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#### What can be regulated on the Internet by control/filtering software

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Published in:

Preceedings of fifth World Conference Human Choice and Computers HCC-5, Geneva, Switzerland 25-28 August 1998

Publication date: 1998

Document Version Publisher's PDF, also known as Version of record

#### Link to publication

Citation for pulished version (HARVARD):

d'Udekem-Gevers, M 1998, What can be regulated on the Internet by control/filtering software. in S Munari, G Krarup & L Rasmussen (eds), Preceedings of fifth World Conference Human Choice and Computers HCC-5, Geneva, Switzerland 25-28 August 1998: Computers and networks in the age of globalization. University of Lausanne, Lausanne, pp. 315-334.

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# What can be regulated on the Internet by control/filtering software ?

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with financial support of the Belgium Services fédéraux des affaires scientifiques, techniques et culturelles Programme "Interuniversity Poles of Attraction - Phase IV - Project 31"

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### 0. INTRODUCTION

1. GENERAL FRAMEWORK	5
1.1. Kinds of control/filtering	5
1.2. Possible locations of control/filtering	5
1.3. Control scopes and corresponding possible technical solutions	5
2. EXAMPLES OF CURRENT FILTERING SOFTWARE PACKAGES AND CORRESPONDING CONTROL SCOPES	6
3. PICS RATING SERVICES	8
3.1. PICS Third-Party Rating Services	8
3.2. PICS Self-Rating Services	12
<b>3.3. Some General Remarks and Conclusions about these Observations</b> 3.3.1. General Remarks 3.3.2. Conclusions about these Observations	14 15 15
3.4. Generalisation : What could be rated with PICS?	16
4. ETHICAL ISSUES AND QUESTIONS	17
4.1. Outside PICS	17
<ul> <li>4.2. With PICS</li> <li>4.2.1. 'Set labelling vocabulary and criteria for assigning labels'</li> <li>4.2.2. 'Assign labels'</li> <li>4.2.3. 'Write filtering software'</li> <li>4.2.4. 'Set filtering criteria'</li> </ul>	17 17 17 18 18

### 0. Introduction

On no account is this paper moralistic or prescriptive. It is only an analytic description of off-the-shelf control/filtering<sup>1</sup> software and a synthesis of

The following explanations are needed to understand this complex domain.

PICS (Platform for Internet Content Selection) is a set of technical standards which have been developed since summer 1995 by the MIT's (Massachusetts Institute of technology) World Wide Web Consortium. Currently, PICS becomes more and more important and control software like, for example, Cyber Patrol<sup>2</sup> does not hesitate to become PICS compliant.

« The first and most important distinction that PICS introduced is a separation between labelling and filtering<sup>3</sup>. A label<sup>4</sup> describes the content of something. A filter makes the content inaccessible to some audience»<sup>5</sup> In other words, thanks to PICS « Consumers choose their selection software and their label sources (called rating service) independently. »<sup>6</sup> Moreover, PICS standards facilitate « self rating (enable content providers to voluntarily label the content they create and distribute) and third party

rating (enable multiple, independent labelling services to associate additional labels with content created and distributed by others. Services may devise their own labelling systems, and the same content may receive different labels from different services. »7

« More generally, there are six roles that could be filled by different entities » (see table 0).

<sup>&#</sup>x27;Control' and 'filtering' are considered here as synonymous. 2

According several comparative reviews (see Munro C. 1997, Internet Filtering Utilities, PC Magazine, April 8 1997, pp. 235-240.; Parental Control Software at a Glance, October 97 issue of FamilyPC http://www.zdnet.com/familypc/9709/noway/table.html; Meeks Ch., 8 programs to porn-proof the Net, 4/3/96; updated 5/28/97 http//www.cnet.com./Contenu/Reviews/Compare/Safesurf), Cyber Patrol is the best among the tested packages.

<sup>3</sup> 

<sup>«</sup> PICSRules is a language for expressing filtering rules (profiles) that allow or block access to URLs based on PICS labels that describe those URLs » PICS FAQ p. 10 « PICS labels can be attached or detached » (and stored on a separate server called a 'label bureau'). (Resnick 1997)

Resnick and Miller 1996 p. 88

<sup>(</sup>see http://www.w3.org/PICS/principles.html).

