United Nations
Educational, Scientific and
Cultural Organization

Keystones to foster inclusive Knowledge Societies

Access to information and knowledge, Freedom of Expression, Privacy, and Ethics on a Global Internet

Final Study

United Nations
Educational, Scientific and
Cultural Organization

Keystones to foster inclusive Knowledge Societies

Access to information and knowledge, Freedom of Expression, Privacy, and Ethics on a Global Internet

Published in 2015 by the United Nations Educational, Scientific and Cultural Organization
7, place de Fontenoy, 75352 Paris 07 SP, France

© UNESCO 2015

ISBN: 9789231000898

This publication is available in Open Access under the Attribution-ShareAlike 3.0 IGO (CC-BY-SA 3.0 IGO) license (http://creativecommons.org/licenses/by-sa/3.0/igo/). By using the content of this publication, the users accept to be bound by the terms of use of the UNESCO Open Access Repository (http://www.unesco.org/open-access/terms-use-ccbysa-en).

The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The ideas and opinions expressed in this publication are those of the authors; they are not necessarily those of UNESCO and do not commit the Organization.

UNESCO is an intergovernmental organisation, with a mandate to promote and protect freedom of expression. In this context, pursuant to 37 C/Resolution 52, the present study results from an inclusive multistakeholder process, which includes governments, the private sector, civil society, international organizations and the technical community. It presents a compilation of current trends, views and positions in current debates on the Internet related issues within the mandate of UNESCO, including access to information and knowledge, freedom of expression, privacy, and ethical dimensions of the Information Society.
See: http://www.unesco.org/new/en/Internetstudy/

Graphic design: UNESCO
Cover design: UNESCO
Illustrations: UNESCO
Typeset: UNESCO
Printed by: UNESCO
Printed in France

Contents

Foreword 5

Executive Summary 9
- The Internet — Broadly Defined 14
- Challenges for the Digital Age — What are the Ends that Technology Should Serve? 15
- The Four Keystone Fields of Focus 16
- The Internet Universality Principles: R-O-A-M 17
- Relationships between Study Keystones and Principles 18
- Stakeholders 19
- The Approach and Methodology of this Study 20
- Outline of this Report 23
- Limitations of this Internet Study and Report 23

Access to Information and Knowledge 27
- Background 28
- Principles 29
- Consultations on Promoting Access 30
- Possible Options for Future Action to Support Access to Information and Knowledge 33

Freedom of Expression 37
- Background 38
- Principles 38
- Consultations on Promoting Freedom of Expression 40
- Possible Options for Future Action to Support Freedom of Expression 51

Privacy 55
- Background 56
- Principles 56
- Definitions 59
- Principles and Arrangements Ensuring Respect for Privacy 60
- Possible Options for Future Action on the Issue of Privacy 66

Ethical Dimensions of the Information Society 69
- Background 70
- Principles 71
- Consultations on Promoting Ethics 72
- Possible Options for Future Action on Ethical Issues 74

Cross-cutting Areas and Broader Issues 75
- Consistency across keystones 76
- Jurisdictional issues 77
- The Internet as a space of intersections 78
- Possible Options for Future Action on Cross-cutting Issues 79

Conclusions 81
- From Principles to Actions 82
- Following and Tracking the Universality Principles 83
- Multistakeholder Approaches 83
- UNESCO's Engagement with All Four Keystone Areas 84
- Coordination and Collaboration 85
- Possible Options for Future Action as regards UNESCO's role on Internet-related issues within its mandate 86

References 89

Appendices 93
- Appendix 1. Background and Structure of this Study 94
- Appendix 2. The Consultations Held on this Internet Study 94
- Appendix 3. The Major Events in Support of the Internet Study 95
- Appendix 4. Questionnaire for the Comprehensive Study 96
- Appendix 5. Summary Report of Responses Received to the Online Questionnaire Consultation 98

Outcome document 102

Acknowledgements 107

Foreword

UNESCO is pleased to present this study, which represents a response to a resolution by the General Conference in 2013 to address key issues concerning the Internet for Knowledge Societies.[1]

This report builds on the finalized concept paper for the Internet Comprehensive Study, which was released in June 2014. The study and earlier concept paper stemmed from an item placed on the agenda of UNESCO's 192nd Executive Board in October 2013, which informed debate by UNESCO Member States on Internet-related issues of relevance to UNESCO's mandate. The discussion focused on ethics and privacy in cyberspace, as well as freedom of expression and access, which are the foci of the present report. During the 37th session of the General Conference, Member States affirmed the principle of applicability of human rights in cyberspace, and there was general acceptance that UNESCO was an appropriate forum to facilitate and lead discussion on issues within its mandate, including access to information and knowledge, freedom of expression, privacy, and ethical dimensions of the Information Society. Member States reached a consensus resolution that mandated this study.

The Resolution called for a comprehensive and consultative multistakeholder study within the mandate of UNESCO on Internet-related issues of access to information and knowledge, freedom of expression, privacy, and the ethical dimensions of the Information Society.[2] The study was to include possible options available for future actions. The results should inform reporting to the 38th General Conference in 2015 in the framework of UNESCO's implementation of the World Summit on the Information Society (WSIS) outcomes.

This mandate emerged after an extensive debate by Member States on a Discussion Paper[3] prepared by the Secretariat that followed a decision taken by the Executive Board at its 192nd session. UNESCO's action mandated the study to be inter-sectoral in nature, drawing on work in Communication and Information and the Social and Human Sciences, as well as UNESCO findings from related reports.

The ability of UNESCO to undertake the study and related consultation builds on the decision titled 'Reflection and Analysis by UNESCO on the Internet', adopted by the 36th session of the General Conference in 2011.[4] This was further demonstrated by the UNESCO event held in 2013, where 1450 participants from 130 countries attended more than 80 sessions to review the World Summit on the Information Society[5], and which generated an outcome statement that was endorsed at the 37th General Conference in 2013.[6] (See also Appendix 3)

To meet the mandate for the study, the Secretariat developed a concept note in February 2014 that outlined a proposed approach, timeline and multistakeholder process to carry out the study. It was proposed that the framework be informed by a prescriptive theoretical conception of 'Internet Universality', which summarizes UNESCO's normative positions on the Internet and highlights issues around four principles: (i) that the Internet should be human rights-based, (ii) open, (iii) accessible to all, and (iv) nurtured by multistakeholder participation. These have been abbreviated as the R-O-A-M principles, standing for the principles of Rights, Openness, Accessibility and Multistakeholder participation. The research process was envisioned to include consultations at a range of global forums and a written questionnaire sent to key actors. These proposals were canvassed widely over five months.

In a series of meetings, input was sought from Member States and other stakeholders to finalize the research design and questions, specifically seeking feedback on the concept notes for the study and for the framework of 'Internet Universality'. (The set of consultations is detailed in Appendix 2 of this

report.) Based on the input from stakeholders, the concept note and the questionnaire were enriched and finalized. In line with the positive feedback received, the overall structure of the concept note and the framework of 'Internet Universality' were retained.

The study process then unfolded. Further consultations were held at international conferences around the world. An online consultation process solicited written contributions in response to the finalized research questions. At the same time, experts were commissioned to conduct research on a number of specific sub-themes that require in-depth study. These include a study on the role of Internet intermediaries in promoting freedom of expression; the protection of journalists' sources in the digital age; online hate speech; online licensing and free expression; Internet governance principles documents; privacy and media and information literacy; and privacy and transparency. These sub-studies have all contributed to the wider Internet study. UNESCO's earlier studies and decisions on the Internet were also tapped.

On this basis, a draft study was developed reflecting an inclusive multistakeholder process, which includes governments, the private sector, civil society, international organizations and the technical community.

Significant discussion of the draft study was enabled at UNESCO's 'CONNECTing the dots' conference on 3–4 March 2015.[7] This two-day multistakeholder event involved almost 400 participants, including 116 speakers reflecting a wide range of backgrounds, and including governments, intergovernmental organisations, civil society, private sector, academia and the technical community. There were 16 break-out sessions and seven plenaries. The event was made possible by support from the Ministry of Foreign Affairs of Finland, the Kingdom of the Netherlands, Sweden, the Swiss Confederation Federal Office of Communications, Google inc., The Walt Disney Corporation, EurID and ICANN. The conference deliberations constituted the final consultative stage of the research process, and they enabled the draft study to be finalised in light of the conference and accordingly be updated in the form of the present report.

In accordance with the 2013 mandate from the General Conference, the consultative process had invited suggestions for possible options for future action by UNESCO, and these were incorporated into the draft study. These proposed options also formed the basis of a draft outcome document for the CONNECTing-the-dots event, which – like the study as a whole – was put up for discussion before and during the conference. Congruent with the evaluative discussion around the draft study, so too the related draft options, as reflected in the draft outcome document, were refined and updated.

This process was structured as follows. Ahead of the conference, a number of online comments were received on the draft study and the draft conference outcome document.[8] During the conference itself, two specialized open drafting sessions were held, where many further comments were contributed. A multistakeholder group worked continuously during the conference to synthesize all discussion into an outcome document which would show the areas of overwhelming agreement by participants as regards options.[9] The group further identified points of detail or difference that would be better reflected within the body of the revised version of the study rather than in the options. The combined results of all this review are now presented in this publication.

After the finalization process described above, the study and the conference outcome document were reported upon for the 196th session of UNESCO's Executive Board in April. In welcoming the progress on the study, the UNESCO Executive Board recognised the insights of the "CONNECTing the Dots: Options for Future Action" conference, and expressed appreciation of "the open, inclusive and transparent process that UNESCO has engaged in for the study". It further recommended the Outcome Document for consideration by the 38th session of the General Conference and looked forward to Member States deliberations on the options set out therein. In addition, the Board requested the Director-General to forward the Outcome Document as a non-binding input to the post-2015

development agenda and the UN General Assembly's review process for the World Summit on the Information Society. Finally, it noted that the study will inform the report to the 38th General Conference of UNESCO in November 2015 on UNESCO's work in implementing the outcomes of the World Summit on the Information Society.

UNESCO thanks all those who took part in consultative meetings, submitted responses to the questionnaire, and took part in the conference.

UNESCO's Deputy Director General, Mr Getachew Engida, in closing the 'CONNECTing the dots' conference, stated: "The Internet and all new information and communication must be at the heart of the post-2015 sustainable development agenda - as a transformational force and a foundation for building the knowledge societies we need." Within this dynamic global context, this publication with its rich fusion of insights from around the world represents a unique and topical resource.

Footnotes

1. UNESCO's 195 Member States mandated this study through Resolution 52 of the Organization's 37th General Conference Resolution in November 2013. The questions and design of the study were developed through a five-month multistakeholder consultation process with civil society, academia, the private sector, the technical community, inter-governmental organizations and UNESCO's Member States.
2. http://unesdoc.unesco.org/images/0022/002261/226162e.pdf
3. Discussion Paper. 'Internet Related Issues: Including Access to Information and Knowledge, Freedom of Expression, Privacy and Ethical Dimensions of the Information Society', produced in response to the mandate of UNESCO Executive Board 192 EX/Decision 40.
4. This document is available online at: http://www.iseforum.org/uploads/seminars/Untitled%20attachment%2000331.pdf [last accessed 17 December 2014].
5. See http://www.unesco.org/new/en/communication-and-information/flagship-project-activities/wsis-10-review-event-25-27-february-2013/homepage/#sthash.J5bgw1WF.dpuf
6. Towards Knowledge Societies for Peace and Sustainable Development, http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/wsis/WSIS_10_Event/wsis10_outcomes_en.pdf
7. http://www.unesco.org/new/en/netconference2015 [last accessed 28 March 2015].
8. Responses came from Brazil, France, Germany, India, Sweden, United Kingdom, the United States, the Council of Europe, the Office of High Commissioner for Human Rights, Internet Corporation for Assigned Names and Numbers, Electronic Frontier Foundation, Freedom Online Coalition, the World Association of Newspapers, Association of Progressive Communication, and several other NGOs and individuals.
9. Leading the group was Mr William Dutton, Quello Professor, Michigan State University. Other group members, reflecting a range of constituencies, included Ms Albana Shala, Chair of UNESCO's International Programme for Development of Communication (IPDC); Ms Chafica Haddad, Chair of UNESCO's Information For All Programme (IFAP); Mr Jānis Kārkliņš, Chair of Multistakeholder Advisory Group (MAG) for Internet Governance Forum; Ms Constance Bommelaer, Internet Society (ISOC); Ms Ellen Blackler, International Chamber of Commerce (ICC); Ms Anriette Esterhuysen, Association for Progressive Communication (APC); Ms Rana Sabbagh, Arab Reporters for Investigative Journalism (ARIJ) and Mr Erick Iriarte, IALaw.

Executive Summary

UNESCO's vision of universal Knowledge Societies builds on a free, open and trusted Internet that enables people to not only have the ability to access information resources from around the world, but to also contribute information and knowledge to local and global communities. What can UNESCO do to move towards the realization of this vision of Internet-enabled Knowledge Societies that can foster inclusive sustainable human development worldwide?

To address this question within the mandate of this study, UNESCO has worked with Member States and other stakeholders to analyse four separate but interdependent fields of Internet policy and practice, within the mandate of UNESCO, perceived to be central to achieving this vision. These are access to information and knowledge, freedom of expression, privacy, and ethical norms and behaviour online. This report assesses these four fields by viewing them as keystones for building a free and trusted global Internet that will enable inclusive Knowledge Societies. The metaphor of "keystone" refers to the architectural element which links an arch at the top, and thereby holds other stones in position. It is used to convey the importance of these four dimensions to the structure of the overarching Internet.

The framework of investigating the four key fields for this report is that of Internet Universality, which identifies four normative principles agreed by UNESCO Member States. These are the principles of human rights, openness, accessibility and multistakeholder participation, summarised in the acronym R-O-A-M. The report examines each of the four keystones of the Internet and asks whether and how their development is aligned with these four R-O-A-M principles.

Based on all this, the report identifies a series of options for UNESCO.

The four keystones are broadly defined for this study. Access to information and knowledge encompasses the vision of universal access, not only to the Internet, but also to the ability to seek and receive open scientific, indigenous, and traditional knowledge online, and also produce content in all forms. This requires initiatives for freedom of information and the building of open and preserved knowledge resources, as well as a respect for cultural and linguistic diversity that fosters local content in multiple languages, quality educational opportunities for all, including new media literacy and skills, and social inclusion online, including addressing inequalities based on income, skills, education, gender, age, race, ethnicity, or accessibility by those with disabilities (Lee *et al.* 2013; Gutierrez and Trimmiño 2009).

Freedom of expression entails the ability to safely express one's views over the Internet, ranging from the right of Internet users to freedom of expression online, through to press freedom and the safety of journalists, bloggers and human rights advocates, along with policies that enhance an open exchange of views and a respect for the rights of free online expression.

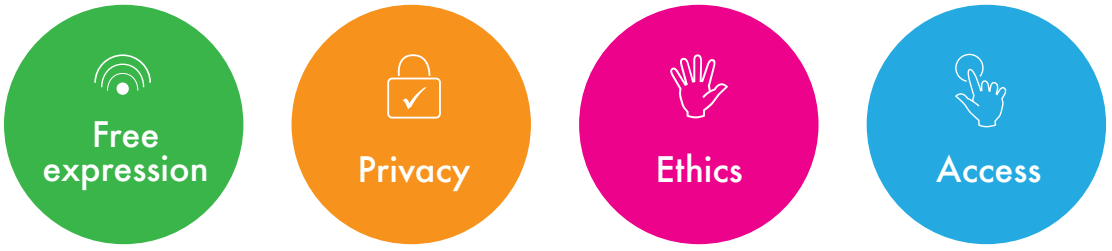
Privacy refers broadly to Internet practices and policies that respect the right of individuals to have a reasonable expectation of having a personal space, and to control access to their personal information. Privacy must be protected in ways that are reconciled with the promotion of openness and transparency and a recognition that privacy and its protection underpins freedom of expression and trust in the Internet, and therefore its greater use for social and economic development.

Finally, ethics considers whether the norms, rules and procedures that govern online behaviour and the design of the Internet and related digital media are based on ethical principles anchored in human rights based principles and geared to protecting the dignity and safety of individuals in cyberspace and advance accessibility, openness, and inclusiveness on the Internet. For example, Internet use should be sensitive to ethical considerations, such as non-discrimination on the basis of gender, age or disabilities; and shaped by ethics rather than used to retrospectively justify practices and policies, placing a focus on the intentionality of actions, as well as on the outcomes of Internet policies and practices.

These four keystones are part of a much larger array of factors that are required to build bridges across the world, but they serve to foster a more holistic approach while also bringing a focus to UNESCO initiatives. Building on UNESCO's vision and the Internet study, this report identifies a concrete set of activities, policies and practices that multiple stakeholders can address over the coming years.

Within this background framework, the research has built upon a series of UNESCO studies and reports on the Internet and Knowledge Societies. It has also drawn upon relevant research on

the factors shaping the Internet and its societal implications. This report further includes extensive reference from the consultation process around the Internet Study, which included a series of UNESCO meetings with multiple stakeholders (Appendix 2), and a global questionnaire that solicited comments and responses on the four keystones and the cross-cutting issues of the Internet Study. Finally, it has built upon feedback on a draft version of the study, as expressed at the 'CONNECTing the dots' conference on 3-4 March 2015. UNESCO hopes that this report will stimulate and inform discussion about its role in regard to the Internet, subject to further guidance by Member States.


Free expression
Privacy
Ethics
Access

Introduction

The social, civic and economic potential of a global Internet — one that bridges the world — is widely recognized (UNESCO 2011a). Connecting an individual, locality, nation or continent to the wealth of information, expertise and communities distributed across the globe is among the greatest promises of the Internet; for example, educational materials can now readily be put in the hands of students worldwide. However, the Internet can also empower users to create, disseminate, and consume information and knowledge resources. This potential for using the Internet to reconfigure access to information and knowledge, and also reshape freedom of expression, privacy, and ethical norms and behaviour, has been a theme in academic research (for example, Dutton 1999, 2004; Castells 2000; Castells and Himanen 2014). It is also recognized by the Member States of UNESCO, who have seen the potential of a universally free, open and global Internet to support the fulfilment of UNESCO's mandate and its vision for Knowledge Societies (Norris 2005; Mansell and Tremblay 2013; UNESCO 2013f). As UNESCO's (2011a) reflection on the Internet put it:

The overarching objectives of the Organization (the building of peace, the alleviation of poverty, sustainable development, Education for All, creation and dissemination of knowledge, freedom of expression, and intercultural dialogue), and its two global priorities Africa and Gender Equality, have natural synergies with the Internet.[1]

This report focuses on identifying and describing the ways in which the four keystones of this study are being shaped, assessed through the theoretical framework of R-O-A-M principles. These principles serve as a prescriptive theory, positing that adherence to them is most likely to ensure an open and trusted Internet that supports UNESCO's vision of Knowledge Societies. The insights gained from this study are used to propose options for achieving this vision.

The reason why this study treats the four fields to investigated as "keystones" is that not only are they core to UNESCO's competencies[2], but they are all essential to networking the world online. As such there are interdependencies between access to information and knowledge, freedom of expression, privacy, and ethics (Mansell and Tremblay 2013; UNESCO 2013b). These keystones are constructed and supported by a diverse array of social and technological components.

This introduction describes the scope and methods of the research that have gone into this report on the many complex issues and challenges posed by digital developments in the areas within which attention has been focused.

The study is anchored in a review of related UNESCO documents focused on the Internet,[3] along with a review of literature, and an extensive consultation process including with UNESCO Member States (see Appendix 2), and an online consultation with other actors (see Appendix 5).

The Internet — Broadly Defined

The Internet is broadly defined in this study to include the interconnected information and communication technologies, such as the Web, social media, developing mobile Internet, and the Internet of Things (IoT), including such developments as cloud computing, big data, and robotics, for example, that are increasingly central to networked technologies. Biometrics and other technologies central to developing network applications, such as for personal identification and security, are also incorporated in this definition.

