financial support for new media institutions within the 'Cultuurnota' culture budget.
3. Digitisation and cultural innovation demand professional knowledge, attitudes and skills. The Council argues that the intermediary cultural institutions themselves are responsible for making financial provisions for this purpose.
4. The Council recommends that the Ministry of Education, Science and Culture should stimulate efforts to bring about a more transparent division of labour in the heritage sector. The heritage sector would also benefit from a self-regulated quality assurance system to promote standardisation and interoperability.
5. The Council proposes to fulfil this need by establishing a temporary project office for e-culture. This bureau would serve all sectors and strive to ensure that knowledge and expertise on e-culture would be broadly shared and explored in greater depth. The project office would also strive to promote and strengthen the connections with the fields of science and education, and development of the 'creative industries'.
6. The Council strongly advises that the Taskforce Digitale Duurzaamheid (Digital Sustainability Taskforce) should be reinvigorated. It is also important that (coordinated) research and experimentation on digital preservation should be pursued, and that the Netherlands should participate in international activities in this field.
7. The Council believes that cultural funding bodies should be given a clearly earmarked grants budget for the incidental funding of e-culture projects. This budget should be at least equal to that which the executive art funding agencies currently receive. The Council argues that cultural funding bodies should take a proactive approach towards e-culture.
8. Funding is a key issue. The Council recommends that the costs of basic knowledge infrastructure should, to the greatest possible degree, be covered within the regular budget of the national

culture budget, the cultural funding agencies and the cultural institutions. Extra funds will be required for large-scale, integrated digitisation of archives, museums and libraries. The Council advises the State Secretary for Education, Culture and Science to draft an integrated e-culture investment plan for digitalisation.

9. The integrated outlook on e-culture, which the Council deems imperative, also presupposes an integrated approach to policy within the government. This should be pursued within the Ministry of Education, Culture and Science as well as between the Ministry and other Ministries.