# Table 0: The 6 roles implied by filtering software (according to Resnick 1998)<sup>8</sup>

1. Set lab	elling vocabulary and criteria for assigning labels
2. Assign	labels
<ol><li>Distrib</li></ol>	ute labels
4. Write	iltering software
5. Set filt	ering criteria [for example by parents]
6. Install/	run filtering software.

<sup>\*</sup> see http://www.w3.org/PICS/PICS-FAQ-980126.html

### 1. General framework

### 1.1. Kinds of control/filtering

Table 1.1.6 different kinds of control/filtering defined by Cranor & Resnick (12 March 1998)<sup>9</sup>

1. SUGGEST	Recommend appropriate content for children [ex CyberYes list (of CyberPatrol)]
2. SEARCH	Select a content that is appropriate for children and match a query
3. INFORM	Provide information about the content (ex. Evaluweb which displays a banner on the web pages)
4. MONITOR	Record for later inspection a list of the content accessed or attempts is to be bages)
	Record for later inspection a list of the content accessed or attempted to be accessed by a user; this may be a complete list or include only the content deemed inappropriate for children (ex in Net Nanny)
	Provide information about content and recommend against accessing that content before it displayed
6. BLOCK	Prevent children from accessing content law Marganist accessing that content before it displayed
	Prevent children from accessing content [ex. Microsoft Internet Explorer (which filters on the basis of any PICS labels), Cyber patrol, Net Nanny,]

# 1.2. Possible locations of control/filtering

Table 1.2 .6 different locations of control/filtering (adapted from Cranor & Resnick, 12 March1998)

1. Personal computer	ex. Cyber Patrol, SurfWatch, Net Shepherd, MS Internet Explorer
2. LAN or local proxy server	ex. Cyber Patrol, SurfWatch, SafeSurf Internet Filtering Solution
3. Internet Service Provider	IN.B. « harder for individual to tamper with »
4. Remote proxy server	ex. SurfWatch, SafeSurf Internet Filtering Solution <sup>10</sup>
5. Search engine	ex. Bess
6. Web site	ex. AltaVista engine at Net Shepherd
	ex. EvaluWEB providing both PICS labels and banner graphics

<sup>&</sup>lt;sup>9</sup> Adapted from http://www.research.att.com/~lorrie/pubs/tech4kids/t4k.html
<sup>10</sup> See http://www.research.att.com/~lorrie/pubs/tech4kids/t4k.html

<sup>&</sup>lt;sup>o</sup> See http://www.safesurf.com/ssfaq.htm#basic

### 1.3. Control scopes and corresponding possible technical solutions

Table 1.3.Control scopes and corresponding possible technical solutions

Control general scopes	Control specific scopes	Possible current technical solutions
	1.1 anything with an URL <sup>11</sup> i.e. for example:	<ul><li>URL or</li><li>names of newsgroups, chat etc.</li></ul>
2. Control at the level of the content itself	personal financial managers, etc.)	<ul> <li>names/addresses</li> <li>Key word/string filter (or word-matching)</li> <li>Intelligence artificial based software</li> </ul>
3. Time control	3.1. Hours/day3.2. Days/week3.3. Total by week	

**2.Examples of current filtering software packages and corresponding control scopes** A control software package can include several scopes and several technical solutions.

Table 2.Control scopes and 2 examples of current control software packages

<sup>&</sup>lt;sup>11</sup> Adapted from Resnick, latest updated 98/01/03 Platform for Internet Content Selection (p. 10).

	Cyber Patrol 4.0 <sup>12</sup>	Net Nanny <sup>13</sup> 3.0
1.1 <u>anything with an URL<sup>14</sup> i.e. for example:</u>		riotriality 5.0
WWW (HTML Protocol)	• Yes (site level and page level)	• Yes
• FTP (File transfer Protocol)	• Yes	• Yes
• GOPHER (for information research)	• Yes	• ?
• Usenet News groups and individual messages (NNTP)	• Yes	• Yes
• TELNET (for terminal access)	• Yes	• ?
• [IRC Internet Relay Chat] (in the near future)	• Yes	• Yes
1.2. local or on-line applications (ex. games, personal financial managers, etc.)	• Yes	• Yes (non Internet BBS etc.)
2.1. Incoming information N.B. for example for e-mail (including their attachments)	• NO (?)	• Yes (e-mail, chat rooms etc.)
2.2. Outgoing information (for ex. <i>personal</i> information via IRC, website questionnaire, e-mail,or <i>offensive</i> words in search of sexually explicit sites or conversations)	• Yes (via IRC or website questionnaire or words in search of sexually explicit sites or conv.)	
3.1. Hours/day	• Yes	• NO
3.2. Days/ week	• Yes	• NO
3.3. Total by week	• Yes	• NO