By 2014, over three billion people had gained access to the Internet from around the world.[4] In many respects, this is a major advance in worldwide access to information and knowledge, but nevertheless translates to only 42 per cent of the world, leaving most of the world without access. Even those with access are often constrained by technical constraints, language barriers, skills deficits and many other social and policy factors, from accessing information and knowledge in ways essential for realizing Knowledge Societies (Qui 2009). As a UNESCO report explained:

By Knowledge Societies, UNESCO means societies in which people have the capabilities not just to acquire information but also to transform it into knowledge and understanding, which empowers them to enhance their livelihoods and contribute to the social and economic development of their societies. (Souter 2010: 1.2.1)

For such reasons, there remain major challenges for access to information and knowledge commensurate with achieving the aims of Knowledge Societies, and equally challenging issues arising over freedom of expression, privacy and new ethical issues tied to the use of the Internet. For example, with respect to privacy, one ambitious effort to track developments worldwide, the WebIndex, estimated that 84 per cent of countries 'do not have effective laws and practices to protect the privacy of online communication'.[5] Clearly there are growing challenges as more of the world is using the Internet in more central ways, making it an increasingly essential infrastructure of everyday life, work and identity in many parts of the world (Lee *et al.* 2013; Graham and Dutton 2014).

Challenges for the Digital Age — What are the Ends that Technology Should Serve?

The global diffusion of the Internet is progressing, but at the same time what we know as the Internet is continually changing. Innovation continues apace in many areas, from mobile applications and payment systems to social media and Information and Communication Technologies (ICT). This progress may seem like an unalloyed blessing, evident in the degree that the Internet has reached more people in more powerful ways than ever thought possible. It has also become a major resource for economic development. Fostering continued Internet innovation is an important goal, but the issues are broader than simply supporting technological innovation and diffusion (Mansell and Tremblay 2013).

As the Internet and related digital media have evolved, they have come to serve many diverse purposes for many different actors, from household entertainment to government surveillance. It is important, therefore, to consider the ends that this technology should serve, and what objectives and actions could be developed to encourage progress in these directions. In this respect, trends in technology, policy and patterns of Internet use raise important questions about its current and future social, cultural and economic uses and implications. For example, technical innovations are altering traditional business models, such as in the provision of news, and the structure of organisations, where traditional hierarchical reporting relationships have been challenged by many-to-one and many-to-many networks of communication that span organisational boundaries. As digital media have been a force behind the convergence of formerly more distinct technologies of the post, telephone, and mass media, so policy and regulation have often failed to keep up. This has left potentially inappropriate regulations in place and failed to integrate new solutions such as Media and Information Literacy. Likewise, technical change is being accompanied by changes in the habits of individuals: for instance, how households watch television, or how many households no longer perceive the need for a fixed-line telephone, once viewed as the gold standard of modern communication infrastructures, or even in how scientists collaborate. For most individuals coming online in the current period, the linking device is the mobile phone, which can entail distinctive uses and issues as regards public expression, geo-location, privacy, functionality, security and terms of service of software "apps".

These changes are simple illustrations of a wider array of worldwide social and technical trends that are likely to have unanticipated and potentially positive and as well as negative consequences for human rights such as press freedom, as well as access to information and the ethical use of communication technologies — and they need to be well understood, better anticipated and appropriately addressed through policy and practice (UNESCO 2014d). The IoT, for example, could usher in major benefits, such as remote monitoring of patients. But it might also unintentionally undermine the privacy of individuals, unless this potential is recognized and avoided in the design and regulation of this innovative area of activity.

A worldwide ecology of policies and regulations is shaping the interrelated local and global outcomes of the Internet on access to information and knowledge, freedom of expression, privacy and ethics (Dutton *et al.* 2011; Mendel *et al.* 2012; MacKinnon *et al.* 2015; UNESCO 2013b). And such policy choices are being considered by a multiplicity of actors at all levels — from the local to national, regional and global, including governments, international organizations, civil society and non-governmental organizations (NGOs), technical communities, the private sector of business and industry, academia, individual users, and media organizations, such as the press, that rely increasingly on the Internet. All are concerned that the policies and practices governing the Internet could undermine principles and purposes they view as fundamental, whether those values are centred on freedom of expression, the privacy of personal information, or ethical conduct, and whether the implications are perceived to be immediate or long term.

UNESCO and its Member States have sought to develop a broad and overarching perspective on the new and emerging trends that are shaping the Internet and its global implications, as well as a framework and approach to addressing these interrelated issues. At the most general level, the Organization has supported a broad conception of building Knowledge Societies globally, but the question is how the Internet can be used in ways that support this vision. In that context, this UNESCO 'Internet Study' can help address this broad question.

The Four Keystone Fields of Focus

The mandate of this study, building upon previous UNESCO meetings and discussions of the Internet, provides a basis for advancing this discussion by analysing four keystones for an open, global and secure Internet (UNESCO 2013d). These are access, freedom of expression, privacy and ethics (Table 1). There are many other important values and interests, but most are closely related as components or underpinnings of these four keystones which are the required fields of study for this report.

Table 1. Four Keystone Fields of Focus[6]

Keystone	Components and Underpinnings of Each Field of Focus
Access to Information and Knowledge	Universal access; ability to seek and receive information online, including scientific, indigenous, and traditional knowledge; freedom of information, building of open-knowledge resources, including open Internet and open standards, and Open Access and availability of data; preservation of digital heritage; respect for cultural and linguistic diversity, such as fostering access to local content in accessible languages; quality education for all, including lifelong and e-learning; diffusion of new Media and Information Literacy and skills, and social inclusion online, including addressing inequalities based on skills, education, gender, age, race, ethnicity, and accessibility by those with disabilities; and the development of connectivity and affordable ICTs, including mobile, the Internet, and broadband infrastructures.
Freedom of Expression	Ability to express views through the Internet, Web and related digital media; rights to freedom of expression online, in line with Article 19 of Declaration of Human Rights, including press freedom and the safety of journalists, social media users and human rights advocates, as a precondition for media freedom, pluralism and independence; policies that enhance open exchange of views; multi-lingualism; users' understanding of rights and responsibilities of free online expression; inclusive versus restricted expression; arrangements for multistakeholder participation, fostering social and self-regulation of free expression in cyberspace
Privacy	Internet practices and policies that respect the right to privacy; the promotion of openness and transparency that takes personal privacy into account; recognition that privacy and its protection underpins trust in the Internet and therefore greater use and accessibility; and the use of multistakeholder arrangements to reconcile privacy with other human rights, such as freedom of expression or "to life, liberty and security of person".
Ethics	Ethics places a focus on the realm of choice between options, and includes the intentionality of actions, as well as outcomes, intended or unintended, as the results of decisions made that impact on the wellbeing of individuals and society. Internet use can have positive outcomes but it can also be misused or purposively employed in ways that violate standard norms, such as to harm others. This category considers whether the norms, rules and procedures that affect online behaviour are based on ethical principles anchored in human rights. This questions if norms are geared to protect the freedoms and dignity of individuals in cyberspace and sensitive to advancing accessibility, openness, inclusiveness and multistakeholder participation on the Internet. Internet practices, law and policy can be anchored in conscious ethical considerations, such as non-discrimination on the basis of gender, age or disabilities. Ethics can play a role in shaping emerging practices and policies.

The Internet Universality Principles: R-O-A-M

UNESCO's approach to the Internet has been framed to stay within its mandate, as affirmed in the Discussion Paper prepared for UNESCO's 37th General Conference (UNESCO 2013d). From those documents, already adopted by UNESCO's governing bodies, several principles have been especially important in guiding the approach of the Organization to the Internet, and which can be summarised as 'Internet Universality' defined by the R-O-A-M principles.[7] In focusing on the four keystone fields of the Internet, the study has therefore used the R-O-A-M principles as a theoretical framework for assessing the state of play on each keystone. This framework underscores a set of normative principles that, when applied to the Internet, are key to achieving an open, global and secure Internet, by highlighting the relevance of human rights as a whole, as well as openness, accessibility and multistakeholder participation (Table 2).

For this study, a review of more than 50 existing declarations of principles, guidelines, and frameworks related to the Internet was conducted.[8] It assessed their relevance to UNESCO concerns, and documented points of overlap and commonality with areas covered by this report. It was noted that while the distributed ecology of these statements of principles for the Internet reflects the wide range of actors and issues concerned with the Internet, UNESCO itself is not particularly served by this situation. In this context, the report signalled the distinctive value to UNESCO of the Internet Universality R-O-A-M principles within the plethora of articulations by other actors (Weber 2015).

Table 2. The R-O-A-M Principles for Internet Universality[9]

Principle	Definition
Rights	The Internet is becoming so significant in everyday life, work and identity in much of the world, that it is increasingly difficult to distinguish human rights on and off the Internet. UNESCO and the UN more broadly have affirmed the principle of human rights should apply to all aspects of the Internet. This would include, for example, freedom of expression, and privacy, which are keystones of this study. At the same time, as these two rights should also apply to the Internet, so too should other rights, many of which are key to UNESCO's mandate, such as cultural diversity, gender equality, and education. As human rights are indivisible, all these rights mentioned above also need to be balanced with rights such as to association and to "life, liberty and security of person", and this applies to both digital and extra-digital life.
Openness	This general principle, applied to the Internet, highlights open global standards, inter-operability, open application interfaces, and open science, documents, text, data, and flows. Social and political support for open systems, not only technical expertise, is part of this principle. Transparency is part of openness, as well as a dimension of the right to seek and receive information. In this way, amongst others, rights and openness are interdependent.
Accessibility	There is special relevance to the Internet of the broader principle of social inclusion. This highlights accessibility to all in overcoming digital divides, digital inequalities, and exclusions based on skills, literacy, language, gender or disability. It further points to the need for sustainable business models for Internet activity, and to trust in the preservation, quality, integrity, security, and authenticity of information and knowledge. Accessibility is interlinked to rights and openness.

Principle	Definition
Multistakeholder Participative	The general principle of participation in decision-making that impacts on the lives of individuals has been part of the Internet from its outset, accounting for much of its success. It recognises the value of multistakeholder participation, incorporating users and a user-centric perspective as well as all other actors critical to developing, using and governing the Internet across a range of levels. Rights, openness and accessibility are enriched by the multistakeholder participation principle.

These R-O-A-M universality principles when applied as a theoretical framework to the Internet illuminate the issues to be assessed, particularly in analysing the four keystones covered in this study: access, free expression, privacy and ethics. Accordingly, the stronger the correspondence of the keystones to these four principles, the greater will be its potential to contribute to building Knowledge Societies (UNESCO 2013e).[10]

For this reason, the R-O-A-M principles served to define the questions for this study in each keystone under investigation. Without the presence of these principles in each of the four Internet keystones, the Internet as a whole would be less than universal — an issue that is of major relevance to UNESCO as a universal organization promoting universal fundamental values as a foundation for diversity and social inclusion.

Relationships between Study Keystones and Principles

There are correspondences between the four R-O-A-M principles and the four fields (or keystones) of study. The difference, however, is that the principles constitute a theoretical framework for this study, while the keystones represent the specific objects of inquiry to which the framework applies. The analysis that follows thus demonstrates the results of applying the R-O-A-M framework to the four keystones. The result is the range of possible options for UNESCO set out at as a consequence of this analysis. The R-O-A-M framework applied to the keystones is shown in Table 3.

Table 3. The Foci of this Study: Keystone and R-O-A-M Principles

Keystones of the Internet	Theoretical framework of R-O-A-M Principles			
	Rights-based	Open	Accessible	Multistakeholder Participative
Access to Information and Knowledge	Basis for development of knowledge societies	Openness fosters greater access and a role for distributed expertise	Infrastructure is not sufficient; issues like language, disabilities, etc.	Information and expertise is widely distributed, not centralised
Freedom of Expression	People must perceive free expression as a fundamental right, and feel safe to express themselves	Sharing as a key value of free expression and inter-cultural dialogue	Free expression requires an ability to be heard and understood	Each individual has a stake along with actors across society, business and industry, government and academia

Keystones of the Internet	Theoretical framework of R-O-A-M Principles			
Privacy	Privacy is secured as a right even when balanced with other rights, such as "security of person"	In the interests of openness, privacy and protection of personal data should be balanced with transparency	Internet use relies on a level of trust in ability to control collection, storage and use of personal information	Processes of defining private and public space supported by multistakeholder processes
Ethics Based	Internet used as a tool to support peace and human rights	Openness enables transparency and accountability	Potential of ICTs to alter human interactions and deepen exclusion requires reflection	Need to encompass diverse user perspectives, varied ethical viewpoints of multiple actors

Stakeholders

Everyone has a stake in the future of the Internet. Even those who do not wish to use the Internet can be affected. It is possible to define a number of broad categories of stakeholders in the Internet, with subgroups as well. Table 4 provides a general overview.

Table 4. Categories and Examples of Internet Stakeholders

Category	Illustrative Actors
State	Parliaments, elected bodies
	Local, national governments
	Courts, and Judicial bodies
	Regulatory agencies
	Police and security agencies
	State-run media and broadcasting organizations
Business & Industry	Businesses using the Internet, large and small
	Internet businesses that create, manufacture and sell hardware, software, or services
	Internet Service Providers and related Internet intermediaries like telecommunications operators
	Internet content, search, or social media platform owners
	Commercial newspapers, radio, television broadcasters and content producers for music, film and television
Non-Governmental Actors	Public service broadcasters, community media
	Local and national NGOs
	International organizations using the Internet
Civil Society	Organized groups of citizens and Internet users
	Individual Internet users and non-users
International Governmental Organizations	Regional and global organizations
Research Actors	Research institutes, centres, consulting organizations
	Academic researchers
Individuals	Internet users, non-users, households, citizens, consumers, - with sensitivity to age, gender, disability, class and other distinctions which need addressing for full stakeholder recognition
Other Stakeholders	Human rights advocates, technical communities

Each of these categories has more or less unique stakes in the future of the Internet, but there are also areas of great overlap and interdependence. For instance, some NGOs, are likely to prioritize the promotion of human rights; meanwhile parliaments are primary actors in defining laws to protect these rights. Still other stakeholders are key to shaping rights online, such as such as search engine providers, and Internet Service Providers (ISPs) (MacKinnon *et al.* 2015). Individuals also have particular roles to play in respecting, promoting and protecting rights.

The Approach and Methodology of this Study

This study was based on multiple methodological approaches. First, we reviewed and synthesized previous UNESCO documents and studies related to the key foci of the present study, including past UNESCO governing body decisions as well as UNESCO publications. Major documents and studies incorporated in this review are referenced in the body of this report. These resources have been complemented by analysis of positions on the Internet agreed within other UN bodies.[11]

The synthesis process went through a number of stages, including a consultation document completed in June of 2014 (UNESCO 2014b), and discussed with Member States and other actors, which was then comprehensively revised and elaborated.[12] A number of specialised studies commissioned by UNESCO for this report have also fed into these findings.

In addition, our research team incorporated the findings of key academic, civil society, business and governmental research, and background resources that apply to the topics of this report and the future of the Internet and its societal implications around the world. Work of most direct relevance is referenced in this report, but we have not sought to comprehensively review all academic literature (for example, Rainie and Wellman 2012; Graham and Dutton 2014). Nevertheless, UNESCO enlisted the support of academics in this field to ensure that the report took this broad literature into account.[13]

Box 1

Areas Covered by the Consultation Questionnaire

- Access to Information and Knowledge in the Online Environment
- Freedom of Expression
- Privacy
- Ethics
- Broader Issues that Stakeholders Wished UNESCO to Address
- Views on Options for the Future

Further, we performed an analysis of all contributions received through an open, multistakeholder consultation process. The process was based in part on the consultation document completed in June 2014, and also incorporated feedback based on the knowledge and expertise of multiple stakeholders in discussion at a series of consultative meetings. The consultation process was then expanded through an online questionnaire that covered the four keystones under study, but also enabled stakeholders to address other issues and suggest options for future policy and practice (Box 1). The full online questionnaire is described in Appendix 4.[14] The questionnaire enabled participants to enter their responses directly or upload prepared text. Before addressing the specific areas studied, it is useful to look at the overall response to the consultation.

UNESCO received a total of almost 200 responses to the questionnaire, including 95 responses through UNESCO's website consultation, and 102 through a regional consultation in Latin America (see below). The 95 responses to the questionnaire through the UNESCO website, include submissions from concerned individuals, the technical community, the private sector, civil society, academics, Member States and international organizations. Many of these submissions were of substantial length and detail. Submissions were received from all over the world, with representation from each

of the five regions (Africa, the Arab States, Asia and the Pacific, Europe and North America, and Latin America and the Caribbean).

Tables 5 and 6 show the breakdown of the first group of respondents to the questionnaire by (self-identified) stakeholder category and region.

Table 5. Respondents to Internet Study Questionnaire through UNESCO Website by Stakeholder Category of Participant

	Number	Name
Civil Society and NGOs plus Individual Users	42	Association for Progressive (APC); AccessNow.org; Just Net Coalition (JNC); Article19; European Digital Rights (EURi); DotConnectAfrica; Independent Music Companies Association (IMPALA); Forum d''vignon; Human Rights in China, Hivos International, africaninternetrights.org, Institute Destrée as well as a number of individuals
Academia	27	African Centre of Excellence for Information Ethics (ACEIE) and 26 academia and individual experts from all continents.
Private Sector	3	Microsoft; the Walt Disney Company and an individual
Technical Community	2	Internet Corporation for Assigned Names and Numbers (ICANN) and Internet Society (ISOC) Yemen Chapter
International Organizations	5	Council of Europe (CoE); Office of the High Commissioner for Human Rights (OHCHR); International Telecommunication Union (ITU); International Federation of Library Association and Institutions (IFLA); European Broadcasting Union.
Governments	14	Burundi (2), Kenya (3), the United Kingdom, Lebanon, Oman, Sierra Leone, Mexico, Switzerland, Sweden, Austria, Freedom Online Coalition countries (24)[15], and Nordic countries (Denmark, Finland, Iceland, Norway and Sweden).
Others	3	Expert Committee on Communication and Information of the German Commission for UNESCO and two individuals.
Total	**95**	

Table 6. Respondents to Internet Study Questionnaire by Region

Region of Participants	Number
Africa	19
Arab States	5
Asia and the Pacific	9
Europe and North America	43
Latin America and the Caribbean[16]	8
Global	11
Total	**95**

The responses, which are all online on the UNESCO website, were studied qualitatively as well as quantitatively, using several analytical tools for content analysis, such as MAXQDA,[17] to ensure that all key themes and issues raised by respondents were identified.[18]

Responses to these questions provided a significant empirical component for new insights for this study. The responses were analysed to identify common themes and obtain detailed insights into the fields of focus. As the response content was analysed, themes were drawn out and grouped together via coding in the analysis tool. These groupings enabled easier identification of themes emerging across the answers of different respondents to the same question.

Though this method of content analysis could lend itself to quantitative analysis — for instance, by identifying the exact number of responses mentioning a particular view on privacy rights — the present analysis focused primarily on enumerating the range of perspectives offered by respondents to the questions, and not on a detailed quantitative breakdown of response content. This is mainly due to two factors. First, the open nature of the questionnaire meant that the pool of respondents was primarily self-selecting: the intent was not to obtain a randomized or strictly representative response pool. Reporting proportions of each type of response could therefore be misleading, insofar as the respondents were not necessarily a statistically representative cross section of the global community at large. Second, there were a large number of unique answers — in other words, ideas or suggestions offered by only a single respondent to a question. This highlights the diversity of opinion and creativity of the respondents; hence, ensuring the capture of all these ideas was deemed important.

Where appropriate, points of agreement and divergence are highlighted in the discussion below. Also, introducing each of the four keystones is a word cloud indicating the most common English words found in responses to questions in that area. This visualisation is designed to help readers see some of the key issues raised in each field, and also gain a sense of how the responses differed across the fields.

As noted earlier, responses to UNESCO's online consultation were further complemented by incorporating the findings of a parallel Latin American consultation. This additional consultation was conducted through an open invitation on social networks and directed requests to a personalized list of experts, organizations, academics and regulators in the region, as well as its promotion through the monthly newsletter Observacom and its website. A total of 102 questionnaires were completed by November 30th, with participants from Argentina, Brazil, Bolivia, Canada, Chile, Colombia, Costa Rica, Ecuador, USA, El Salvador, Spain, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, Dominican Republic, Uruguay and Venezuela. These participants were distributed across our categories of stakeholders, with 32 percent from civil society and NGOs, 37 percent from academia, 3 percent from the private sector, 1 percent from the technical community, 3 percent from international organizations, 4 percent from government, and 19 percent identifying themselves as individual users.

Finally, the draft study was discussed in detail over two days in March 2015 at UNESCO's 'CONNECTing the Dots: Options for Future Action' conference. Through participation in the conference, and review of all the subsequent rapporteur reports, the draft report was updated to reflect new points, feedback, and clarifications. In addition, all the draft options from the draft report were discussed and revised at the conference in a series of open sessions, which led to a final set that secured the overwhelming support of the conference attendees and were adopted as a conference outcome statement (See Appendix 6).[19] The revisions have all been incorporated into the relevant sections below.

All of this serves to highlight the nature of this study, drawing on an inclusive multistakeholder process, as requested by Member States. The result is a compilation of current trends, views and positions in current debates on Internet-related

issues within the mandate of UNESCO, including access to information and knowledge, freedom of expression, privacy, and ethical dimensions of the Information Society.

Outline of this Report

The body of this study is focused mainly on conveying the findings of the consultation around the four keystone fields, followed by a discussion of cross-cutting issues that do not fall neatly into one of the keystone areas. Each of the following sections begins with a brief introduction, followed by an overview of the responses to the consultation processes, and then concludes with possible options for future actions that Member States can consider for UNESCO in this area. The report then moves to a more general summary and conclusion.

Limitations of this Internet Study and Report

There are many possibilities for the design and use of the Internet for enhancing human development, but this study has focused on initiatives that fall within the core competencies of UNESCO. Nevertheless, it may also add value to the work of others without duplicating their efforts and roles.

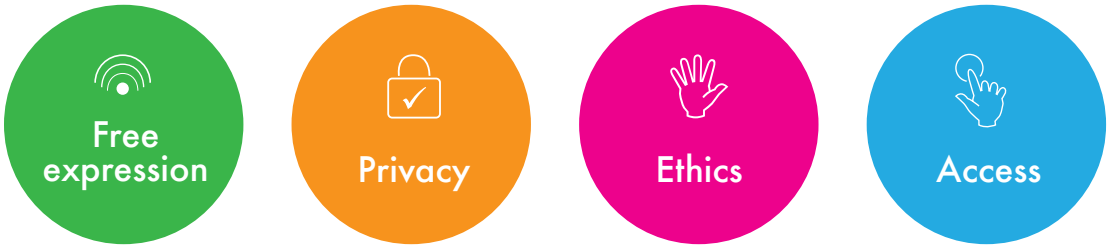
Methodologically, the consultation process yielded a remarkably global selection of participants. Responses were received from every stakeholder category and region (as shown in Tables 3 and 4); however, the online consultation did not have a strong response from business and industry. Although participation was open to all contributions, the study particularly attracted expert responses from the civil society, NGOs and academic stakeholder categories, and from the Europe and North America region. However, the geographical range of responses was boosted by the Latin American component of the consultation that employed social media to generate more than 100 additional participants. The 'CONNECTing the dots' conference provided an opportunity to secure participation from constituencies which had been less forthcoming in regard to responding to the online questionnaire.

Although no particular budget was voted by the UNESCO Member States for the research and writing process of this study, limited finances were used from the Regular Programme budget and from Extra-budgetary contributions, particularly from Sweden and Germany. A fuller budget, however, would have enabled further research and consultation to be conducted across additional countries, languages and actors. With augmented resources, more steps could also have been taken to solicit greater feedback from business, industry and the technical community. If this study is to contribute to broader education and awareness-raising beyond UNESCO, new resources could help to translate it into additional languages and to convene regionally-specific events to widen the dialogue ever more. Any further follow-up activities, such as particular research or provision of policy support, as may flow from consideration of the study by the governing bodies of UNESCO Member States, could also benefit from additional Extra-budgetary support.

Footnotes

1. UNESCO (2011a), Reflection and Analysis by UNESCO on the Internet. 29 April. Available online at http://unesdoc.unesco.org/images/0019/001920/192096e.pdf [Last accessed on 30 December 2014].
2. Competency areas of UNESCO are defined by its constitution and role within the UN system, and are elaborated through a broad consultative process involving UNESCO governing bodies, staff, focus group discussions, and interviews with multiple stakeholders such as National Commissions, as well as members of the institution's member nations (UNESCO 2011a).
3. For a list of international and regional documents of value to this review, see the references cited throughout this report, which include key documents listed online at http://www.unesco.org/new/en/communication-and-information/events/calendar-of-events/events-websites/connecting-the-dots/the-study/international-and-regional-instruments/ [last accessed 19 January 2015].

4. Internet World Stats estimates that there were 3,035,749,340 Internet users by 30 June 2014, constituting 42.3% of the global population of 7.2B people. See http://www.Internetworldstats.com/stats.htm [Last accessed on 17 December 2014].
5. See http://thewebindex.org [Last accessed 17 December 2014].
6. The fields and their elaboration are based, inter alia, on the terms of reference for this study, the consultation around the study, as well as research by Dutton *et al.* (2011); Mansell and Tremblay (2013); UNESCO (2013b, 2013e, 2013f); MacKinnon *et al.* (2015).
7. Since February 2013, UNESCO has undertaken extensive consultations on using 'Internet universality' as an overarching term to designate the principles within the Organization's agreed positions on the Internet. Commencing during the 2013 Review Event of the World Summit on the Information Society, the consultations have continued through over ten other international events, as well as internally with all sectors of the Organization. Summarizing four principles which are extant in accepted UNESCO texts on the Internet, the notion of 'Internet universality' provides a vision of a universalized Internet aligned with UNESCO's mandate and values. It highlights the kind of Internet needed to achieve Knowledge Societies in which information and knowledge are not simply issues of technological availability, but are integrally bound up with the human aspects of development. See www.unesco.org/Internet-universality [last accessed 19 January 2015].
8. See http://www.unesco.org/new/en/communication-and-information/events/calendar-of-events/events-websites/connecting-the-dots/the-study/international-and-regional-instruments/
9. UNESCO (2013e), 'Internet Universality', UNESCO Discussion Paper, 2 September. Paris: UNESCO; and Weber (2015 forthcoming).
10. UNESCO's cross-sectoral character has been fundamental to its approach to strengthening the universality of the Internet, and the R.O.A.M principles encompass the Organization's work in such areas as efforts to advance universality in education, social inclusion and gender equality, multi-lingualism in cyberspace, access to information and knowledge, ethical thinking and press freedom, amongst others. The mandate of the Broadband Commission for Digital Development that UNESCO played a role in establishing is also important here, as it links the Internet to accelerated progress towards the Millennium Development Goals. See: http://www.broadbandcommission.org/about/Pages/default.aspx [last accessed 19 January 2015].
11. This present study also builds on UN positions on the Internet, such as the Human Rights Council Resolution A/HRC/RES/20/8 on 'The Promotion, Protection and Enjoyment of Human Rights on the Internet' and the UN General Assembly Resolutions A/RES/68/167 and A/RES/69/166 on 'The Right to Privacy in the Digital Age'.
12. UNESCO (2014b), Internet Comprehensive Study: Finalised Concept Paper, June. Paris: UNESCO. Available online at http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/news/Internet_questions_study_en.pdf [Last accessed on 2 January 2015].
13. Professor William Dutton and his team at MSU were asked to support the drafting of this report, as noted in the acknowledgments.
14. The questionnaire is described in Appendix 4 and can be viewed online at: http://unesco-ci.org/cmscore/content/questions-unescos-comprehensive-study-Internet-related-issues [last accessed 19 January 2015].
15. www.freedomonlinecoalition.com
16. The additional submissions from Latin America were aggregated, and then content analyzed.
17. MAXQDA is software that supports qualitative analysis. See: http://www.maxqda.com/products/maxqda
18. Issues, such as intellectual property rights, 'net neutrality' and cybersecurity, were raised in some submissions to the study, as well as discussions at the CONNECTing the dots conference, but considered only inasmuch as they impinge on UNESCO's mandate concerning the four keystones targeted for the present study.
19. One civil society representative expressed an objection. See the discussion on multistakeholderism in the later section 'Consultations on Promoting Access'


Free expression
Privacy
Ethics
Access

Access to Information and Knowledge

Figure 1. Word Cloud of Responses to Questions on Access

Background

Access to information and knowledge is a basic requirement for building inclusive Knowledge Societies with strong foundations for lasting peace and sustainable development. As people correspond, bank, shop, learn, exercise their rights, and obtain government services online, constraints on the use of the Internet become constraints on society more generally. In such ways, access to the Internet and related digital media is becoming a critical factor in enabling and realizing human rights, giving added urgency and significance to the removal of discriminatory barriers and technical impediments to access to the Internet and its accessibility to people from diverse backgrounds, skills and abilities (Qiu 2009). This is especially relevant to the process of developing and implementing Sustainable Development Goals.

There has been a significant increase in access to the Internet, which reached just over three billion users in 2014, amounting to about 42 per cent of the world's population. But the digital divide continues to exclude over half of the world's population, particularly women and girls, and especially in Africa[1] and the least developed countries (LDCs) as well as several Small Island Developing States (SIDS).[2] Further, individuals with disabilities can either be advantaged or further disadvantaged by the design of technologies or through the presence or absence of training and education (UNESCO 2014c). Different strategies are needed to address the different kinds of imbalances in access by different groups.

Access to the Internet has grown over the decades as a result of activities by numerous stakeholders — an ecology of multiple actors. While individuals, such as citizens and households are a primary concern, so too are small and medium sized enterprises (SMEs), who often lack awareness of the centrality of the Internet to their business, but who could expand their service potential dramatically through access to broadband and the mobile Internet.

Likewise, youth are often neglected as a focus of initiatives for access. Many policy makers assume that youth are more technically savvy and multimedia literate than their elders, but great variation exists among youth in their access

to and skills in using the Internet and related technologies. However, access by youth to one of the greatest educational technologies of this age must be a high priority to ensure more equality in opportunities for learning and education.

Principles

From the UNESCO point of view, access to information is essential as a precondition for the development of Knowledge Societies. Access is also linked to the Universal Declaration of Human Rights Article 19, which affirms that the right to freedom of expression includes the freedom to seek and receive information and ideas through any media and regardless of frontiers.[3] This applies on all platforms, what Article 19 inclusively refers to as 'all media'. While "access to information", "right to information", "right to know" and "freedom of information" are sometimes used as synonyms, the diverse terminology does highlight particular (albeit related) dimensions of the issue.

Considered as a right, this is usually related to information held by public bodies and to private institutions involving public functions, impact or interest. Entitlement to this right, and its protection, entails provision of remedies in the case of violations. For example, this was a major theme of a UNESCO report "Freedom of Connection – Freedom of Expression", which critically examined the changing legal and regulatory ecology shaping the Internet (Dutton *et al.* 2011).

However, UNESCO has also long emphasized access to information and knowledge as enablers for the right to education and development. This perspective has highlighted issues of access beyond the right to information. Amongst these is access to information and knowledge networks via opportunities to access the Internet. UNESCO also promotes optimum access to the Internet through its co-vice chairmanship, with the ITU, of the Broadband Commission for Digital Development (http://www.broadbandcommission.org). The Commission brings together almost 50 ICT leaders, government officials, experts and high level personalities, to promote recognition of the transformational potential of high-speed networks. In March 2014, the Commission described broadband as the vital development enabler in the UN post-2015 Sustainable Development framework, and urged that broadband penetration targets are specifically included in the Sustainable Development Goals. In September 2014, the Commission released the report *Broadband for All*.[4]

For UNESCO, access also goes further than establishing physical network infrastructure, or ensuring that citizens have the opportunity to connect to the Internet through universal access (Samarajiva and Zainudeen 2008). Access to knowledge entails learning in formal and informal education settings. It also entails fostering the competencies of Media and Information Literacy (MIL) that enable users to be empowered and make full use of access to the Internet (UNESCO 2013a; Kuzmin and Parshakova, 2013). Enhancing the quality and linguistic diversity of content, developing sustainable digital heritage, encouraging local content online, and promoting special services for marginalized groups are also key to UNESCO's interests in accessibility. The Organization's support for journalism education is an example of how UNESCO seeks to contribute to the provision of independent and verifiable information accessible in cyberspace. Promoting access for disabled persons has been strengthened by the UNESCO-convened conference in 2014, which adopted the "New Delhi Declaration on Inclusive ICTs for Persons with Disabilities: Making Empowerment a Reality".[5]

All this signals that for UNESCO the notion of access to information has had wide-ranging resonance, including matters such as: access to scientific, indigenous, and traditional knowledge; the preservation of digital heritage; respect for cultural and linguistic diversity, such as fostering access to local content in accessible languages; access to a quality education for all, including lifelong and e-learning; and the promotion of social inclusion online,

including addressing inequalities based on skills, education, gender, age, race, ethnicity, and accessibility by those with disabilities. For UNESCO, rights-based legislation can help to advance all these objectives.

Also considered within UNESCO's approach to access, are the issues of openness of information and the building of open knowledge resources, including open Internet standards. These standards enhance interoperability of systems and make it easier for users to obtain and share data, now and in the future. For UNESCO, it is important that the Internet's potential for sharing knowledge by providing open access is fostered in practice, and this is exemplified by UNESCO's open educational resource (OER) programme. The same access principles underpin free and open source software (FOSS), open data, and open technical standards (e.g., UNESCO 2013c).

All activities in support of connecting people with the Internet in more affordable and accessible ways will help foster more creativity and expression online. UNESCO helps to showcase and champion innovations, including in mobile space, that can foster access in the expansive sense of the Organisation's interests.

UNESCO recognises that different locales have had different experiences with fostering access; therefore sharing information, expertise, and good practices in a multistakeholder environment can therefore help the promotion of access. Each actor has an important role to play in ensuring access to information: no single actor can ensure responsibility for deepening access across devices, platforms, services, languages, content and user capacities. In this way, UNESCO highlights the wide-ranging opportunities opened through access to the Internet, from learning and education, to the crowdfunding of local initiatives and civil society organizations, to the pursuit of science and technological developments.

The engagement of UNESCO with Member States, National Commissions, civil society and other actors underlines the interest in maximising involvement of stakeholders in Internet debates underway that are relevant to the Organization, including via discussion on UNESCO online Knowledge Communities.

Though the principles of accessibility presented above are ideals, they are not always achieved in practice. In this context, respondents to the consultation and the 'CONNECTing the dots' conference were invited to comment on what they saw as the greatest issues facing access to information and knowledge. Their responses are the focus in the next section.

Consultations on Promoting Access

The consultations processes driving this study surfaced a common message about the importance of a holistic approach to access issues. In addition, respondents and conference participants urged for greater awareness raising, so that the public could know about their right to access information and knowledge, and the importance of the Internet in this. Numerous people called for improvements to national legal and regulatory frameworks relevant to access. Despite Article 19 of the UDHR, the implementation of the right to access information is uneven. Strong policy and legislation specifically protecting the basic right of access to information, coupled with regulatory and enforcement mechanisms, can actively protect this right. Legislative initiatives should be accompanied by more efforts to raise awareness of the individual's right to seek and receive information, with good practices promoted internationally.

Many respondents and conference participants identified filters and blocks on content, whether imposed by governments or by intermediaries such as ISPs or platform owners, as inimical to freedom of access to information. One submission cautioned against a 'new digital divide' between those enjoying freedom of expression (including access to information) online, and those not. Censorship of content, if it exists, should only be imposed as required to protect vulnerable populations (such as children) from content assessed as potentially harmful to

them. Censorship, such as filtering or blocking of legitimate political speech, must be avoided. A closely linked suggestion was protecting privacy rights, so that citizens could seek and receive even unpopular information and opinions, as part of the right of access to information. Reference was also made to respect for privacy as a contribution to access, with possible impact on access by identity requirements as preconditions to use cybercafés, buy a simcard or comment on a blog.[6]

These topics are discussed at greater length below, in the sections on freedom of expression and privacy.

Education concerning the promotion of awareness of human rights, such as the right of access to information, was seen as important. Though citizen awareness campaigns were frequently suggested, others also proposed education targeted at institutions, such as companies and governments, reminding them of the rights of citizens and their role in upholding them. Beyond these rights-oriented suggestions, many responses indicated that reinforcing the other Internet Universality principles — openness, accessibility, and multistakeholder discussion — is critical to shoring up the right of access to information. It was noted that access goes further than being important for users to seek and receive information online and for them to benefit from transparency — it extends to their opportunity to employ the Internet as a means of expression and access to services, and not only as a means of consumption.

Turning to other dimensions of access, data formats and licensing were particular focus areas for questionnaire respondents, who suggested that governments should increase access to information by releasing as much of it as possible under open licences. Some linked this to suggesting that the right to seek, receive and impart information provided a basis for an emphasis on sharing.[7] Many respondents further extended this principle to include data, studies, educational materials, and cultural output resulting from public funding to academics, universities, and public broadcasters; in the last case, programming can be made freely available online. Non-governmental actors should also be encouraged to embrace open data formats and licences wherever possible, as proprietary formats and restrictive licences can inhibit information-seeking behaviour. Some respondents also pointed out that excessive copyright measures, such as overlong extensions to the duration of copyright, threaten the public availability of important cultural resources. Adopting open standards has the potential to contribute to the vision of a 'digital commons' in which citizens can freely find, share, and re-use information.

That said, open publishing raises other issues of importance to access. For example, it is possible that policies for open publishing could favour those countries and organizations that have the resources to pay for publication. Free access often translates into the author or author's organization paying for publication, creating the very real threat of open access reinforcing inequalities in resources. It is therefore crucial that all stakeholders continue to critically use alternative models for open access to ensure that those without resources can still create and publish content and not just consume the content of others. Some respondents, along with conference participants, also argued that reasonable copyright measures can encourage content production, and that when producers do desire such protection, intellectual property rights should be respected. There was a view that, since every approach to copyright has some weaknesses, a mix of approaches could have merit relative to any single approach. The point was also made that not all content is equal, and there should be more precision in discussions of protecting intellectual property that does not apply in the same ways to news or facts or to film and television or user generated content.

To enhance the value of open access, numerous respondents identified the importance of digital information repositories. Such repositories could contain data and content licensed according to the open principles described above. Respondents suggested that educational institutions and public media organizations, in particular, could have foundational roles in

establishing these repositories and promoting linkages between them, both within nations and internationally. This would reduce redundancy of information and encourage creative collaboration between researchers, governments, and the public. A global information system would ideally enable each individual and organization to contribute the information that they are most uniquely capable of providing to this global commons. Further, some respondents suggested Wikipedia as a model for a free, open, and global knowledge resource that could be drawn upon when designing information repositories.

One response dealt with traditional knowledge (TK) and traditional cultural expressions (TCEs) that are being developed, transmitted from generation to generation and held by indigenous peoples and local communities, and which should be conceived as core and vulnerable elements of their cultural identity. Concerns were raised that making these publicly available on the internet, as it is already the case in many instances, can contribute to their misuse, misappropriation, or use in ways that were not anticipated by their holders. It might also deprive those communities from a potential source of revenue. From another perspective, there are concerted initiatives underway to document TK and TCEs in digital databases, as this could be supportive of their safeguarding and protection. Documenting TK can, for example, contribute to preventing their misappropriation within the patent system. Documentation can also help protect TK and TCEs, by providing a record reserved for the relevant community only.

Sound principles, like the prior and informed consent of the communities involved, and measures that define which and how TK and TCEs are documented and accessed, would contribute to reconciling the legitimate interests of the communities involved, and those of the public at large when it uses internet as a way to broaden its access to knowledge and culture.

The need to increase affordable, reliable Internet access was a particularly common theme, as without such access the benefits of the Knowledge Society would be difficult to realize. But to accomplish this, ICT infrastructure in many parts of the world still requires significant development, especially in rural areas, distressed areas of inner cities, and other locations where even basic feature phones are still beyond the means of many citizens. Solutions suggested include public provision of free Internet access, such as in libraries and schools, and the facilitation of universal and secure broadband and WiFi networks. Broadband access was also highlighted. The value of public-private partnerships to address many access issues was stressed at the 'CONNECTing the dots' conference. Some countries are beginning to view broadband access as an emerging definition of universal service in the digital age, or even as a fundamental human right. Some respondents, however, expressed concern about the details of how universal access is provided. For instance, public provision of infrastructure might increase state surveillance capabilities and reduce private opportunity; on the other hand, the provision of free public Internet access by private companies might be associated with content filtering, advertising, or intrusive data collection.

Beyond digital divides based on location and income, many respondents pointed to divides associated with gender, age, and ability. Women, youth and seniors, and those with disabilities should all have equitable access to online information. Promoting open source software, which is both free of cost and freely modifiable to meet the particular needs of marginalized users, was also seen as important. Other strategies included advocacy on behalf of minority groups, such as targeted outreach, better provision of Internet access, tax incentives for private companies and organizations working to enhance access, and solving underlying issues of social and economic inequalities. Moreover, various marginalized groups, such as women, youth, and persons with disabilities, need to be addressed through policies and practices targeted for these very specific groups in order to adequately address existing imbalances.