See The CyberPatrol Fact sheet at html://www.cyberpatrol.com/cyber/fact.html and Cyber Patrol Online Demonstration tour html://www.cyberpatrol.com/cp\_demo/default.html See F.A.Q. at html://www.netnanny.com/NNFAQ/nnfaq\_bottom.html Adapted from Resnick, latest updated 98/01/03 Platform for Internet Content Selection (p. 10). at 

### **3.PICS Rating Services**

The rating services included in tables of § 3 are listed (with their hyperlinks) at http://www.3org/PICS/raters.html<sup>15</sup>. According to our vocabulary, *'levels'* inside a labelling category can be used for setting filtering criteria. But *'sub-categories'* or *'examples'* allow to explain the whole meaning of a category but cannot be used for setting filtering criteria.

### 3.1. PICS Third-Party Rating Services

 Table 3.1.1. PICS Third-Party Rating Services : Who has set labelling vocabulary and criteria for assigning labels ?

CyberNOTlist	evaluWEB	websites, FTP, NNTP and IRC protocols)	
linked to Cyber Patrol <sup>16</sup> , a Microsystems software	no link with any filtering software	Shepherd' <sup>17</sup> of NetShepherd Inc.	Linked to 'SurfWatch', the Spyglass' filtering software
Microsystems' CyberNOT Oversight Committee, « a diverse group of advisors from a wide range of civic organizations representing all parts of the social and political spectrum »	online developed by Sserv (?) <sup>18</sup>	Net Shepherd, « a Calgary based Internet company » « employing virtual Internet communities for relevant information retrieval, increased subscriber loyalty & enhanced e-commerce performance » <sup>19</sup>	« Developed and regularly reviewed by SurfWatch's community-based Advisory Committee » <sup>20</sup> which « is a group of community members ranging in age from their 20s to their 50s. The group includes teachers, parents, publishing professionals, members of the clergy, corporate human resource managers, drug and alcohol prevention counsellors and child abuse prevention agents. They represent diverse ethnic and religious backgrounds, and have in common an interest and passion for the issues that surround filtering content on the Internet. » <sup>21</sup>

Table 3.1.2. PICS Third-Party Rating Services : Who is in charge of assigning labels ?

<sup>17</sup> See http://www.zdnet.com/familypc/9709/noway/table.html

<sup>&</sup>lt;sup>15</sup> Except for ORC (Objective Ratings Criteria) mentioned in the list of the webpage but not found on the Web.

<sup>&</sup>lt;sup>16</sup> It must be noticed that Cyber Patrol has its own criteria of ratings but also supports the RSACi's rating standard.

<sup>&</sup>lt;sup>18</sup> This information has to be confirmed.

<sup>&</sup>lt;sup>19</sup> See http://www.netshepherd.com/Corporate/Presreport.html (dated June 15 1998).

<sup>&</sup>lt;sup>20</sup> See http://www.surfwatch.com/filteringcriteria/ (visited on 11 July 1998).

<sup>&</sup>lt;sup>21</sup> See http://www1.surfwatch.com/submit/faq\_index.html

(CyberNOTlist)	d (which does <i>not</i> take into account the context) + evaluation by a human reviewer if needed	labels assigned by third party communities composed of end-users (> 1200 volunteers) who vote for the rating of a site ( $\rightarrow$ World Opinion's Service Data Base with more than 500 000 ratings opinions) « A Rating Community is a virtual, on-line community of people who represent the Internet's general population. »	be reviewed by an Advisory Committee of parents, teachers and community members. This 'eyes on page' content evaluation is supplemented by our pattern blocking technology which detects words in UPLs shot
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<sup>&</sup>lt;sup>22</sup> See http://www.surfwatch.com/filteringcriteria/index.html (visited on 30 January 1998).