In the early years of the Internet, many worried that it would foster English as a nearly universal language, because it dominated early online

use. Over time it has become clear that the Internet is fostering the development of a diversity of languages. Nevertheless, users of the Internet who speak minority languages can also face challenges in accessing material not available in their language, and the preservation of local cultural heritage can be challenging in an era of globalized media. Some respondents focused on translation technologies, proposing increased funding for the translation of important resources into local languages, the promotion of open licences (to allow translation without concern for copyright infringement), and capacity-building at both the individual and institutional level focused on funding and training to increase the creation of high-quality local content or the digitization of cultural heritage material. The need for translation of hardware and software interfaces into more languages was also identified. Further, some respondents argued that education in common languages could help engage users who would otherwise be excluded; this need not be in opposition to the other approaches listed above.

One commonly referenced strategy to aid all these goals was digital literacy training: teaching users not only how to use computers, and to find and assess information, but also covering such topics as their rights, privacy, data ownership good practices, and the risks and opportunities available online. Such training is part of what UNESCO calls "media and information literacy" (UNESCO 2013a). Respondents repeatedly emphasized the importance of both formal and informal educational efforts to ensure access and to build Knowledge Societies, and this was echoed at the 'CONNECTing the dots' conference. In particular, training in digital skills should start early and be broadly and naturally incorporated into curricula throughout the public education system and at universities. In many cases, this will require additional training for teachers (see also Birmingham and Davis 2005; UNESCO 2011b). Beyond this, respondents emphasized the need for programs targeted at citizens who are no longer at school, whether to teach skills for the first time or to keep abreast of new technological developments. Civil society groups were seen as key actors in helping provide this training and outreach.

Finally, both respondents and conference participants welcomed multistakeholder engagement on access issues, encouraging the generation of new ideas and the sharing of good practices across the range of concerned actors. At the 'CONNECTing the dots' conference, some sought specificity around the definition of multistakeholder engagement, with one person arguing that it should be defined as 'democratic multistakeholder' participation.[8] Most conference participants advocated a more flexible view whereby the multistakeholder modality could accommodate different configurations, in which some engagements might be led by technical experts, others by civil society, or industry or governments, depending on the issue at hand, and yet nevertheless still always striving to involve all relevant stakeholders in their various roles. The important issue was presented as seeking to enable access to multistakeholder processes, especially for individuals and groups lacking the resources to take part and contribute their views.

With regard to access issues and participation, many issues remain to be resolved, such as over open access models, and this will require input from all stakeholders. It was recognised in the feedback to this study, however, that participation can take many forms, including research, monitoring, awareness-raising, advocacy, capacity building and technical advice. All these activities can make important contributions from a diversity of actors.

Possible Options for Future Action to Support Access to Information and Knowledge

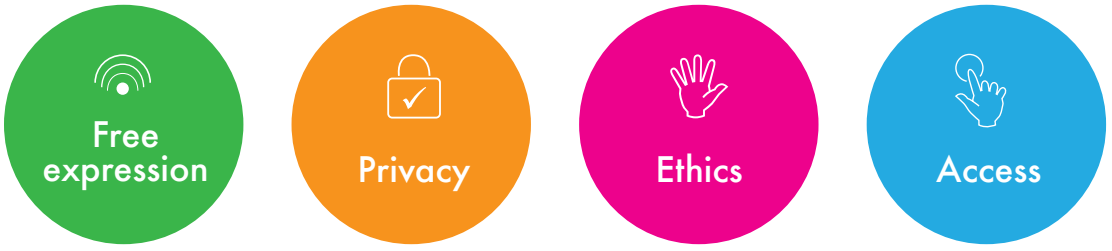
The consultation processes suggested a variety of ways in which Member States may wish for UNESCO to support initiatives to improve access to information and knowledge. As reflected in the outcome document agreed at the 'CONNECTing the dots' conference, Member States may wish

to consider the following possible options for UNESCO action:

- Foster universal, open, affordable and unfettered access to information and knowledge, and narrowing the digital divide, including the gender gap, and encourage open standards, raise awareness and monitor progress
- Advocate for ICT policies that enhance access guided by governance principles that ensure openness, transparency, accountability, multilingualism, inclusiveness, gender equality, and civil participation including for youth, persons with disabilities, marginalized and vulnerable groups
- Support innovative approaches to facilitate citizen involvement in the development, implementation and monitoring of the Sustainable Development Goals, as agreed at the UN General Assembly
- Promote universal access to information and knowledge and ICTs by encouraging the creation of public access facilities, and by supporting users of all types to develop their capabilities to use the Internet as creators and users of information and knowledge
- Reaffirm the important contribution provided by open access to scholarly, scientific and journalistic information, open government data, and free and open source software, towards the building of open knowledge resources
- Explore the potential of the Internet for cultural diversity.

Footnotes

1. This is a point highlighted in the submission to this study of the African Declaration on Internet Rights and Freedoms, http://africaninternetrights.org/about/
2. See: World Internet Stats for more current information as available: http://www.Internetworldstats.com/stats.htm
3. Specifically, Article 19 reads: 'Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.'
4. http://www.broadbandcommission.org/Documents/reports/bb-annualreport2014.pdf
5. Adopted by the participants in the International Conference From Exclusion to Empowerment: Role of ICTs for Persons with Disabilities, 24 – 26 November 2014, New Delhi, India. http://www.unesco-ci.org/ict-pwd/
6. The report of the former UN Special Rapporteur on Freedom of Opinion and Expression was cited in this context: Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, Human Rights Council, 23rd session. A/HRC/23/40.
7. ARTICLE 19. 2013. The Right to Share: Principles on Freedom of Expression and Copyright in the Digital Age. http://www.article19.org/resources.php/resource/3716/en/the-right-to-share:-principles-on-freedom-of-expression-and-copyright-in-the-digital-age [last accessed 28 March 2015]
8. Underpinning this particular position is the view that without the qualification of "democratic", elected governments will be reduced to having equal say with corporations in multistakeholder engagements. See http://www.ip-watch.org/2015/03/11/no-democracy-is-not-excess-baggage/ However, including the qualification did not win support from representatives of such governments at the conference, and it was therefore not included as a consensus point in the conference outcome document.


Free expression
Privacy
Ethics
Access

Freedom of Expression

Figure 2. Word Cloud of Responses to Questions on Freedom of Expression

Background

Access to the Internet is increasingly a prerequisite to exercising freedom of expression, a recognition underpinning a UNESCO report entitled 'Freedom of Connection — Freedom of Expression' (Dutton *et al.* 2011). In fact, the worldwide diffusion of the Internet has had a dramatic impact on expanding freedom of expression in the 21st century. Nevertheless, freedom of expression is not simply a result of new technologies, even if computer-based, digital technologies have been called 'technologies of freedom' (de Sola Pool 1983). Freedom of expression must also be supported by policy and practice, and requires trust in the Internet as a safe channel for expressing one's views. Rising concerns over surveillance and Internet filtering, for example, have perceived freedom of expression on the Internet as becoming more problematic, requiring major efforts to instil trust in privacy, security, and the authenticity of information and knowledge accessible online, and to protect the safety of journalists, social media users, and those imparting information and opinion in the online world, including digital authors, publishers and broadcasters (Deibert *et al.* 2010; Dutton *et al.* 2011) (Box 2).

Principles

UNESCO's constitutional mandate to promote the 'free exchange of ideas and knowledge' is reinforced by the Universal Declaration of Human Rights, which affirms that 'everyone has the right to freedom of opinion and expression'. This right has also been protected in the International Covenant on Civil and Political Rights (ICCPR), and further elaborated in relation to Internet and mobile-based information dissemination systems by the UN Human Rights Committee in July 2011. Freedom of expression is critical to achieving UNESCO's vision of Knowledge Societies.

For UNESCO, the right to freedom of expression applies, as do other rights, to cyberspace, and all persons should be safe to use this right. Accordingly, as the UN Human Rights Committee General Comment states, any limitation of freedom of expression online should be the exception rather than the norm. Furthermore, the international standard requires that any restrictions need to be enacted by law, should only be imposed for legitimate grounds as set out in the UDHR and ICCPR, and must also conform to tests of legality, necessity and proportionality. The standard also is that legitimate restrictions

should be considered in retrospect, rather than through exercise of prior restraint.[1] Restriction that exceeds these standards in any one locality has a direct global significance for users on the Internet elsewhere.

The right to free expression includes freedom to seek and receive information, a dimension that has been covered in the preceding chapter on access. This chapter concentrates on the second dimension of the right, namely the freedom to impart information, (bearing in mind still that these different communication acts may also be seen as two sides of the same coin). The emphasis below is therefore on disseminating information to a public, namely press freedom, and this freedom depends on a free, pluralistic, and independent media system, which also upholds the safety of those doing journalism (see UNESCO 2014d). UNESCO promotes these dimensions, on all platforms, by means of research, monitoring, awareness-raising, advocacy, capacity building and technical advice. UNESCO's International Programme for the Development of Communication (IPDC) also provides grant support for relevant projects.

Box 2

Ensuring Digital Safety for Journalism

The safety of journalists is a necessary condition for freedom of the press and freedom of expression in the digital age more generally. This has long been an issue, but over the last decade, there has been a worrying upsurge of attacks on journalists. The UNESCO-initiated United Nations Plan of Action on the Safety of Journalists and the Issue of Impunity has become a global reference point for multistakeholder co-operation on these issues. The attacks on journalists have been impacted by digital technology in two ways. First, there is growing digital exposure by journalists engaging with ICT to find and store information, communicate with sources, navigate spatially, and have a social life online. Second, is a broadening practice of journalism to include online journalists, bloggers, and human rights advocates, who can be particularly effective in capturing stories on the ground and as they are occurring, and who may become targets for attack as a result. For example, 37 of the 276 killings of journalists condemned by the UNESCO Director General were killings of persons who primarily published their information online. Against this backdrop, UNESCO works to promote the safety of journalists, bloggers, citizen journalists and others who use digital media to produce news, and to end impunity for attacks on these communicators.[2]

An overview of the issues and how to address them is provided in a UNESCO report on 'Building Digital Safety for Journalists', which argues for a multistakeholder approach, given the wide array of actors involved that are outside the press as traditionally defined, including social media producers, but also police and security experts.[3]

As signalled in the UNESCO report World Trends in Freedom of Expression and Media Development (2014d), among the factors critical to freedom of expression, and as relevant to this chapter, are:

- The freedom and ability to impart expression online
- Press freedom and the safety of journalists, social media users and human rights advocates, as fundamental for disseminating expression more broadly
- Journalism as a particular exercise of press freedom through forms of expression that are created with standards of professionalism and are oriented to the public interest
- Policies that enhance pluralism, diversity and independence across all media platforms, enabling the open exchange of views
- Multilingualism

- User understanding of the limits of free speech, such as that which exceeds boundaries by violating other rights, inciting violence or threatening public safety
- User respect for the rights of free online expression, and empowerment in regard to dealing with legitimate speech with which they may disagree
- Arrangements for multistakeholder participation, fostering social and individual self-regulation of free expression in cyberspace and which is informed by ethical norms and principles that users understand and can apply.

As part of UNESCO's recognition of the importance of independence in media, it has long advocated the value of bottom-up self-regulation as the optimum mechanism for promoting ethical and professional journalism. With regard to cyberspace, it is also evident that online media independence entails self-regulatory systems and ethical principles that, in turn, require participative involvement to secure legitimacy and be effective. However, it is also recognized that care should be taken that self-regulation does not become a mechanism for self-censorship or privatized censorship of legitimate speech, which would undermine the exercise of human rights online. Given these complexities, there is great value in multistakeholder involvement in decisions and policies around free expression on the Internet.

Freedom of expression online is linked to the principle of openness, particularly in regard to the international standards that advocate transparency in relation to restrictions on the right to expression. In addition, open opportunities to share ideas and information on the Internet are integral to UNESCO's work to promote freedom of expression, media pluralism and inter- cultural dialogue.

For UNESCO, freedom of expression online is also a question of how people use their access to the Internet and related ICTs to express themselves. Media and Information Literacy for men and women of all ages is relevant to this question, including especially youth engagement and the countering of racism and discrimination in digital contexts ranging from email to online video games. By hosting discussions to augment the conception of Media and Information Literacy with digital issues,[4] UNESCO seeks to help catalyse related two areas of action: First, to diminish at source the rise of online threats or advocacy of discrimination, hostility or violence; second, to empower users to understand and resist attempts to manipulate their emotions and identities for hatred that incites discrimination, hostility or violence. UNESCO works to promote Media and Information Literacy programmes within educational institutions and the public more broadly.

Consultations on Promoting Freedom of Expression

Through the consultation process of this study, a wide range of issues was identified relating to freedom of expression. Respondents to the questionnaire as well as participants in the 'CONNECTing the dots' conference emphasised that offline and online freedom of expression are linked and that one of the best ways to respect and protect the right online is for this to happen offline. Some proposed that freedom of expression should be strengthened broadly, without isolated reference to Internet-related problems. Some respondents assessed that there were very few areas related to freedom of expression online that were a genuinely new challenge.

At the same time, many comments suggested that online challenges were increasing in light of the global scope and scale of the Internet, a growing awareness of surveillance, and the larger ecology of policies that were constraining freedom of expression, such as through over-reach in enforcing libel and privacy (see also Dutton *et al.* 2011). The point was argued in submissions and at the conference that the proof of burden should be on governments seeking more control on Internet speech to show why, and to align emerging policy and law with international standards of human rights law concerning freedom of expression.

A number of particular concerns raised are identified below:

Blocking, Filtering and Content Regulation

Blocking and filtering of content was a very common area of concern, as these measures restrict in a direct way citizens' rights to impart information and opinion, as well as impacting adversely on their right to access online content. In many cases, users might not even realize that content has been filtered or blocked. At the same time, there was some recognition that alongside censorship as a violation of free expression, there is also legitimate reason in some contexts to block certain content, such as material that incites violence. This raises the question of how to draw the line in specific cases about what to block, for how long, in what proportion, and with what transparency and redress mechanism. Historically, this judgement might have been relatively easier to apply. For instance, a common limitation on free speech is often cited as 'shouting fire in a crowded theatre'.[5] Today, there are legitimate fears that a video posted in one jurisdiction could incite violence in another. However, blame may be more appropriately attributed in some contexts to those committing violence, rather than the content such as when actors exploit the content to instigate violence. Accordingly, content restrictions may be difficult to justify prior to any action, and actions in turn may be difficult to predict. Another consideration is that of reporting of events such as a suicide or a terrorist strike, which could lead others to copycat actions. Here, the value of having accurate and trusted news, rather than an information blackout in which rumour can run rife, may override the potential for harm.

For such reasons, numerous respondents to the consultation identified content restriction by governments as a major threat to freedom of expression on the basis that it can come to serve as, or morph into, censorship of legitimate speech. Alternatives were suggested as means to mitigate the presence and impact of illegitimate speech (see below). Common in many responses was the reminder that international standards of human rights law mean that removal, blockage or filtering of Internet content should be the exception to the norm of free flow of information, and that such actions fulfil the conditions of due purpose, necessity, proportionality, and transparency, and are authorized under relevant law and policy. In this context, it is important to promote the viability and desirability of self-regulation in different contexts, keeping in mind the potential danger for self-censorship and the advantages of independent judicial review of potentially objectionable content.

Respondents also raised the criminalization of online expression, including the criminal prosecution of online commentators, such as for violating law or policy that was developed to apply to broadcasters in an earlier media era. An example is a user being arrested or prosecuted for posting an offensive remark, for instance on a news site, blog, or Twitter conversation. The regulation applied is often based on law or policy designed to restrict broadcasting, given its reach and potential impact, whereas a tweet, for instance, is most likely to be read by very few. As more and more individuals are being prosecuted, concern was raised that this could also have a chilling effect on other users, and more people will naturally worry about expressing themselves freely in such circumstances. Far from feeling that they are part of a global public commons, they will feel as if they are taking an unpredictable risk by exposing their views online. Criminalisation of speech offenses is already the subject of debate as to whether civil law remedies are a more proportionate response to illegitimate speech (such as defamation). Applied to online speech acts, there is a risk of criminalisation sometimes going beyond reasonable interpretation of whether it is strictly necessary in terms of international standards of human rights law.

A number of responses assessed voluntary self-restriction on the part of users or Internet intermediaries as a means for reducing the dangers of government censorship. However, self-restriction was identified as an area of concern as well, where users, ISPs and other actors might over-restrict, thereby self-censoring online because

they feel that their views might be punished by government, or used to profile them as in regard to particular ideas or policies. Such anticipatory self-censorship can violate free expression even more than that imposed by governments directly censoring the Internet. The matter of self-censorship, however, was seen as distinct from encouraging self-restriction as a matter of ethical choice, freely made, including through systems of voluntary and independent self-regulation aligned to international standards on free expression. There is a clear need for research on the actual implications of voluntary self-regulation.

Another issue raised by respondents was the danger of holding intermediaries liable as if they were publishers — for example, making social media platforms or publishers responsible for an alleged case of hate speech. This measure, treating these actors as if they were traditional analogue media, can have a chilling effect, and make them vulnerable to overcompensating and overly limiting expression, even when such speech does not violate international standards of human rights law. This situation can escalate formal or informal takedown requests — and may lead intermediaries to take an overly aggressive proactive role in filtering content. Such steps are compounded when they are not subject to transparency and accountability.

If unqualified liability for intermediaries were to prevail, it would make ISPs and other intermediaries more like printed newspapers, in that they would become increasingly responsible for pre-editing content. They might therefore be subject to lawsuits, such as actions over libel, which could have further chilling effects on a free, trusted global Internet. For this reason, some respondents and some conference participants suggested that policies requiring platforms to self-regulate and police their own content could have a negative effect on freedom of expression, when instead intermediaries should have a major role in protecting freedom of expression and democracy (See also MacKinnon et al 2015). Other feedback proposed that such systems could provide a first port of call for individuals to seek legitimate restrictions on content, with independent courts as a back up to decide whether contested decisions amounted to censorship or not. The UN Guiding Principles on Business and Human Rights were signalled as relevant to intermediaries, who could take cognisance of the value of transparent, rule-based decision-making that operates by standards of necessity and proportionality, as well as criteria for legitimate purpose of restriction. One submission proposed that UNESCO develop clear principles to guide Member States in their policies on intermediary liability.

As seen in analysing these issues, the problem of content regulation is a difficult one in general, because it entails considerations of interpreting international standards of legitimate processes, necessity and due purpose as regards any limitation of the right to free expression. However, multiple actors, including individual users can identify instances of censorship and exposing these cases to the court of public opinion. In such ways, the Internet has the potential for enabling individual Internet users to hold institutions and other users more accountable for their actions online, creating what has been called a 'Fifth Estate', analogous to the Fourth Estate of the press, but potentially even more powerful (Dutton 2009). Nevertheless, such a Fifth Estate does require a relatively free and open Internet to be sustainable and influential.

User Targeting and Profiling

Also of concern amongst respondents was the ability of some actors, such as governments or commercial enterprises, to target individual users, given that they will know much about their interests through their search or other online activities. Even individual users of social media platforms can advertise to others who are interested in particular topics. Is this an exercise of free speech or a violation of privacy? A related issue raised is that of the so-called 'filter bubble' (Pariser 2011): the idea that different Internet users will see different versions of the Internet, based on how algorithms use their previous search or social media preferences. User targeting can happen at the level of the government, private companies (such

as search or social media providers), or even at the infrastructural level.

Expression and identification

Much discussion focused on the dependence of freedom of expression on related issues of privacy, anonymity, and encryption. Some responses called for more information about, and research into, these challenges, especially in the face of an apparent resistance to change. Suggested work included mapping actors and their possible roles regarding freedom of expression.

Anonymity

The anonymity of users was seen as important to free expression, but also as under threat. This is important because anonymity is seen as a cornerstone of privacy; many respondents and conference participants considered anonymity a prerequisite for the expression of unpopular or critical speech, although anonymity is more protected in some countries than in others. (This is dealt with at greater length in the Privacy chapter, below.) At the same time, anonymity is sometimes viewed as contributing to harmful speech, such as hate speech, which goes beyond international standards of human rights law for protected speech. Despite this perception, academic research has not established that removing anonymity and requiring the identification of speakers would be a cure to insensitive or hurtful remarks. These incivilities are often fostered by a larger set of circumstances, such as a failure of users sitting at a computer to fully realise that they are communicating with a real person and that "netiquette" would be appropriate. (For more on the topic of hate speech, see Box 6 below.)

As was often signalled in the consultation processes of this study, anonymity may also impact on public debate online. In some countries, participants would refrain from participating (for instance on the issue of gay rights or domestic abuse) for fear of identification and persecution. On the other hand, there is also the case of anonymous paid commentators who pose as self-selected users to kill debate, such as by scaring participants away by being discourteous or profane and thereby having a chilling effect on the expression of minority or unpopular views. At the same time, some government agencies have assigned personnel to follow and respond to online forums as a means to 'join the conversation' and decrease the likelihood of misinformation by providing corrections or alternative sources of information and this can be positive if they identify themselves, such as in some cases of online diplomacy (Khatib *et al.* 2012). Anonymity in cyberattacks, including fake domain attacks impersonating civil society, is a serious violation of free expression.

Respondents and conference participants underlined that it is important to ensure that those who engage in digital attacks on freedom of expression and journalism realize there will be consequences for their actions. There is a need for investigations into such attacks, and support efforts to identify the perpetrators and hold them accountable. Impunity for online attacks on free expression needs to be stopped from becoming a norm. Besides promoting an Internet where users feel safe to impart information and opinion, all relevant stakeholders should promote the updating or introduction of laws or other arrangements to protect the sources of journalism in the digital age (See Box 5).

Data Protection and Surveillance

Data protection was seen as critical to free expression by some respondents. (This issue is discussed further in the section on Privacy.) While data protection, which is a political-administrative approach to protecting privacy, is common in Europe, it is less so in many other parts of the world, but the general sentiment was that individuals will depend on institutions to help protect their rights. From this perspective, users should be given more control over their data, and laws relating to privacy, such as informed consent and data-retention laws, should be promoted and protected by agencies that can monitor those who hold a user's data. The private sector also has a role to play, for instance by designing for privacy

by default and by developing good notice and consent agreements.

Another set of concerns commonly expressed in the consultation processes of this study was related to surveillance issues. Some respondents assessed that increasing government surveillance of citizens, including through the collection and analysis of 'big data', was leading to an erosion of their rights to privacy and freedom of expression. The consultation identified rising concerns over security over-reach as one impetus behind surveillance, such as the use of data analytics to look for possible security threats. The way in which security measures were creating threats to freedom of expression was identified as an overarching concern, as discussed as a cross-cutting issue below. Respondents tended to identify the mass surveillance of communications metadata, such as that revealed by whistleblower, Edward Snowden, as a disproportionate response in relation to the security problem. Reference was made to a report of the former UN Special Rapporteur on Freedom of Opinion and Expression, according to which bulk access to all digital communications traffic eradicates the possibility of individualised proportionality analysis, because it pre-empts prior authorisation based on specific targeted suspicion.[6]

While the perceived severity of the problem of security can rise and fall as new incidents occur, many discussions underscored a concern over the role of mass surveillance potentials and the use of big data analytics to change the balance between the state and individuals. There issues are not uniform across countries, but technological developments could be shifting this balance worldwide. Concern was expressed during the 'CONNECTing the dots' conference about surveillance tools, originally built to address severe crimes, being used to collect personal information about dissidents, or sometimes from all citizens. Further concerns were over weak transparency on how data is collected or used for security investigations.

Respondents observed that the manipulation of security practices such as the introduction of 'back doors' into software, to allow legitimate government access can leave Internet users vulnerable to other, illegitimate threats. Attackers can potentially get in through the same back doors, rendering systems less secure. In such ways, while state surveillance is seen as justified in many respects, the approaches to surveillance are raising concerns that the remedy can damage the democratic rights and freedoms which it should serve to protect.

Other Challenges

Many respondents called for increased openness, both in terms of transparency and free use, as a means to strengthen freedom of expression on the Internet. Too many patents and copyright protections, especially copyright claims against lawful content, were seen as restrictions on the right of freedom of expression. At the same time, however, there are some challenges associated with openness, including erosion of privacy (discussed at further length in the Privacy section below).

Technology itself can sometimes be a challenge regarding freedom of expression. Respondents suggested supporting decentralized technical solutions, including the use of open hardware for infrastructure. Several respondents also referred to net neutrality as an important component of freedom of expression and the R-O-A-M principles, generally (see Box 3), ensuring that users have the ability to impart (and receive) information online without unreasonable restrictions. This policy issue is currently outside of UNESCO's mandate, as it focuses more on national telecommunications regulation, but the evolution of this debate could shape the future role of national governments in Internet policy for better or worse, and could lead to a strengthening or weakening of the principles of openness and free expression. Several respondents proposed that networks should be equally open to information transmission no matter from whom it originates, and argued that treating network traffic differentially would lead to negative outcomes for freedom of expression and access to information. Others have argued that such regulation could undermine the vitality and raise the costs of Internet services in ways that

can limit access to information and knowledge as well as undermine freedom of expression.

Numerous respondents and conference participants identified a threat arising from the attitudes and beliefs of certain users. For example, an apparent indifference towards the expansion of surveillance, was seen as a threat to freedom of expression. Another threat identified is when users show a lack of respect for each other's humanity or dignity, such as by engaging in cyberbullying and trolling, hate speech, distribution of child-abuse images, and online religious or political radicalization, extremism or support for terrorism. Regarding these matters, with the exception of criminal activity there is broad support for self-regulation and social influence by users and platform owners as opposed to government regulation. With respect to hate speech, many participants in the conference stressed the need for learning and education and for social responses, rather than law as an effective means for addressing problems, not least in doing so without unduly curtailing freedom of expression. Submissions to the online questionnaire cited the report of the former UN Special Rapporteur for Freedom of Opinion and Expression who called for a strategic response with "more speech that educates about cultural differences; more speech that promotes diversity and understanding; more speech to empower and give voice to minorities and indigenous people".[7]

However, some reservations were also raised in as much as self-regulation is proposed as one solution. It was said that in many cases, self-regulation has been inadequate without clear norms for individuals, companies and other users to guide their own behaviour online (See also Tambini *et al.* 2008). In other cases, self-regulation can lead to over-regulation, such as if intermediaries anticipate oversight by governmental agencies, whom their future might depend on, and regulate content more severely than warranted by law and policy.

Some respondents discussed how the affordances of the Internet allow all users to become a speaker, and how the communication model is 'many to many'. However, they pointed out, not everyone is equally heard. In this sense, there is a concern that though more information is being shared publicly by more people, the end effect is not necessarily a radical empowerment of individual voices (see also Liang and Bo 2009; Zheng 2008). Some respondents called for strategies to help promote the bidirectional flow of data between local and global contexts.

Box 3

Network Neutrality

The major advocates of network neutrality wish to use government regulation to keep the Internet open and avoid the creation of so-called 'fast lanes' for some Internet service providers, such as a film service that can afford to pay for faster access to a household, since a new rival company might not be able to compete with such a fast service. The advocates would see it as potentially discriminatory and anti-competitive, and thereby constraining openness through the removal of an "even-playing field" which would impact on smaller actors seeking to express content online. The critics of this policy believe market forces should be permitted to determine the wisdom of such fast lanes, which are sometimes provided for services such as toll roads, and that net neutrality policy could usher in heavy-handed government regulation that would stifle innovation or introduce regulation of pricing. Advocates for network neutrality argue that whether governments begin to regulate Internet services for neutrality, does not necessarily mean they will seek to regulate prices or stifle innovation. Network neutrality provisions are too recent to determine their actual impact on information and communication services, including freedom of expression, but empirical studies are being developed to address such questions.

See Marsden (2010).

Numerous respondents and conference participants also expressed growing concern with the power of private companies. As discussed above in regards to filter bubbles, Internet giants are increasingly engaged in 'gatekeeping' of Internet content, by customizing web pages based on particular users, for instance. In most cases, the proprietary algorithms that regulate these results are not publicly available, and so remain opaque. These companies are also responsible for the governance of user-generated content according to practices which are often obscure. Some respondents and conference participants proposed that companies need to do more to protect users, especially when under government pressure to compromise user rights. Others, however, pointed out that the economic models underlying large new companies, such as their dependence on advertising, can lead to incentives which do not protect users, and which can also have a strong influence on the regulatory process. The economic models may also lead to growth in global monopolies and a concomitant lack of local content. Respondents proposed that community media and local networks should be encouraged as a result. Some respondents argued that rules for companies are important, but can sometimes interfere with legitimate business; and there were diverse approaches to what some have called a 'right to be forgotten' (See Box 4).

Another challenge pointed out by several respondents as well as conference participants is that cultural differences and relativism can play a role when understanding the right to freedom of expression. Different polities may come to different conclusions on the appropriate measure of regulation and protection of this freedom. It is important to account for the importance of differing social norms in societies. At the same time, international human rights law exists and signatory countries should subscribe to these standards; and a number of respondents assessed there has been some success in promoting freedom of expression standards globally. Some respondents called for the establishment of a monitoring body to encourage compliance with norms around freedom of expression. Other respondents argued that the latitude provided in international standards of human rights law means that they can only be guiding principles. This is also the case due to issues of legal jurisdiction, which tend to be national in character. In this view, it was suggested that international organizations can promote overarching norms as well as develop and share model laws with Member States.

Regulation and Freedom of Expression

Numerous respondents and conference participants identified obstacles in maintaining and promoting the right to freedom of expression via regulation and regulatory frameworks. Some respondents saw the Internet as inherently unregulated, due to its globalized and borderless nature, and they identified a difficulty in establishing effective state-based regulation in a world where content can be hosted and accessed from entirely different countries.

Some argued, therefore, that legislation alone could not protect freedom of expression. For others, striking the correct regulatory balance is difficult, as over- or inappropriate regulation can have negative consequences, not only for freedom of expression but for the value of the Internet in general. In fact, a number of respondents highlighted excessive, restrictive regulation as problematic. They argued that governments should not restrict freedoms, but should rather ensure that fundamental human rights — including communication-related rights — are protected. Other respondents, by contrast, were concerned that a lack of regulation would be a detriment to the public interest. One respondent proposed exploring new and experimental regulatory mechanisms as a means of developing a more evidence-based approach, but how this would be done was unclear.

The consultative process for the study frequently yielded calls for national laws to be in alignment with global rules, standards, and norms regarding freedom of expression rights. Some inputs called for legislation protecting journalists, including expansion of the definition of "journalist" to include social

Box 4

A 'Right to Be Forgotten'?

International human rights law does not provide for such a "right" as such. However, the issue has become topical in recent times. This may be because in the digital age, it might be impossible for past wrongs to be forgotten, given the ability for people to find a post, comment, picture, or record about someone wherever they may work or reside. Should there be a right – or a lesser legal entitlement – to erase or conceal certain information, to be forgotten? Or is the issue of "forgiveness" different to the issue of "forgetting"? After a landmark 2014 decision by the European Court of Justice, individuals in the European Union can ask Internet search companies to remove links to information which they want to be delisted. Advocates argue that this is protecting individuals' privacy, while opponents argue that other options are already protected by privacy and data-protection directives in the case of Europe. Some critics are concerned that the "right to be forgotten" can be Orwellian in its role in erasing history. The concern is that expression, notwithstanding whether it is true, legitimate and legal, can be effectively censored under such a right; further that decisions can be made by private, rather than judicial entities, and without clear process or redress procedures.

For more on this topic, see Mayer-Schönberger 2009, Dutton 2010, Bertoni 2014

media producers and human rights advocates, for example. Updating regulation that protects the confidentiality of journalists' sources to include digital aspects, was underlined as being central to press freedom in research specially commissioned from the World Association of Newspapers (WAN-IFRA) as a contribution towards this study.[8] This research found significant developments in legal source protection frameworks in 85 of 121 countries studied. These included erosion of protections as a result of electronic surveillance, mandatory data retention policies and pressures on Internet intermediaries to disclose data. In addition, many frameworks were found to be outdated in regard to regulating the use of digital data, such as in regard to whether information recorded without consent is admissible in a court case against either a journalist or a source. Also lagging was the issue of clarifying which actors in the digital age could claim protection for doing journalism.

A number of respondents argued that Internet-specific laws to protect freedom of expression were justified, since the Internet is so very different from any of the traditional media that came before it. One justification was that the Internet's specific affordances, technical characteristics, and status as a network for the interchange of information and knowledge make existing legislation either outdated or disproportionately restrictive. Some also analysed freedom of expression as particularly threatened on the Internet, and that authorities or others rely on the lack of Internet-specific legal protections to more easily prevent speech online. Others motivated that there are specific needs to legally protect user privacy, prevent censorship of user content, or to guarantee anonymity, for instance, which items are not usually covered by traditional media regulations.

Respondents also presented arguments against Internet-specific legislation. One concern was that good rules, norms, and laws already exist, but that either national adoption or effective enforcement is not up to standard. Some expressed concern that new legislation could introduce loopholes or avenues of exploitation. Often new regulations are not required. For example, it might be more important in many cases to clearly identify minimum guidelines and principles, rather than entirely new regulations. Others disagreed that the Internet is fundamentally different from existing media, and posited that freedom of expression rights can be established regardless of the medium. They assessed that the differences between the offline

and online worlds were not significant enough to require Internet-specific legislation – since laws and policies in the offline world extend to the online world. However, law and policies made for older media, such as broadcasting might not be appropriate for the new media, with blogging not being equivalent to broadcasting. Still other contributions to this study stated that a focus on protecting human dignity was more important than protecting freedom of expression rights.

Finally, some respondents were ambivalent or relativistic on the issue, arguing, for instance, that citizens in different polities should make their own democratic decisions as to the need for law and regulation. These arguments tended to suggest that different limits or boundaries on the right to freedom of expression might exist for different people, cultures, or even online platforms, albeit without transgressing the parameters of the broader international standards on this matter (transparency, legitimate purpose, necessity, proportionality, and legality). Some also argued for self-regulation (discussed above) as an alternative to government legislation, or for a general policy of government neutrality regarding the Internet. Self-regulation was again mentioned positively by some respondents, as well as conference participants, especially in areas such as journalistic ethics. There was a suggestion for news media and intermediary platforms to engage in dialogue over their different experiences with self-regulation systems.

Those who argued in favour of regulation saw a need for effective, clear, legislation focused on human rights. Specifically, they argued that freedom of expression and privacy are not just concepts, but fundamental human rights, and should be guaranteed as such in national constitutions. One complaint was also that regulation is often not 'user-friendly', either due to complex or onerous laws — for example, those that have led to the arrest of social media users for posting a tweet deemed inappropriate by the authorities. And, as mentioned above, many have identified the need, once regulatory frameworks are established, for consistent application of laws. Special concern was raised over governments violating their own rules, and also over a lack of knowledge by legislators, and by members of the judiciary. Both respondents and conference participants called for the implementation of existing standards, the need for effective compliance systems, and more guidance on how to comply with those standards. They further advocated for the involvement of a wide variety of actors, especially civil society organizations, during the legislative drafting process, and underlined that once established, regulatory bodies should be independent from government and private influence alike.

In regard to regulation, some specific proposals to promote freedom of expression included:

- Less regulation of online compared to offline speech, to recognize the special characteristics of the medium.
- Removing censorship rules.
- Judicial review of content removal and blocking.
- Addressing proportionality and transparency in Internet filtering and blocking.
- Protecting intermediaries from content-related liability.
- Legal guarantees for the protection of whistleblowers and journalists' sources.
- Criminalization of hate speech online.
- The reform of defamation law to decriminalize defamation.
- Permitting and enabling anonymous speech online.
- Due process in regard to identification of users.
- Developing specific regulations around surveillance that users can trust to be in force.
- The erection of virtual cyber-borders, such as agreements to collect and store data within a specific jurisdiction, as some banks require for cloud services.
- Network neutrality legislation.

- Addressing the activities of transnational corporations, such as Internet Service Providers and providers of search engines.
- Reducing inequalities in Internet access, and promoting digital literacy training.

Box 5

Regulatory Challenges: Journalism

Journalistic practice is of special concern to freedom of expression. Two of the questionnaire items for this study focussed on questions related to journalism. First, are journalists adequately protected by existing legislation in regard to their digital activities? And, second, what scope is there for journalistic self-regulation?

Though acknowledging regulatory variation between countries, some respondents assessed that protections for journalists were inadequate, with many feeling that journalists were 'barely' covered. Of prime concern by respondents was that protections, where they exist, are often limited to 'traditional' journalists, those working in media whose primary output is print or broadcast. In an era of increasingly Internet-based journalism, this was seen as inadequate. Respondents motivated that protection for journalists should exist regardless of medium. Some suggested a reframing of journalism as an activity (which any citizen can perform), rather than necessarily a formal profession.

There are some special challenges facing Internet journalism. In some countries, news sites must be authorized by the government, and/or certain material gets prevented from being published (or in some cases, accessed). A second challenge is the rise in 'citizen journalism', where citizens not trained as journalists are using new media, such as social media, to publish news. Though this can lead to positive competition with professional journalism, including ethical lapses in this sector, it also raises issues of ethics in social media production. Third, the interface with digital can mean that journalists are more easily targeted by elements interested in their sources or seeking to eliminate their output, or even to attack the journalists themselves. Security practices in regard to the Internet have threatened journalistic freedom in a number of cases.

In relation to these complexities, respondents and conference participants identified several important areas of concern. Education of journalists was seen as critical. Such education could include ethical training, and the establishment of professional guidelines and codes of ethics — though how to apply such standards to citizen journalists is somewhat unclear. Ensuring journalists have a strong understanding of privacy issues and their rights was also important. Technical education should encourage the use of antivirus software, trusted operating systems, encryption, and so on.

Both respondents and conference participants recognised interfaces between journalistic free expression and privacy, as underlined in Resolution 52 of UNESCO's 37th General Conference in 2013: "privacy is essential to protect journalistic sources, which enable a society to benefit from investigative journalism, to strengthen good governance and the rule of law, and that such privacy should not be subject to arbitrary or unlawful interference." According to respondents, states have a duty to enact legislation and regulation that protects journalists, ideally according to standardized frameworks. This should be done democratically (through parliaments). Measures should include legal action against intimidating journalists, clear rules on a variety of topics (for instance, whistleblower protection; content moderation policies; when to contact authorities; content regulation, and narrowly defined rules where its removal is legitimate in terms of international standards in human rights law; rules around proactive removal of content, and removal requests; and rules around the delivery of user information). Safe harbours for content, and co-regulation for ISPs, were also identified as possible solutions. In all cases, such regulation should have strong enforcement mechanisms to ensure compliance.

In addition, some respondents and conference participants suggested journalistic self-regulation as a potentially viable alternative to state regulation. They argued that self-regulation would minimize state interference and preserve editorial freedom. However, some commentators expressed scepticism regarding the effectiveness of self-regulation, saying it might not work or might be undemocratic — or, potentially, even lead to self-censorship. Others suggested that journalistic unions or institutions, including press councils, are best-placed to establish regimes of self-regulation. Such organizations could be established at both the national and international levels.

Box 6

Regulatory Challenges: Hate Speech

Online hate speech based on issues such as race, gender, disability, nationality and other criteria has become an increasingly big problem for regulators, content platforms, and users themselves. One submission to this study made a distinction between online situations involving (i) users via a provider; (ii) users and the provider; and (iii) users-providers-state. Exactly these three situations and the different roles between users, providers and state in regard to hate speech helps to analyse the divergent views on countering such expression depending on the relationships it may impact.

Another complexity is that it can be hard to clarify what exactly constitutes hate speech. International standards diverge as to whether 'hatred' requires an incitement to harm, and what appropriate regulatory remedies might exist. Assessing whether a particular utterance in an actual given context amounts to the specific conception of hatred is a further complexity. A point was made that particular conceptions of hate speech not only pass the boundaries of legitimate speech, but can also be exercised to limit the expression rights of others. An example given was "censorship through harassment".

Given the range of understandings, respondents cautioned that regulation should not prohibit legitimate political expression and criticism under the cloak of combatting hatred. Indeed, some respondents were in favour of a maximalist position, in which speech should be regulated as little as possible, with restrictions covering only the most important cases — such as the protection of children.

Views on prosecution were similarly diverse: some called for prosecution of the author, some for prosecution of the publisher, although it was not deeply addressed as to whether this included platforms of service providers who are not necessarily publishers in the traditional sense, and how this would impact on the principle of limited liability for Internet intermediaries. Other respondents pointed out that prosecution can have a chilling effect or be used as an excuse to eliminate legitimate speech, and they suggested that it should be avoided in favour of other approaches. Some respondents proposed that prosecution, if it occurs, should meet several tests, including not punishing statements of fact; only penalising those who are shown to have acted with the intent to incite hatred to discrimination, hostility or violence; protecting journalism and reporting; and imposing punishment according to the principle of proportionality.