Cyber Patrol (4.0) (CyberNOTlist) 11/5/97	evaluWEB	Net Shepherd's Rating	SurfWatch (for kids) = core
Violence/Profanity (Graphics or Text)		<u>_</u>	Violence (6 sub-cat.)
Partial Nudity			
Full Nudity			
Sexual Acts (G/T)			Sexually Explicit (7 s-c.)
Sex Education (G/T)			
Gross Depictions (G/T)		, , , , , , , , , , , , , , , , , , ,	
Intolerance (G/T)			Hate Speech (4 sub-cat.)
Satanic/Cult (G/T)		4	
Drugs/Drug Culture (G/T)			see below
Militant/Extremist (G/T)			
Questionable/Illegal & Gambling (G/T)			Gambling (5 sub-cat.)
Alcohol & Tobacco (G/T)			Drugs/Alcohol (7 sub-c.)
[+ Sports & Entertainment (cf. soft. for firms)]			
	Age based: 3 levels: • GV = general viewing (suitable for all	Age based: 6 levels: • General	· · · · · · · · · · · · · · · · · · ·
	ages)	Child	
	• PA13 = Parental Advisory (unsuitable for	• Pre-teen	
	<ul> <li>young children)</li> <li>XC = explicit content (intended only for</li> </ul>	• Teen	
	• AC = explicit content (intended only for- legal adult)		
		Objectionable	
		Quality : 5 levels:	
		<ul><li>poor</li><li>fair</li></ul>	
		• good	
		<ul> <li>very good</li> </ul>	
		• excellent	
			ChatBlock (all)

Table 3.1.3.	<b>PICS Third-Party</b>	Rating	Services	: breaking	down of	f the	labelling	categories

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# Table 3.1.3.bis

# PICS Third-Party Rating Services : breaking down of the labelling categories

SurfWatch' profession edition <sup>23</sup> or	Productivity
category criteria	
astrology/mysticism (4 sub-categories)	<u> </u>
entertainment (4 sub-categories)	<u> </u>
games (4 sub-categories)	
general news (4 sub-categories)	
glamour or intimate apparel (4 sub-categories)	
hobbles (4 sub-categories)	
investments (4 sub-categories)	
job search (3 sub-categories)	
travel (3 sub-categories)	
motor vehicles (4 sub-categories)	
personals or dating (4 sub-categories)	<u> </u>
real estate (3 sub-categories)	
shopping (4 sub-categories)	
sports (4 sub-categories)	
Usenet News (all)	
ChatBlock (all)	

See http://www.news.com/News/Item/0%2C4%2C21751C00.html?sas.mail http://www1.surfwatch.com/filteringcriteria/productivity 23 24

#### 3.2. PICS Self-Rating Services

 Table 3.2.1. Current PICS Self Rating Services: Who has set labelling vocabulary and criteria for assigning labels?

in the second			ussigning lubers.			
Adequate.c	•		Safe For Kids <sup>26</sup>	SafeSurf's Internet Rating	Vancouver	
om <sup>25</sup>	prima Rating	Internet) (integrated in	(N.B.: no certification mark)		Webpages	
(provides a	Agency	Microsoft's Internet	· · · · · · · · · · · · · · · · · · ·	(integrated in Microsoft's	Rating Service	
visual cue)	Italiana)	Explorer 3.0 - as the option	۶	Internet Explorer and		
(to be		by default - and in		Netscape <sup>27</sup> )		
installed in		CyberPatrol) (N.B.		1 /		
Microsoft's		Nominated for the Carl				
Internet		Bertelsmann Prize 1998)				
Explorer)						
no link with	no link with	no link with any filtering	no link with any filtering	initially linked to SafeSurf	no link with any	
any filtering	any filtering	software	software	<b>Internet Filtering Solution</b>		
software	software			(no longer available)		
free system	developed by	developed by the	developed by a British	voluntary system - « developed	experimental	
developed by	the University			with input of thousands parents	service developed	
Adequate.co	of Bologna in	Advisory Council (RSAC),	without commercial goal but	& netcitizens world-wide » by	by Vancouver-	
m	collaboration	« an independent, non-	« to provide a simpler system	SafeSurf, « a no-fee parents'	Webnages com	
(entertainmen	with	profit organisation based in	of rating pages which did not	organization » « dedicated to	(a nart-time	
t web sites	GENITORI	Washington DC » (which	require me or others to answer	making the Internet safe for your	small business)	
provider	(discussion	initially performed a	complicated ill posed questions	children without censorship <sup>29</sup> »	The categories	
firm)	list) of the	computer game rating)	and register our answers with	(and founded by 2 men out « of	were created by	
	'Citta		SafeSurf or RSACi »28	concern for children accessing	one individual <sup>30</sup>	
	Invisibile'			adult material »)	ono marviadai.	
Та	Table 3.2.2.         PICS Self Rating Services : breaking down of the labelling categories					
Adequate.con	a <sup>31</sup>	IT-RA RSA		ls SafeSurf's Internet Van		
-					pages Rating	
				Service Servic	vice	