Self-regulation by platform owners, via voluntary removal or moderation, was also identified as potentially valuable by quite a few respondents; but the caveats applying to self-regulation identified earlier in this section apply here, too. Finally, respondents disagreed about the effectiveness of "real name" policies. Some saw them as beneficial, while others were concerned about the lack of anonymity they entail, and the potential for additional harassment.

Beyond regulation, a large number of respondents as well as conference participants called for an increase in media and information literacy and education of the public. Ideally, this could shape behaviour by encouraging users to act with understanding and respect for others, and by reminding

users that little said online is truly anonymous. Reference was made to the 2012 Rabat Plan of Action of the Office of the High Commissioner for Human Rights and to the 2014 annual report of the UN Special Rapporteur for Racism, Racial Discrimination, Xenophobia, and Related Intolerance. This 2014 report highlights the importance of access to the Internet of those groups who are most often the targets of discrimination.[9] Calling for 'more speech', including offering more and better content, in response to trolling and hate speech, was also a popular response. Some submissions highlighted the Council of Europe's "No More Hate Speech" campaign. Encouraging users to strengthen their sense of self, and to identify, laugh at, counter or ridicule hateful speech, was also seen as an effective measure.

Finally, some respondents called for academic and multistakeholder exchanges on hate speech, including getting experts from civil society to help with identifying and effectively regulating hate speech online. Others pointed out that the media themselves need to play a role, and need funding to combat hate speech.

These themes were all also mirrored in specialized case study research commissioned by UNESCO for this study (see Gagliardone et al, 2015), which also highlighted the role of citizen groups and NGOs in monitoring, reporting and countering hate speech online. The value of educational programmes to empower users to identify and resist hate speech is also signalled in this research.

Possible Options for Future Action to Support Freedom of Expression

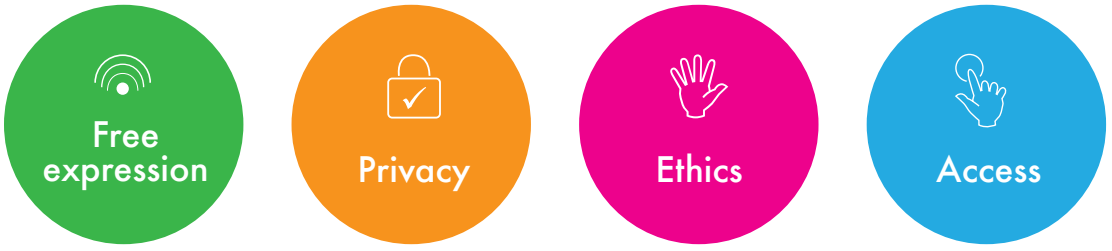
UNESCO sees freedom of expression as a matter in which each individual has a stake.

To preserve, protect and foster freedom of expression, the consultation processes of this study raised a number of possible options for future actions by UNESCO for consideration by Member States. As also encapsulated in the outcome document of the 'CONNECTing the Dots' conference (See Appendix 6), these possible options are for consideration by Member States for UNESCO action:

- Urge Member States and other actors to protect, promote and implement international human rights law on free expression and the free flow of information and ideas on the Internet
- Reaffirm that freedom of expression applies, and should be respected, online and offline in accordance with Article 19 of the Universal Declaration of Human Rights and Article 19 of the International Covenant on Civil and Political Rights (ICCPR) that any limitation on freedom of information must comply with international human rights law as outlined by Article 19(3) of the International Covenant on Civil and Political Rights
- Support safety for journalists, media workers, and social media producers who generate a significant amount of journalism, and reaffirm the importance of the rule of law to combat impunity in cases of attacks on freedom of expression and journalism on or off the Internet
- Noting the relevance to the Internet and digital communications of the international Convention on the Rights of Persons with Disabilities (CRPD), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), and the work of the Office of the High Commissioner for Human Rights, concerning the prohibition of advocacy of national, racial or religious hatred that constitutes incitement to discrimination, hostility or violence (Rabat Plan of Action 2012), promote educational and social mechanisms for combating online hate speech, without using this to restrict freedom of expression
- Continue dialogue on the important role that Internet intermediaries have in promoting and protecting freedom of expression.

Footnotes

1. See for example http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/news/53_digital_safety_kournalists.pdf [Last accessed 4 January 2015].
2. Henrichsen, J. R., Betz, M., and Lisosky, J. M. (2015), Building Digital Safety for Journalists: A Survey of Selected Issues. Paris: UNESCO
3. Joint declaration on freedom of expression and the internet, by the United Nations (UN) Special Rapporteur on Freedom of Opinion and Expression, the Organization for Security and Co-operation in Europe (OSCE) Representative on Freedom of the Media, the Organization of American States (OAS) Special Rapporteur on Freedom of Expression and the African Commission on Human and Peoples' Rights (ACHPR) Special Rapporteur on Freedom of Expression and Access to Information. http://www.osce.org/fom/78309?download=true
4. Paris Declaration on Media and Information Literacy in the Digital Era, http://www.unesco.org/new/en/communication-and-information/resources/news-and-in-focus-articles/in-focus-articles/2014/paris-declaration-on-media-and-information-literacy-adopted/ [Last accessed 26 January 2015]
5. This common example originated in 1919 with US Supreme Court Justice Oliver Wendell Holmes, Jr.'s opinion in the United States Supreme Court case Schenck v. United States.
6. Report of the Special Rapporteur to the General Assembly on the promotion and protection of human rights and fundamental freedoms while countering terrorism, supra, paras. 12, 13,14.
7. Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, Report of the Special Rapporteur to the General Assembly on the right to freedom of opinion and expression exercised through the Internet, UN Doc. A/66/290, 10 August 201, para. 41. See also Haiman (2000).
8. Posetti *et al.* 2015 (forthcoming)
9. http://www.ohchr.org/Documents/Issues/Racism/A-HRC-26-49.pdf


Free expression
Privacy
Ethics
Access

Privacy

Figure 3. Word Cloud of Responses to Questions on Privacy

Background

The general right to privacy is related to many distinct issues, such as the freedom and the ability to define a personal space separate from public space; to protect oneself from unwanted intrusion; and to control access or unauthorized disclosure of personal information. It also relates to concepts of identity and confidentiality, and of anonymity and human dignity. On the Internet, there are additional related issues, ranging from protection of personal data and intellectual property to data-mining and cybersecurity. Privacy relates particularly to the collection, storage, use and circulation of information that is variably conceptualized under the label of 'personal data', or what is sometimes labelled as 'sensitive personal data', such as health records that require stronger forms of protection, and which is distinguished by its difference from what is legitimately considered 'public' or 'proprietary' in its character and role. Since the Internet creates global access to data, the international issues raised by different cultural and legal perspectives on what is and what is not considered private have raised many complexities in resolving technical and policy approaches to this area (Bennett and Raab 2003). New sources of so-called 'big data' and the computational analytics that can derive meaningful insights from what was previously perceived to be uncodified and anonymous information have also raised new issues over governmental and industry surveillance of individuals and society (Mayer-Schönberger and Cukier 2013).

Principles

Article 12 of the Universal Declaration of Human Rights states: "No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks." Article 17 of the International Covenant on Civil and Political Rights states: "1. No one shall be subjected to arbitrary or unlawful interference with his privacy, family, home or correspondence, nor to unlawful attacks on his honour and reputation. 2. Everyone has the right to the protection of the law against such interference or attacks." Also relevant to the issue is the Human Rights Committee's General Comment 16 of 1988.[1]

Further related to privacy is the UN General Assembly's 1990 resolution about regulating computerised personal data files.[2] More recently, the General Assembly in 2013 adopted a resolution on The Right to Privacy in the Digital Age (A/RES/68/167). This stated that: "unlawful or arbitrary surveillance and/or interception of communications, as well as unlawful or arbitrary collection of personal data, as highly intrusive acts, violate the rights to privacy and to freedom of expression and may contradict the tenets of a democratic society." It called for measures to end violations of the right to privacy, including in the context of digital communication, and for reviews of surveillance systems in this light. The resolution further highlighted the importance of "independent, effective domestic oversight mechanisms capable of ensuring transparency, as appropriate, and accountability for State surveillance of communications, their interception and the collection of personal data." The key points were again affirmed in a 2014 UN General Assembly Resolution (A/RES/69/166).

A report (A/HRC/27/37) by the Office of the High Commissioner for Human Rights and presented to the 69th session of the General Assembly, and an earlier report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, Frank LaRue (A/HRC/23/40) also tackle these issues. Further, the 2014 report by the Special Rapporteur on the protection on human rights while countering terrorism, Ben Emmerson, also focuses on the issues of surveillance (UN doc A/69/397). In March 2015, the UN Human Rights Council created the position of a special rapporteur on the right to privacy (A/HRC/28/L.27).

These UN documents and decisions inform UNESCO's approach to privacy. Relevant principles are:

- Advocating for Internet practices and policies that respect the right to privacy
- Promoting openness and transparency that takes personal privacy into account
- Recognizing that privacy and its protection underpins trust in the Internet and therefore greater use and accessibility
- Using multistakeholder arrangements to reconcile privacy with other human rights, such as freedom of expression or "life, liberty and security of person" (UDHR).

UNESCO further recognises that particular actions concerning the right to privacy can impact on other rights, such as the right to freedom of expression, and vice versa. As noted in UNESCO's 37 C/Resolution 52, 'privacy is essential to protect journalistic sources, which enable a society to benefit from investigative journalism, to strengthen good governance and the rule of law, and that such privacy should not be subject to arbitrary or unlawful interference'. At the same time, as noted in the Discussion Paper prepared for the 37th General Conference, privacy may also not be used to shield violations of individual rights or to block the media from exposing them. Public interest must enter any calculation of reconciling rights, and Article 29 of the Universal Declaration of Human Rights sets out this test for the purpose and method required in this regard: 'In the exercise of his rights and freedoms, everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society.' Any balancing, such as between privacy and public safety (which should provide for "security of person"), should respect the principle that the least restrictive option should be taken in order to preserve the essence of the right. An attempt to strike such a balance can be found in the Tshwane Principles on National Security and the Right to Information.[3]

Fundamental to users taking advantage of access to the Internet is the question of whether they can trust that their rights will be respected, not least their right to a reasonable expectation of privacy (Mendel *et al.* 2012).

Without confidence, users may begin to limit their involvement, and the universality of the Internet could be diminished. Users should be aware of the extent of their right to privacy and of ways they can protect their privacy online.

At the same time, users should themselves respect the privacy of others on the Internet, and UNESCO's work in Media and Information Literacy has a role to play here (see Box 7).

Box 7

Media and Information Literacy in Support of Privacy

There are many complex issues for users of the Internet, such as parents, teachers, and students, to grasp in order to protect the privacy of children and themselves. This is underlined by the business models of many Internet services, which might rely on the provision of data for other purposes, such as marketing. There is a need for children and all users to understand the evolving ways in which governments and commercial enterprises might collect and use information they post online, such as in social media. These issues include an awareness of one's rights to privacy online, how to evaluate the privacy policy and practices of different providers and how to exercise one's rights online. The awareness should cover how privacy may depend on many other factors, such as whether one participates anonymously, and also how to think about balancing the rights to privacy with other rights, such as freedom of expression. This covers the possibility to have confidential discussions or meetings without live Tweets or attributed quotations. All of these issues are the focus of a study by the UNESCO-initiated Global Alliance for Partnerships in Media and Information Literacy (http://www.unesco.org/new/en/communication-and-information/media-development/media-literacy/global-alliance-for-partnerships-on-media-and-information-literacy/). The initial findings of this study are that privacy is minimally addressed in Media and Information Literacy programmes, and there is a lack of understanding among educators as to what topics are privacy-related and how these apply to actual competencies. There is a critical literacy approach to privacy in some universities, a participatory approach at schools, and an empowerment approach in civil society initiatives.

Privacy articulates directly with transparency concerning the recording, collection, storage and analysis of personal data (Box 8). UNESCO stands for an appropriate reconciliation of rights and sufficient safeguards to ensure the public and individual interests in the interface between privacy and openness. Privacy also relates to open-source technology, which enables scrutiny of privacy protection in the relevant software.

Box 8

Balancing Privacy and Transparency and Freedom of Information

The potential tensions between rights and values might require balancing in concrete situations. For example, calls for transparency on the part of government and corporations could run up against privacy considerations in some respects. On the one hand, freedom of information policy often requires public bodies to permit and even facilitate access to information they hold about an individual. Such policy is designed to support freedom of expression, by enabling individuals to 'seek and receive' and well as impart information. On the other hand, balancing may be needed. Asking some actors, such as students, to waive their right to access information about letters written on their behalf for admission to a college or university is one example. Some web sites that collect information on wrong-doing, such as bribery web sites, are designed to shine a light on corruption, but they normally anonymize information about who allegedly paid or received a bribe, so that whistleblowing individuals can be protected

while the problem can be investigated. Similarly, demands for transparency can conflict with what is sometimes referred to as a "right to be forgotten". These issues are the focus of an upcoming UNESCO study, called 'Balancing Privacy and Transparency'.

Given the complex ecology of the Internet, the exercise of balancing the right to privacy in relation to other rights in public interest may lend itself to multistakeholder participation in policy development, especially in regard to norms, issues of regulation and self-regulation.

Definitions

One complex area is the very definition of privacy, anonymity, and encryption, as well as the way these ideas intersect. The consultative process of this study showed that there are varying interpretations of these items and the relationship between them. Despite this, many agreed that these areas are highly complementary and relate to identity management or are linked by the concept of identity. Attempting to put together these disparate ideas, it can be conceptualised that privacy is a right, while anonymity and encryption can be ways of safeguarding that right. To give more depth on the debates:

Privacy as a right is less concretely defined than anonymity or encryption. Following the usage in the UNESCO Global Survey on Internet Privacy and Freedom of Expression (Mendel et al, 2012), privacy can be considered to be about having a reasonable expectation to have control of one's data or information. This implicitly frames the issue within a paradigm of information ownership, and stresses the claims of the individual rather than public or private bodies. In this perspective, privacy means that information can be shared voluntarily and on a limited basis, i.e. without being made public. This approach sees privacy as allowing individuals to seclude themselves from public when they so desire, and thereby relates to personal life — though some respondents questioned the degree to which individuals in contemporary societies can successfully participate online if they desire full seclusion. However, many general issues were raised around ways to better ensure privacy, such as questions about the ownership and definition of personal data recorded by private companies.

Anonymity prevents identification of a user by hiding his or her identity in varying degrees (eg. through pseudonyms). In this way, it is a shield that can protect privacy; in turn, privacy of information often requires anonymity. By preventing public identification of a particular user, even if digital footprints persist, anonymity also provides security and hence safety from repression or illegitimate use of personal data; it is thus closely related to freedom of expression, as identified by numerous respondents. By contrast, anonymity can fuel expression that ignores social civility ("netiquette") in the online arena. Respondents called for identification of good practices regarding anonymity online. Confidentiality can be seen as a partial application of anonymity, by referring to limits placed on the extent of disclosing particular personal identifiers, such as in cases of the identities of journalists' sources.

Encryption refers to tools used to protect user data which may, but not necessarily, include user identifiers. These tools are typically cryptographic in nature, making it impossible to read without possession of secret keys. To the extent that our data can be considered representative of ourselves, encryption has a role to play in protecting who we are, and in preventing abuse of user content. It also allows for somewhat greater protection of privacy and anonymity in transit by ensuring that the contents (and sometimes also the metadata) of communications are only seen by the intended recipient. Some respondents described encryption as a 'gold standard' in maintaining privacy and essential for personal and commercial protection. They proposed that it be enabled by default. Others were less sure, but accepted that some level of encryption could at least prevent most infringements of privacy. Concerns over public safety, such as over terrorist threats, have raised

renewed calls to do away with encryption, or at least for it to be decodable or for individuals to be compelled to yield their encryption keys, subject to specified conditions and processes that ensure legitimacy for such limitation on privacy. By its nature, however, encryption on the Internet does not easily lend itself to regulation.

Privacy requires communications security, and it is undermined by requirements to decrypt communications. Many respondents argued that it was imperative to recognize and protect the right to privacy, and proposed that governments must establish such protections where these are inadequate or non-existent. At the same time, some respondents recognized that privacy is not an absolute right, (although any limitations or interferences should meet criteria of lawfulness and proportionality as well as the other tests of their legitimacy as per international standards on human rights). For instance, though privacy can be protected via anonymity and encryption, as stated above, it may enable less individual accountability in regard to their respect for other human rights, such as in the cases of anonymous "trolls" online.

It was underlined that allowing users to know the boundaries of their privacy is fundamental to user data management. Tools and policies should be identified and promoted. Private companies should disclose what they collect in easy-to-read privacy statements, and inform users if their privacy is breached (such as through hacking).

Recommendations made by respondents included the need to ensure that privacy encompasses a data security action plan. States should adopt privacy protections, based on public engagement, and they should be open and transparent about the methods used to ensure data protection and security. Equally, digital literacy was motivated as important for citizens in general and especially for actors such as journalists, who might have specific needs (see Box 5 above). A technical infrastructure is also required for security; overall, technological and social guarantees of privacy should be balanced with one another.

More broadly, some participants at the 'CONNECTing the dots' conference called for the UN to review and again affirm the right to privacy in a digital age, others suggested a global minimum standard on privacy, and there were calls for UNESCO to support implementation of the UN Resolutions.

Principles and Arrangements Ensuring Respect for Privacy

The consultation process of this study highlighted the importance of civilian oversight bodies, access to courts, and provision of effective remedies in regard to arrangements that impact upon privacy.

Some respondents mentioned the importance of what they termed "digital self-determination" when protecting privacy rights. Following from this, users are entitled to an expectation to control what could be identified in law and ethics as their personal information and/or identity. This is seen as part of various possible principles, including limitations, on how data is recorded, collected, stored and used, as well as principles concerning data accuracy. Europe's extensive experience, dating back to the 1981 Convention 108 for the Protection of Individuals with regard to Automatic Processing of Personal Data, was highlighted as an attempt to cover a number of issues.[4]

One principle arising in arrangements to protect privacy is that of users having access to the information collected about them, and the right to delete or correct what a society agrees to being their private data. Further principles which are sometimes considered concern Internet users being informed and needing to consent to the ways their data may be collected and used, including their entitlement to identify those charged with controlling personal data and having mechanisms to hold these actors accountable. An additional principle in the debate concerns personal data regarded as sensitive to the individual. In this principle, such data should not be collected at all unless absolutely necessary, and when collected, should be treated with care not to violate the basic right

to a dimension of personal life outside of both the public or private-sector arenas.

Concerns were raised about the need for policies for data retention that provide for the potential for judicial oversight. Some respondents also called for disallowing third-party data retention. Users should have to consent to the dissemination of defined personal data. They should be informed and have recourse in case their data privacy is breached, and public officials (such as privacy commissioners) should act as guardians of the public interest in this matter. There should be institutional safeguards such as transparency and accountability to prevent the arbitrary application of these rules. While Internet intermediaries such as social networks have the right to insist on some form of official name identification, some respondents assessed that they should nevertheless recognise and protect the value of public anonymity as a means to protect the privacy of users and their ability to exercise their freedom of expression.

Box 9

Surveillance

Surveillance of user activity online was very commonly identified as a restriction or interference with the right to privacy. In general, respondents called for restraint on behalf of government security services. Many respondents and conference participants mentioned and endorsed the International Principles of the Application of Human Rights to Communication Surveillance agreement (IPAHRCS, viewable at https://necessaryandproportionate.org), which outlines principles that could govern state surveillance regimes. The principles emerged from a year of consultation among civil society, privacy and technology experts, and gained support from more than 100 organisations around the world. The process was led by Privacy International, Access, and the Electronic Frontier Foundation, and followed on a report released in April 2013 by Frank LaRue, then the UN Special Rapporteur on Freedom of Expression and Opinion (A/HRC/23/40). The IPAHRCS principles are:

- Legality
- Legitimate aim
- Necessity
- Adequacy
- Proportionality
- Judicial authority
- Due process
- User notification
- Transparency
- Public oversight
- Integrity of communications and systems
- Safeguards for international cooperation
- Safeguards against illegitimate access and right to effective remedy

Other respondents and conference participants, without mentioning IPAHRCS directly, endorsed at least some of its constituent principles. In general, they also identified a need to obtain a balance between security and privacy. Some also pointed out that maintaining this balance requires the protection of citizens from surveillance by authorities. Respondents and conference participants also called for transparency from ISPs and companies regarding government information requests. Some called for the UN to reaffirm privacy principles in the digital age so as to continue to encourage states to review practices and policies of privacy and surveillance, and how they apply to citizens, other residents and foreign parties in communication.

While it was recognised that when conducted in compliance with the law and international standards, surveillance may be a necessary and effective measure for legitimate law enforcement or intelligence

purposes, there was concern about mass surveillance. Reference was made to the report by the Office of the High Commissioner for Human Rights on privacy in the digital age (A/HRC/27/37), which characterises mass surveillance, because of its indiscriminatory nature, as enabling arbitrary interference with the right to privacy.

Surveillance technologies were also noted as an important focus of debate over safeguards on their international import and export. Another common complaint about surveillance regimes related to the integrity of communications networks and systems. Users were concerned that the creation of backdoor access points in commercial systems could be exploited by hackers, threatening the safety of user data. Open software and hardware standards with publicly reviewable code were seen as a way of avoiding this scenario. Some respondents encouraged users to use authentication, credentials, and encryption to maintain their data security.

Respondents and conference participants also expressed concern about the increasing amount of data collected by corporations, and noted that the private sector has an important role to play as regards privacy. Companies can and should protect user data by default — in other words, they should take the approach of 'privacy by design'. Beyond this, however, some respondents called for limiting companies' ability to track user data, and for preventing private companies from circulating the data they collect. In these submissions, respondents said that companies should comply with the user control measures described above, telling users how their data will be used and deleting user data when requested. They should not collect data for one purpose and use it for another without user consent.

A variety of technical solutions that can help protect user control of data were identified. These include wider use of better encryption and HTTPS, using anonymity networks such as Tor, more secure platforms with separate data banks, and adopting privacy by design principles. Respondents also called for emerging technologies to protect privacy, such as shared defaults, and rules ensuring that cybersecurity principles are more closely followed.

Proposed regulatory mechanisms included legislation guaranteeing freedom of expression and personal privacy protections. Specific privacy-related research and legislative recommendations were:

- Protection of anonymity
- Development of data ownership and protection regimes
- Clarity in how personal data are defined, and how these data relate to either metadata or geolocation data.
- Prohibition of unlawful or arbitrary interference with the right to privacy
- Legislation to identify, limit, and provide recourse regarding privacy breaches
- Limits on sharing of data by governments and ISPs
- The imposition of consequences for violating others' privacy, such as through unauthorised surveillance
- Transparency about the scope of cybercrime and cybersecurity agencies, including regarding the collection and use of data about citizens
- Considering a 'right to be forgotten', although others assessed this as problematic and a potential abuse of privacy that violated the right to seek and receive information, as well as transparency and public interest
- Regulation of the commercialization of surveillance technologies
- Ability to control third party access to private data
- Accountability mechanisms
- Wider consideration of European notions of data privacy as a practice of international relevance

- Fostering cooperation among privacy enforcement authorities

As with freedom of expression, respondents also identified the need for laws protecting the right to privacy to be clear and well enforced. Many also identified transparency around limitations on the right to privacy as being of critical importance. Transparency was seen to support informed public debate and oversight, and thus to enhance privacy. However, some respondents also indicated that transparency cannot substitute for regulation to protect privacy.

Respondents were prompted as to the reconciliation of openness and transparency (especially the release of information by governments) with privacy. Some users assessed that there was no contradiction, seeing these ideals as complementary. But most perceived that there was some tension between public openness and the notion of the hidden, private self. Some respondents advocated that there should be limits on transparency in order to protect privacy; others, in direct contrast, suggested that privacy rights should not prevail against the greater social interest in transparency. It was observed that although governments and corporations are not claimants of human rights, some of these actors cited privacy considerations in their attempt to limit openness or transparency.

A popular response to resolve this tension was that societies should practise 'transparency in public affairs, and privacy in personal ones'. This approach recognizes that transparency is critical in public matters, but also that the privacy of ordinary, law-abiding citizens should be protected. Thus, governments (including public officials) should be open with their citizens, and citizens have the right to hold them accountable. Citizens' rights to request governmental openness (for instance, by issuing Freedom of Information requests) should hence be safeguarded. Some respondents stated that transparency should also extend to large corporations and their officials, using a general principle of 'more power, less privacy'. However, there was also a caution that too much transparency for public figures can lead to transparency-avoiding behaviour. It was thus suggested that this balance should be constantly reassessed and rebalanced, all within a human rights framework (See Box 8 above).

In instances when data is publicly released, respondents indicated that it should generally be anonymised, taking into account the risks of both metadata sets and data triangulation which can undermine anonymisation. Some respondents motivated that wherever possible, public and private information should be distinguished and separated altogether; still, some details might need to be omitted from public data sets to protect privacy or security. Again, the theme emerged that where possible, too, the data owners — users — should be permitted to have input on how their data is released, with the aim of maximizing transparency, consent and user control.

Big data has great positive potential, for instance in increasing the understanding of social phenomena or improving transparency. But, there are also risk areas that must be addressed.

Box 10

Issues Related to Big Data

With the growth in the popularity of big data comes an increase in concerns about its collection, storage and use (see Mayer-Schönberger and Cukier 2013). There is controversy over how to define big data, but in essence the concept refers to very large data sets requiring advanced computational and networking technologies to capture and analyse. Examples would be a "firehose" of Twitter posts, or a database of records of phone calls. These can be codified and analysed as big data to provide meaningful information. Social scientist, Daniel Bell (1973), once defined the 'Information Society' as being driven by the ability to codify data to create information in ways that made the information sector as important as earlier agricultural and industrial sectors of the economy. The ways in which

advanced computational and networking technologies enable the collection and analysis of data formerly perceived to be a problem — a data deluge — are examples of the power of codifying data. How to collect and manage this data ethically, and in ways that are truly informative and valid, is a subject of great controversy. One concern mentioned by respondents and conference participants is that individuals often provide this data without realizing the purposes for which it might be used. Another is that by combining multiple, disparate data sets, anonymised data can become de-anonymised. Still another is that social decisions might increasingly be made based on data that does not sufficiently represent the diversity of communities — especially when issues of access and participation are not addressed. There is also concern over the security of storage in regard to hacking and misuse. A further issue signalled in the consultation process is the debate around the validity of distinctions between data and metadata. The Human Rights Council has noted "while metadata can provide benefits, certain types of metadata, when aggregated, can reveal personal information and can give an insight into an individual's behaviour, social relationships, private preferences and identity." (A/HRC/28/L.27)

The concerns noted that profiling of users becomes ever easier, which exacerbates the impact of surveillance (both private and public), data breaches, and loss of control over data. Some respondents said that users should be able to opt out of data collection, and should also be taught about how their data is visible. Even when they consent, their data should ideally be anonymised. However, problems with anonymisation were also identified: it can be difficult to properly anonymise data, even when efforts are made to do so (see Mayer-Schönberger and Cukier, 2013).

Other areas of concern included the potential for excessive valorisation of data, which might have very limited value (boyd and Crawford 2011). Collecting data for its own sake, just in case some insight might be gleaned from it, becomes easy and potentially commonplace. Private companies and security agencies are collecting large amounts of data on their users, potentially leading to a loss of trust in these actors, and even in Internet use in general. Big and broad is not always better or more scientifically useful than targeted data.

Respondents called for multistakeholder participation in developing regulation and safeguards, including checks and balances on data collectors and data controllers. The state has a role to play in this regard.

The consultation processes for this study also signalled new algorithms, many of which are not public, can pose regulatory challenges. Technologists and engineers need to be engaged in debates over privacy and data protection, clarifying how new technologies might influence access to personal information and its retention. Awareness of how technologies work is as important as law and policy in this area, and how the state of the art is evolving in ways that might impact privacy and security, such as through the development of Privacy Enhancing Technologies (PETs). Individuals and households need to know how technologies work in order to make an informed choice on their use.

That said, policy remains important in this area, since many individuals do not always act to protect their privacy, and many companies do not have an interest in employing technologies that have higher levels of security and privacy protections. In addition, companies should proactively support transparency about their policies, as well as data security. Along with governments and other stakeholders, it was noted that companies need to promote data security action plans to ensure compliance with privacy principles.

More generally, numerous respondents as well as participants in the 'CONNECTing the dots' conference also mentioned the vital importance of education about privacy and the Internet, both to increase user awareness and to change user behaviour. They called for digital and privacy literacy programmes, education on privacy, outreach to affected users (or even a 'privacy

concierge' service for at-risk users), professional development of educators in this area, and education of the public to cherish privacy as a fundamental right. Promotion of the notion of personal ownership and management of data described above was also seen as necessary, in addition to ensuring that users understand the value of their data. The social need for learning and education around basic social norms for communicating online, which some have called 'Netiquette, was stressed by many. This combination of user control and education would permit users to make better-informed decisions regarding their privacy and also in respecting the privacy of others. Overall, this approach recognizes the issue of individual autonomy and the subjective components of privacy.

Respondents and conference participants thus saw the protection of privacy as a primary goal of Media and Information Literacy, and so education was seen as a critical component of privacy rights by many. Internet users and individuals in general need to know of tools and strategies they can use to protect their privacy. A large number of responses called for education on privacy issues to be included as a basic part of educational curricula, with such issues being taught from a young age. Examples of some civic-minded companies embedding principles of information literacy and ethics in games and social platforms for children were highlighted as positive developments. The point was made that some children can access the Internet and social media before they can read, write or understand issues of multimedia information literacy.

This strategy should be multi-pronged: students should be taught their privacy-related rights; how to use the Internet ethically; appreciation of their rights and responsibilities with data (such as transient versus permanent data, and when each is legally permitted); and technical matters, such as encryption. Integrating such Internet use in the classroom would permit practical expression and hands-on experience with this learning. At the same time, respondents and conference participants identified a need to educate teachers, as well. Some highlighted the importance of focussing on youth, and others pointed out areas of focus such as the global South or seniors (who are often neglected).

Parents should also be helped to provide a safe environment for their children outside the classroom. Some respondents expressed a special hope that more Media and Information Literacy would lead to new services and business models as more new users are made aware of the capabilities and affordances of the Internet. Others saw Media and Information Literacy as critical to democratic processes and global citizenship, and called for a multistakeholder approach, including dialogue, workshops, and social discussions.

Respondents called for intercultural discussions on privacy principles. Where so established, they suggested adherence to international agreements and standards, such as the privacy guarantee in the UDHR. UNESCO was enjoined to disseminate and encourage the implementation of the report of the UN High Commissioner on Human Rights. International organizations have a role to play in sharing established good practices, and examples of rights-based approaches to privacy. Relying on professional and academic expertise and international standardization can help the development of high-quality legislation.

Submissions for this study and the discussions at the 'CONNECTing the dots' conference, highlighted that it is important to reaffirm that the right to privacy must be reconciled and balanced with other rights, such safety of "life, liberty and security of person" or freedom of information (and the related transparency), with the aim of preserving the integrity of all rights as much as possible, and avoiding the protection of one at the expense of others. Decisions on the reconciliation and balancing of rights with each other should be anchored in law, be only for legitimate purposes, and conform to the principles of necessity and proportionality. In line with the international standards of human rights law, any limitation must be the least restrictive possible. In most cases, this exercise can be furthered by a multistakeholder process.

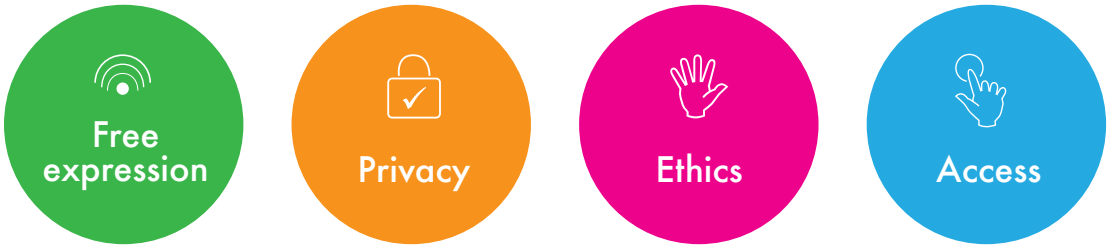
Possible Options for Future Action on the Issue of Privacy

Emerging out of the consultation process of this study, are the following options for promoting privacy which Member States may wish to consider the following options for UNESCO to pursue:

- Support research to assess the impacts on privacy of digital interception, collection, storage and use of data, as well as other emerging trends
- Reaffirm that the right to privacy applies and should be respected online and offline in accordance with Article 12 of the UDHR and Article 17 of the ICCPR and support as relevant within UNESCO's mandate, the efforts related to UN General Assembly Resolution A/RES/69/166 on the Right to Privacy in the Digital Age
- Support best practices and efforts made by Member States and other stakeholders to address security and privacy concerns on the Internet in accordance with their international human rights obligations and consider in this respect the key role played by actors in the private sector
- Recognize the role that anonymity and encryption can play as enablers of privacy protection and freedom of expression, and facilitate dialogue on these issues
- Share best practices in approaches to collecting personal information that is legitimate, necessary and proportionate, and that minimizes personal identifiers in data
- Support initiatives that promote peoples' awareness of the right to privacy online and the understanding of the evolving ways in which governments and commercial enterprises collect, use, store and share information, as well as the ways in which digital security tools can be used to protect users' privacy rights
- Support efforts to protect personal data which provide users with security, respect for their rights, and redress mechanisms, and which strengthen trust in new digital services.

Footnotes

1. General comment No. 16: Article 17 (Right to privacy) http://tbinternet.ohchr.org/_layouts/treatybodyexternal/Download.aspx?symbolno=INT%2fCCPR%2fGEC%2f6624&Lang=en
2. Guidelines for the regulation of computerized personal data files. A/RES/45/95. http://www.un.org/documents/ga/res/45/a45r095.htm
3. http://www.opensocietyfoundations.org/publications/global-principles-national-security-and-freedom-information-tshwane-principles
4. http://www.coe.int/t/dghl/standardsetting/DataProtection/default_en.asp


Free expression
Privacy
Ethics
Access

Ethical Dimensions of the Information Society

Figure 4. Word Cloud of Responses to Questions on Ethics

Background

The area of information ethics emerged as an academic discipline in the 20th century and has slowly entered into popular awareness, so it is still in its formative stages. It has come to the forefront as the Internet has rapidly brought people together from across geographical, cultural and political distances. Some at the CONNECTing the dots conference argued that we need to understand the ethical and other social implications of more and more people and devices being connected all the time. The online environment is therefore glocal, that is to say simultaneously local and global, which means that individuals and all actors must reflect on how material might be created, read and understood by people who do not share their own local context or normative framework. At the same time, there are concrete material implications of the digital age, such as the disposal of electronic waste and its impact on the environment, that are equally critical to consider from an ethical perspective. As some put this problem — the Internet is moving faster than societies can adapt, and we lack established ethical frameworks for determining what is acceptable and what is not.

From UNESCO's perspective, the Internet should help advance respect for cultural, social and other diversities, within the wider realization of universal human rights and associated values, such as social wellbeing. Discrepancies between this vision and real-world situations raise issues for ethical consideration. 'Ethics', in this context, can be understood as the simultaneous affirmation of human rights, peace, equity, and justice, as well as a field of inquiry and a style of making choices in and of itself. Ethical choices are informed by actors' beliefs and values, in a realm that is different to that of the compulsion of law and regulation, although ethics should also inform legislation and its implementation. UNESCO considers human rights as the appropriate basis for assessing the ethical content of norms, beliefs and values, and of decisions and their expected outcomes. Such reflection should inform the development of regulatory, compulsory and statutory standards, as well as serve as a basis for individual decision-making and a focus for consultation

with all stakeholders, including youth, parents and educators.

Alongside work conducted on the ethics of science and technology, issues of social transformation relating to the uses and effects of digital technologies have been considered at an exploratory level within UNESCO's Management of Social Transformations (MOST) programme. In a similar vein, this topic has also been explored within the framework of UNESCO's intergovernmental Information for All Programme (IFAP), and has served as a focus for collaboration with UNESCO's World Commission on the Ethics of Science, Technology and Knowledge (COMEST). From the point of view of universality principles, the following may apply.

Principles

UNESCO is committed to encouraging awareness of the ethical dimensions and context in the use of the Internet. This entails promoting an engagement with the Internet that is thoughtful and informed and which advances peace and the realization of each person's full potential. It is a matter of actors using human rights for these objectives and of ethical self-regulatory systems such as UNESCO promotes in the case of journalists, and of Media and Information Literacy. In this context, ethical considerations include:

- A focus on the intentionality of actions, as well as outcomes, intended or unintended
- Understanding that Internet use can have positive outcomes, but it can also be misused or purposively employed in ways that violate standard norms, such as harming others
- Consideration of whether the norms, rules and procedures that govern online behaviour are based on ethical principles anchored in human rights and geared to protect the freedoms and dignity of individuals in cyber-space and advance accessibility, openness, inclusiveness, and multistakeholder participation on the Internet
- Anchoring Internet practices, law and policy in a sensitivity to ethical considerations, such as non-discrimination on the basis of gender, age or disabilities
- Ensuring that ethically-informed choice shapes emerging practices and policies

ICTs are sometimes viewed as being neutral and, on this basis, value judgments may only be made in relation to the intent, use and the outcomes of Internet use. Focusing on the intentionality of Internet use — that is, user goals and objectives — highlights how ethics has a role to play in encouraging individuals to reflectively engage with how they use technologies and how they interact with other users. Another perspective goes further and recognises that ICTs also have embedded in their design, whether explicitly or implicitly, a number of assumptions, expectations, values and biases, along with the viewpoints of their designers and the societies in which they were created. In this view, it is important to recognize that the latitude available to users to inform as well as to effect their exercise of ethical self-regulation may be impacted by design choices, norms and standards that operate or exist in the network. Technologies embody particular choices with distinct consequences, which may explicitly or otherwise favour certain behaviours or inhibit the ability of some segments of society to benefit from them. Ethical consideration is required with regard to the extent to which the Internet enables transparent and open technology standards and opportunities, and the principle of openness, in turn, can facilitate users developing greater ethical awareness of ICTs.

ICTs are 'resources' whose ethical usage and distribution can contribute to creating conditions for a greater well-being. They are also the building blocks of UNESCO's vision of inclusive Knowledge Societies. In such societies, ICTs are seen, in fact, as ceasing to be simple 'affordances,' but as contributors to a shared global life and mutual understanding. This is why Internet accessibility issues — such as gender, language, knowledge, culture and identity — are profoundly ethical. In addition, ethics are relevant within the perspective that perceives ICTs as factors in drastic changes in the context of social

interactions, such as removing important social cues that serve to mediate our social interactions. Media and Information Literacy which includes ethical reasoning can empower Internet users to engage with these issues.

The different perspectives and assumptions about technology and its relation to society highlight the need for increased awareness, with particular attention to the participation of developing countries and sensitivity to their needs, and interdisciplinary consideration of the ethical dimensions of the Information Society at all levels — by users, network operators, content producers, designers of ICT, and policymakers. Some conference participants argued for an observatory on ethics in the information age that would survey existing policies and practices and synthesize studies of information and ethics in ways that could inform educational programs.

Consultations on Promoting Ethics

Respondents and conference participants stressed that ethical principles and reflective processes should be based on human rights, and be relevant to all stakeholders, from children to technical experts. Education in these principles, both formally and informally, and promotion of them in society at large, should help allow citizens to make best use of the Internet and its power to help build Knowledge Societies.

Participants in the conference noted that UNESCO had started to reflect on ethical questions related to the Information Society and the online space in the 1990s when it organized a conference series called INFOethics (1997-2000). These conferences were followed in the last 10 years by a number of regional meetings and by several attempts at developing ethical frameworks that could guide policy-decisions, as for example, the 'Code of Ethics for the Information Society', proposed by the intergovernmental council of the Information For All Programme (IFAP) in 2011. Some panellists at the conference proposed that UNESCO's approach to Internet ethics should be based on what had already been achieved, while also responding to new issues including biometrics and the Internet of Things, as well as emerging actions by companies, governments and users. "Digital citizenship" as a concept relevant to ethics was proposed by one speaker, as part of a vision of global citizenship.