<sup>25</sup> http://www.adequate.com

<sup>26</sup> http://www.weburbia.com/safe/

<sup>27</sup> http://www.safesurf.com/press (June 17 1998).

<sup>28</sup> Cf. e-mail dated 13 July 1998 from Phil Gibbs.

<sup>29</sup> « Proof that the Internet community will implement solutions on its own can convice them [legislators] of alternative solutions to censorship. »

<sup>30</sup> Cf. e-mail dated 17 July 1998 from Andrew Daviel.

<sup>31</sup> http://www.adequate.com

see age			1		
Sec age	Violenza (5 levels)	Violence (5-levels)		SS~~005 Violence (9	Violence (6 levels)
	<b>正常体的影响,将不能将不同的出现。</b>			levels)	
				SS~~001 Profanity (9	Profanity (5 levels)
				levels)	
		Nudity (5 levels)		SS~~004 Nudity (9	
				levels)	
see age	Sesso (5 levels)	Sex (5 levels)		SS~~006 Sex, Violence	Sex (8 levels)
				& Profanity (9 levels)	
	State of the state	如 <b>动力的位于约本</b> 中国法士的		SS~~002 heterosexual	
自分的问题: 2018年4月27日,2月1日,2月1日,2月1日,2月1日,2月1日,2月1日,2月1日,2月1	普加德 经采收公益的管理所			Themes (9 levels)	
				SS~~003 Homosexual	
				Themes (9 levels)	
	Razzismo (5 levels)				
				SS~~007 Intolerance (9	1 olerance ( / levels)
			· · · · · · · · · · · · · · · · · · ·	levels)	
				SS~~008 Glorifying	
				Drug Use (9 levels)	
				SS~~00A Gambling (9	Gambling (4 levels)
				levels)	<u> </u>
Age based:			Age:	SS~~000 Age Range (9	
• Web Y = all children			0. Safe for kids	levels)	
• Web Y7 = older children			1. Parental		
			guidance (9		
(fantasy violence)			examples)	with the set of the mark there are and when the p	
• Web G = general audiences			2. Adults only		
• Web PG = parental guidance					
suggested (moderate violence/					
sexual situations/ infrequent			er wite en ger og vinne det en staar op de staar o		
sexual situations/ innequent		مل	and the second second second second		
coarse language/ suggestive					
content)					
• Web 14 = parental guidance			<ul> <li>A second sec second second sec</li></ul>		
strongly suggested (intense					
violence/ intense sexual					
situations/ strong coarse			and the second		
language/ intensely					
suggestive content					
• Web MA = mature audiences					
only (graphic violence/				MINGRALI A REPORT OF STREET	
explicit sexual situation/ crude					

e el l'el de la desarrador estatues este se

.

indecent language						
				SS~~009	Other Adult	
				Themes (9		
see age	Linguaggio (5 levels)	Language (5 levels)				
		(including profanity				
		and hate speech)				
	Pubblicità (5 levels)					
	Religione (5 levels)					
	Politica (5 levels)		e			
	Didatticità (5 levels)					Educat. Content (51.)
						Multiculturalism (61.)
						Environmental
						Awareness (6 levels)
						Safety (5 levels)
				[		Canadian Content (3 1.)
						Commercial Content (4
						1.)

# 3.3. Some General Remarks and Conclusions about these Observations

### 3.3.1. General Remarks

Criteria for assigning labels which allow the more choices and the greater adaptability at the customization level are with

- the more levels inside each category
- not only age-based categories (so as to let to the person in charge of setting the criteria the possibility to judge by himself/herself what is convenient for a given age).

Criteria can be more or less subjective (and thus possibly inconsistent):

- age-based categories are rather subjective and linked with culture
- quality categories are also subjective
- the more levels inside a category, the more nuances and thus the more risks of subjectivity.

# 3.3.2. Conclusions about these Observations

Following comments can be made from the tables of § 3 and, of course, concern only the ten analysed ratings. (Unfortunately, available information about evaluWEB are insufficient to be used here except for the breaking down of labelling categories.)

- Several conclusions can be drawn first about who fill the different roles and about the link between rating and the commercial
- Some ratings (CyberNOTlist, Net Shepherd's Rating, SurfWatch's rating and SafeSurf Internet Rating Standard) have been linked, at least initially, to the development of a given filtering software (respectively by Microsystems[U.S.], the Canadian company NetShepherd, Spyglass
- Firms either ask 'representative' committee to set labelling vocabulary and criteria for assigning labels (for example, Microsystems, Spyglass/SurfWatch) or do it themselves (for example, NetSepherd and Adequate.com [U.S. entertainment web sites provider firm]). The case of SafeSurf seems special: it will no longer be offering the SafeSurf Internet Filtering Solution and currently present himself as a no-fee parents'
- The two firms in charge of defining criteria and vocabulary for assigning labels do not realise themselves the labelling: Net Shepherd lets labels assigned by third party communities composed of end users and have built a very famous database of ratings opinion and Adequat.com provides self rating service.
- On the other hand, four self ratings services (the Italian IT-RA, the U.S. RSCA and the U.K. Safe For Kids and Vancouver Webpages' Rating) have not been developed by firms but by non-profit organisations (the first two) or an individual (the last two).

From a cultural point of view, let us notice that the great majority of the ratings is:

• in English but one is written in Italian

• with criteria defined in U.S. except for Net Shepherd's Rating and Vancouver Webpages Rating Service (both made in the Western part of Let us add about third party ratings services that only U.S. people intervene to assign labels in the case of the CyberNOTlist and evaluWEB but

the SurfWatch Surfer team includes also Japanese people. And let us notice that the Rating Communities of Net Shepherd « represent the Internet's

and the second second

- About the rating categories, let us make the following conclusions:
- Only the self rating services provide *levels* inside categories other than age-based categories.
- Age based (or quality) ratings are provided either by commercial firms (Adequate.com and Net Shepherd) or by non-profit organization.

• One of the ratings allowing the most choices for the setting (for example, by parents) is provided by a no fee parents' organization (SafeSurf). • The most frequent labelling categories are: sex, violence, and then age.

And let us as make a suggestion: Why not include in the categories specific labels for child pornography and calls to violence or hate in order to really and efficiently always censor it (already at the level of ISP)? This suggestion is in accordance with the conclusions of MAPI (see : http://www.info.fundp.ac.be/~mapi/mapi-eng.html) but is not made by CPSR (Computer Professional for Social Responsibility) (1997), for

# 3.4. Generalisation : What could be rated with PICS?

« PICS labels can describe any aspect of a document of a Web site ... »: indecency (cf. current labels), privacy, intellectual property, subject categories, reliability of information from a site, software's safety (« to help protect computers from exposure to viruses ») (see Resnick 1997).

# 4. Ethical Issues and Questions

Ethical issues with filtering software will be discussed from the breakdown of table 0. Let us first remark that 'set labelling vocabulary and criteria for assigning labels' is not value-neutral and that 'assign labels' and 'set filtering criteria' can imply moral judgements.

### 4.1. Outside PICS

Outside PICS, it happens that several roles (particularly 'set labelling vocabulary', 'assign labels', 'write filtering software' and even 'set filtering judgements of this firm!

### 4.2. With PICS

With PICS, as explained above, the 6 roles can be filled by different entities. This can improve the situation from an ethical point of view but cannot delete any issue.

# 4.2.1. 'Set labelling vocabulary and criteria for assigning labels'

• First of all it must be noticed that to set labelling vocabulary and criteria for assigning labels is a really important role : as pointed out by CPSR (1997) « in general, the use of a filtering product involves an implicit acceptance of the criteria used to generate the ratings involved. » Who is in charge of this role?

#### 4.2.2. 'Assign labels'

- Who is in charge of the very sensitive role of assigning labels ?
- Which of the two approaches (self-rating and third party rating) is the best?
- When a third party rating service is involved, the next questions are to be raised : Who is effectively represented by this third party ? Is this party representative of a values-oriented organisation or of a given population ? How are the ratings attributed ?
- With self rating, the questions are :

How to oblige or, at least, to incite people to self rate ? And on the basis of which principle ?

How to solve the problem of mislabelled pages, and particularly of deliberately mislabelled pages?

[As suggested by Resnick (Technology inventory), « The Internet community will need to co-operate in the creation of either vouching services, which vouch for authors who are honest in their self-labelling, or blacklisting services which keep track of authors whose labels are not reliable. »]

• If people assign labels and if labelling is not compulsory all over the world, it is obvious that many sites will stay unlabelled. The question is then: What to do with unlabelled sites? If the software allow unrated sites, then the global control will not be efficient but if it does not, then software could end up blocking access to a significant amount of the individual, idiosyncratic speech that makes the Internet a unique medium of Internet. » (Weinberg 1997)

# 4.2.3. 'Write filtering software'

• Who is in charge to decide:

Which kind of control/filtering ? (see the 6 possibilities [suggest, search, inform, monitor, warn, block] in table 1.1) Which location ? (see table 1.2)

# 4.2.4. 'Set filtering criteria' (= customize)

- Which kind of customization ? In fact there is a dilemma : the more choices you give to the final users the more difficult it is to set ! A solution in the future could be, as suggested by Resnick (Technology Inventory), the use of PICSRules (a format for writing filtering settings).
- Who is in charge of this role? Initially this role was dedicated to parents to control their children. But filtering software are used also by libraries (in U.S.), for instance to control adults (see Weinberg).
- Is it ethically justified to give such a power of control to this kind of entity?

### Sources

### Parental control SW comparisons

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### Synthesis:

Cranor L.F. & Resnick P., Technology Inventory, 12 March 1998, http://www.research.att.com/~lorrie/pubs/tech4kids/t4k.html Resnick P. 1997, Filtering Information on the Internet, *Sci. Amer.* 03 97, http://www.sciam.com/0397issue/0397resnick.html Resnick P. (last updated) 1998 01 03, Platform for Internet Content Selection (PICS), http://www.w3.org/PICS/ Resnick P. PICS Third-Party Rating Services (last update March 5, 1996), http://www.w3.org/PICS/raters.htm Resnick P. last revised 26 01 1998, PICS, Censorship & Intellectual Freedom FAQ, http://www.w3.org/PICS/PICS-FAQ-980126.html Resnick P. & Miller J., 1996, PICS: Internet Access Controls without Censorship, CACM 39 (10): 87-93, October 1996. Weinberg J. 1997, Rating the Net, http://www.msen.com/~weinberg/rating.htm CPSR 1997, Filtering FAQ, Version 1.1, 12/25/97, written by Hochheiser H., http://quark.cprs.org/~harryh/faq.html MAPI (Mouvement Anti-Pédophilie sur Internet) http://www.info.fundp.ac.be/~mapi/mapi-fr.html

# Web sites with specific technology description

http://www.cyberpatrol.com http://www.microsys.com/cyber/fact.html

http://www.sserv.com/evaluweb/pics.html http://www.sserv.com/evaluweb/ratings.html

http://www.surfwatch.com http://www1.surfwatch.com : Surfwatch PICS Label Bureau http://www.news.com/News/Item/0%2C4%2C21751C00.html?sas.mail: Lipton, B., Software to filter workers'access, 4 May 1998

http://www.safesurf.com

http://www.rsac.org http://www.netshepherd.com (November 97) http://www.ratings.netshepherd.com http://www.adequate.com http://www.citinv.it/ http://www.rsac.org/ http://www.weburbia.com/safe/ratings.html http://vancouver-webpages.com/VWP1.0/

# Acknowledgements

The author thanks Jacques BERLEUR for his comments and suggestions.

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