Both participants and survey respondents identified a variety of approaches that could inform decision-making on Internet issues. Multistakeholder approaches, including knowledge sharing and greater public participation, were advocated by many. They saw this as an iterative and intercultural process that might include the sharing of good practices, the development of international guidelines, conventions, indicators, and interdisciplinary academic research. For example, international empirical indicators on ethics related to changes over time in all of the four keystone areas would be valuable in informing policy and practice. Openness was also seen as a virtue, including the promotion of open data initiatives, transparency and the proactive disclosure of data. Both governments and companies were encouraged to focus on users and their rights, including privacy. On this point, the ethics of the design of ICTs was raised as an area that companies can focus on. Finally, education, including hands-on experience with Internet technologies, was seen as important for increasing public knowledge, particularly for children, as well as providing the ability to participate online.

Regarding the specific role of ethical reflection and choice, both respondents and conference participants saw this as having prime importance in relation to the crafting of laws related to Internet, which, as with offline regulation, must respect human rights, such as freedom of expression, and promote justice and equity. The Internet is different from traditional media of communication. Therefore, most law and regulation regulating expression over broadcast and common carrier networks, for example, are unlikely to apply well to the Internet as a hybrid new medium of expression, highlighting the importance of the role of ethics in this space.

Some respondents saw ethics as a dynamic and cumulative process, and so called for laws to be adjusted according to potentially shifting ethical principles. Other respondents held that ethics should inform a sense of corporate responsibility, especially when designing products for users, and in the treatment of user data and choices in regard rights to free expression and privacy. Finally, some respondents called for users of the Internet to act with care and compassion for each other, respecting each other's individual autonomy, and taking accountability for their own actions online. A panellist at the 'CONNECTing the dots' conference proposed that dialogue was needed to answer ethical questions related to the constantly changing informational environment, such as "Who are we in the digital age?" or "What is freedom in the digital age?".

There was also recognition that the use of the Internet can feed social transformations, both positive and negative. Some respondents suggested forming or expanding monitoring and research bodies to analyse the impact of the Internet on societies and the ethical challenges associated with these changes.

Media and Information Literacy, and education, as well as the promotion of codes of ethics, were also suggested. Promoting rights, such as the right to access information, was seen as important, as was encouraging human rights compliance, especially in the promotion of the rights of women (see Box 11) and minority groups.

Box 11

Focus on Ethics: Addressing Gender Gaps

In some developed nations, the gender gaps in access to information technologies, such as the Internet, have almost disappeared (Dutton and Blank 2013). In other countries, they remain large. A 2013 UN report found that worldwide, 200 million more men than women were using the Internet.[1] For such reasons, one of the most pressing ethical issues identified by UNESCO is the gender gap in Internet access and experience. In the developing world, gender gaps are most noticeable in terms of access to the Internet. But globally, women are also often subject to other access-related hurdles, such as online harassment.[2]

Respondents were asked how ethical considerations can relate to gendered aspects of the online experience and the use of ICTs generally. This led to the identification of a variety of recommendations from those who identified gender discrimination as a matter of ethics. Changing social norms aimed at promoting women's equality was seen as an important step, as numerous respondents saw the Internet as replicating offline gender inequalities. One practical step is to increase women's participation online, for instance by taking proactive measures to remove barriers — both online and offline — to women's participation as a positive means of enhancing gender equality. In this sense, the Internet could be viewed as a tool for empowerment, and women should be encouraged and enabled (via Media and Information Literacy and skills training, for example) to take full advantage of it.

At the same time, respondents identified that these matters can differ between communities, and even different areas of the Internet. They thus called for intercultural discussion, improved intercultural understanding, engagement and mutual respect as important foundations for better promoting equal Internet access. Initiatives such as UNESCO's programmes on Global Citizenship Education and Cities against Discrimination could also make substantive contributions in this area.

Respondents presented diverse and diverging perspectives on how best to acknowledge ethical principles in developing international guidelines. Some respondents urged the importance of acknowledging human rights as objective and universal. Others challenged the

assumption that there are human rights that can be universally applied, and proposed that this should be acknowledged. For example, some argued that the sovereign rights of States must be respected in governing implementation of human rights principles online. For UNESCO, human rights are universal, and the diversity of local interpretations and applications should never transgress the core rights.

The consultative processes of this study further identified that many Internet issues can possibly come within the realm of ethical reflection and choice, and some suggested the importance of building codes of ethics and norms by means of international bodies, global advocacy, and international declarations. It was suggested these should be built on existing bases, including the Universal Declaration of Human Rights. At the same time, emerging ethical issues — such as mass surveillance and the changing private–public divide — should also be identified and tackled. These processes should follow democratic mechanisms, via transparent and open decision-making institutions, and should take a multistakeholder approach, with discussion, participation, and expert recommendations. Some respondents encouraged the toleration of a variety of views, so that instead of users seeking censorship of others, they use their choice to access, engage with or avoid content they may find offensive. Insofar as human rights are concerned, respondents held that digital rights should be understood as extensions of, not as conflicts with, human rights.

Among ethical issues deserving attention, respondents and conference participants identified: advocacy for issues affecting disabled people; open access; a need for education, access- and capacity-building; and self- and co-regulation for actors.

Possible Options for Future Action on Ethical Issues

Despite the emerging status of this area, the consultative processes of this study highlighted a number of possible options for future actions by UNESCO for consideration by Member States. These options are:

- Promote human rights-based ethical reflection, research and public dialogue on the implications of new and emerging technologies and their potential societal impacts
- Incorporate, as a core component in educational content and resources, including life-long learning programmes, the understanding and practice of human rights-based ethical reflection and its role in both online and offline life
- Enable girls and women take full advantage of the potential of the Internet for gender equality through taking proactive measures to remove barriers, both online and offline, and promoting their equal participation
- Support policy makers in enhancing their capacity to address the human right-based ethical aspects of inclusive knowledge societies by providing relevant training and resources
- In recognition of the trans-boundary nature of the Internet, promote global citizenship education, regional and international co-operation, capacity-building, research, the exchange of best practices and development of a broad understanding and capabilities to respond to its ethical challenges.

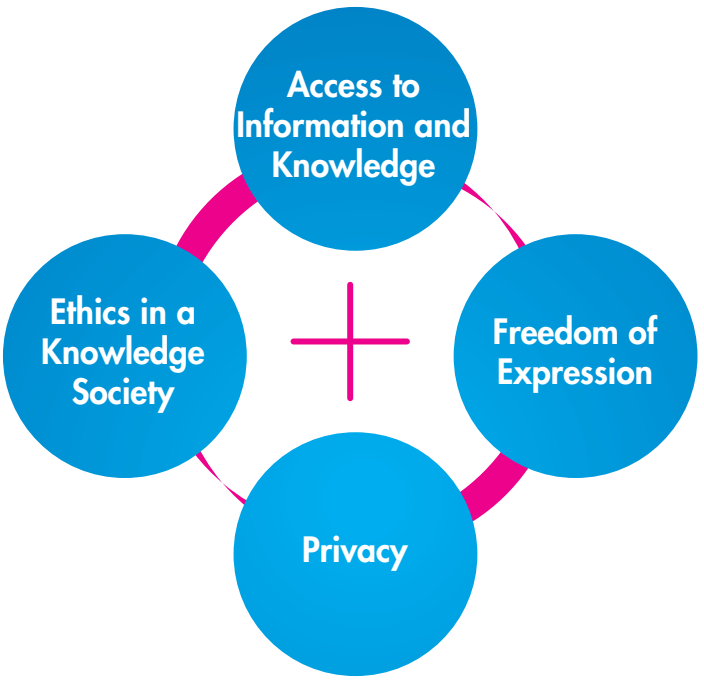
Footnotes

1. See http://www.networkworld.com/article/2170200/lan-wan/un-report-highlights-massive-internet-gender-gap.html [last accessed 19 January 2015].
2. Henrichsen, J. R., Betz, M., and Lisosky, J. M. (2015), Building Digital Safety for Journalists: A Survey of Selected Issues. Paris: UNESCO

Cross-cutting Areas and Broader Issues

As suggested in the discussion of each of the keystones covered in this study, there are many relationships that bear upon constructing Knowledge Societies around the world (Figure 1). There are several ways in which these relationships emerge, including areas that raised common responses in the consultative processes of this study, and those that raised conflicting responses.

Figure 5. Interrelationships across the Keystone Areas



Consistency across keystones

Some responses to the consultation for this study suggested that UNESCO put a priority on activities that could be of value to more than one keystone, and all four in some cases. An example is education and Media and Information Literacy.[1] UNESCO's expertise on Media and Information Literacy could be more strongly integrated into education systems in order to empower users in the fields of access to information and knowledge, freedom of expression, privacy and ethics.

Another cross-cutting issue was whether the Internet introduces truly new aspects to some enduring concerns. For example, with respect to the role of privacy in protecting freedom of expression, whether the protection of the confidentiality of journalistic sources needs to be tailored differently in the online digital media environment where it is possible to technically track networks of communication. In this light, should there be greater or different kinds of protections for sources of journalism? The analysis of whether evolving Internet issues introduce new aspects to the issue of participation and multistakeholder modality, and similarly how these may raise new kinds of ethical considerations, also merits much further attention. Some responses, however, said that the challenge was less new policies for the Internet than proper implementation of more general policies.

Some respondents attempted to deal with this issue, suggesting that existing laws guaranteeing freedoms should apply equally online, but that additional laws may be needed to deal with new situations arising from the Internet's particular affordances. In this view, for example, freedom of journalistic expression — an existing right — should extend equally online; but new laws should be written to protect media organizations from liability based on comments that users might leave on their websites. It is valuable to promote research and thought-leadership on models of law and regulation that would be uniquely suited to the Internet. This might be the best way forward to overcome the debate over whether or not regulations designed for other media should be applied to the Internet in whole or part.

The consultation for this study also elicited responses on how the four keystone fields are

separate but interrelated areas of policy and practice. This was signalled in relation to issues that are in conflict and must be balanced in policy and practice. For example, freedom of expression can be in conflict with privacy, such as in the debates over what is sometimes referred to as a 'right to be forgotten'. Deleting from the Internet factual historical information that might be viewed as harmful to someone's reputation, and therefore providing a protection of privacy, could also at the same time undermine freedom of expression or be an obstacle to accountability for human rights violations.

A further potential set of conflicts between keystones occurs in the wide range of frameworks, guidelines, and mechanisms that seek to respond to the same issues but in often subtly different ways. Respondents and conference participants identified a host of frameworks, guidelines, and mechanisms relevant to the four keystones of this report, originating in both government and civil society. However, as with the findings of research commissioned for this report (see Weber 2015), they also acknowledged that the interconnection between these regimes is highly complicated, and that there are gaps of accountability and democracy. However, the feedback underlined local, national, regional, interregional and international frameworks as important, especially for promoting accountability, and reinforcing key values. At the same time, it was noted that these frameworks are frequently unharmonized and uncoordinated. The Internet Universality concept was seen as having value to UNESCO's work in strengthening access to information, free expression, privacy and ethics as a whole.

Jurisdictional issues

Another cross-cutting issue that both respondents and participants in 'CONNECTing the dots' commented upon concerns differences in law, policy and regulation across governmental jurisdictions. Jurisdiction is a serious challenge when regulating issues such as freedom of expression and privacy. All states must conform to international law, but due to issues of both compliance and leeway in domestication and in implementation, differences can frustrate efforts to coordinate actions that must span jurisdictions. At the same time, territorial law is seen by some respondents to be irreconcilable (or at the least difficult to reconcile) with global communication.

While norms, frameworks, and enforcement regimes were all seen to be required, existing ones were not seen as equally good; therefore, debate focused on identifying model regimes could be a way forward, such as in the areas of privacy and freedom of expression. Given the complexity of reconciling multiple frameworks, laws and policies, there might be moves toward quasi-legal instruments — so called 'soft law' — rather than binding law or regulation.

One specific problem, for instance, is the extraterritorial impacts of national censorship. Content that would not normally be illegal in a country might still be unavailable if it has been declared illegal in the country of the hosting platform. This can lead to a compromise of access to information and knowledge, such as if global companies chose to adhere to the most restrictive jurisdictional regime as one means of maintaining a global standard. On the other hand, content that is illegal in one jurisdiction may still be available if it is hosted in a country where it is legal.

The consultation process generated many suggestions on the need to pre-empt cross-jurisdictional friction by harmonizing relevant domestic laws with international standards of human rights law, which require limitations of any right to be in law, necessary, proportionate, confined to a legitimate purpose, and transparent. Support was also called for as regards the development of policies towards and by Internet intermediaries which would be transparent and aligned with international norms and standards to protect freedom of expression and privacy. There needed to be more debates seeking solutions on jurisdictional issues covering differences between the actual, virtual and legal location of actors, in order to deal with cross-

jurisdictional frictions in the areas of freedom of expression and privacy.

To further address some of these problems, respondents called for regional legal mechanisms, voluntary cooperation, or 'cyber-borders' that could define a new standard that better mediated conflicting national standards. In this area, improved Mutual Legal Assistance Treaties were suggested as one mechanism for decision-making in cases that span jurisdictions.

Many responses to the consultation process were sceptical of the ability and desirability of governments to effectively regulate the Internet, singly or jointly, given its dynamic and multi-actor character and global expanse. The Internet is global: for instance, data could be created by a user in one country and stored across servers in several other countries. This makes local state regulation more problematic; there is no neat consistency between local or national boundaries and the reach of the Internet. This could lead to two quite different problems. On the one hand, it could mean that national regulation would be ineffectual, such as a nationally unique effort to regulate copyright. On the other hand, a single national policy or regulation could determine global policy in some respects, such as if a single national institution threatened to take action against any violation, irrespective of jurisdiction. This could have a very conservative influence on the use of the Internet by moving towards the lowest common denominator, or by fragmenting the Internet into a series of local or regional networks. One submission urged that "the Internet should not be divided into various regional or national internets. The universality is one of its most significant qualities." In practice, this means that local policy configurations would need to be exceptional rather than predominant, if the overall network is to continue to generate the network effects that come from global scale and integration.

The Internet as a space of intersections

Though some respondents did not identify significant overlap between the four keystones, the general assessment was that there were intersections between the issues of access, freedom of expression, privacy, and ethics. Indeed, many said that the Internet itself represents such an intersection, as it changes ways of thinking, expectations, and the interplay between these keystones. Hence, the four cannot be looked at in isolation. Illustrations abound, but the consultation brought up a number of interactions that illustrate the issue. For example, greater access to online information and knowledge can support the right to seek and receive information, and improved access can also reinforce the right to impart information. As other examples: privacy can strengthen freedom of expression; ethical management of platforms is likely to support enhanced privacy. On the other hand, freedom of expression can sometimes violate privacy without there being a public interest override justification; while excessive privacy may constrain public transparency and the benefits of the data revolution. The issue of Network Neutrality cuts across all four keystones of access to information, freedom of expression, privacy and ethics. It could have significant impact on each field depending on how it is resolved within each Member State or region.

In addition, the Internet might well change the way people think about themselves, the world, their expectations, and how to solve problems, such as reconfiguring perceptions of one's neighbourhood or the risks perceived in communicating with friends. Some respondents expressed concern that the Internet, once considered a tool of emancipation or freedom, might increasingly be viewed as a tool of surveillance and oppression. State surveillance was raised as a concern, as well as surveillance driven by the use of data by large global

Internet companies with a technical capacity and scale that surpasses most states. In this sense, respondents identified struggles between individuals, business, society, and states over these fundamental keystone areas.

As discussed in previous UNESCO reports, any Internet policy or practice exists within a broad ecology of policy choices. Choices in one area can have unanticipated implications, not only for what is intended, but also on other policies and practices.

As a consequence of these complexities and unanticipated outcomes, multistakeholder involvement and research is required to better foresee and reconcile these real and potential conflicts, or they could result in an increasing compartmentalization of the Internet, such as increasing control over the Internet by national governments and regulators in ways that undermine its open and trusted global nature. Since the implications of policy are often only knowable in hindsight, it is also important to monitor the role of policy across the world in order to identify good practice and apparent success.

A number of submissions proposed that the Internet Universality framework could be used to develop Internet indicators that would enable coherent research into developments across the four keystone areas relevant to policy making, including the impact on users and other actors. There was also widespread recognition of the 'multistakeholder' approach as one of the only feasible means to resolve complex Internet issues. This potential is reinforced by optimism from some respondents around a growing international discourse stimulated by national and international legal cases.

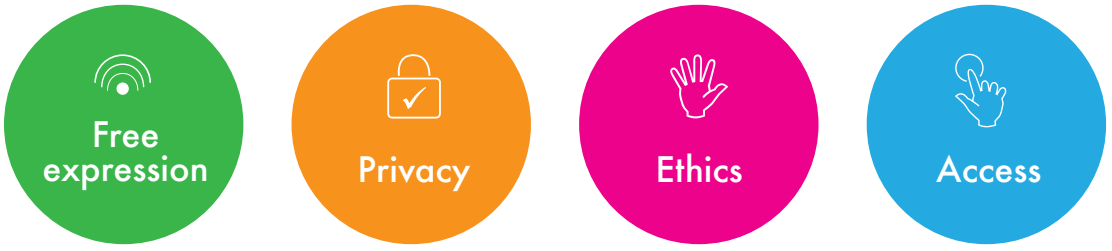
Possible Options for Future Action on Cross-cutting Issues

In light of these cross-cutting issues, possible options for future actions which emerged out of the consultation processes of this study for consideration by Member States are:

- Promote the integration of UNESCO's expertise on Media and Information Literacy (MIL) into formal and informal education systems, in recognition of the important roles that digital literacy and facilitating universal access to information on the Internet, play in the promotion of the right to education, as enumerated in Human Rights Council, Resolution 26/13
- Recognize the need for enhanced protection of the confidentiality of sources of journalism in the digital age
- Support Member States as requested in the harmonization of relevant domestic laws, policies and practices with international human rights law
- Support transparency and public participation in the development and implementation of policies and practices amongst all actors in the information society
- Promote research into law, policy, regulatory frameworks and the use of the Internet, including relevant indicators in the key areas of the study
- Promote UNESCO's participation in discussions on Network Neutrality as relevant to the fields of access to information and knowledge and freedom of expression.

Footnotes

1. See Kuzmin, E., and Parshakova, A. (2013), available at: http://www.ifapcom.ru/files/News/Images/2013/mil_eng_web.pdf#page=24


Free expression
Privacy
Ethics
Access

Conclusions

UNESCO identified for this study four areas that are key building blocks in creating a future for the Internet as an open, trusted and global resource that is equally accessible to all across the world. These four 'keystones' draw attention to whether developments of technology and policy will support greater and more equitable access to information and knowledge, strengthen freedom of expression as both a right and an instrument of democratic processes and accountability, and reinforce the privacy of personal information. Through the focus on ethics, attention is given to the choices, intentions and impacts by holding all stakeholders to principles that are human rights based.

Technologies, and their use, are not 'value-free'. The Internet is designed, implemented, and used by people. Its potential implications for supporting human rights, greater equity in access to information, education and knowledge, including gender equality, make it one of the most promising technologies of the information age. Yet public policies and regulation of the Internet, and patterns of Internet use, are not always positive in their outcomes. In many respects, the value of the Internet as a global resource has been the unanticipated outcome of a multitude of inventions, decisions, policies and practices by a wide range of actors over decades of development and implementation. Similarly, the world's Internet could be enhanced, or lose much of its value, as the outcomes of global choices continue to unfold over the next decade. Undesirable outcomes are not necessarily intended or anticipated, but they need to be addressed.

One example is the way in which the Internet has created new inequalities both globally and within countries. Another example is misuse, such as cyber-bullying and harassment, distributing misinformation, or blocking access to legitimate information and expression which should be permitted in a democratic society. For this reason, the four keystones of the Internet have been analysed through the theoretical framework of R-O-A-M. The normative principles of this framework can help to shape the Internet's design, use, and governance around the world.

From Principles to Actions

Most approaches to high-level principles, such as those that have been the focus of this report, are broad and global, such as in advocating advances in global values as transparency or open access. However, beyond reinforcing the symbolic weight of these, their recitation does not always give clear guidance as to the way forward. Another approach, which has been suggested by the set of consultations as a whole, and which is more amenable to the distributed collaboration that is at the heart of multistakeholder participation, is to break these global foci up into more specific components that can be considered as more concrete goals and objectives at multiple levels by multiple actors.

In essence, the aims of possible future actions by UNESCO for consideration by Member States can be modularized into more specific tasks that enable a wide range of actors to take on a specific task that is within the scope of their expertise and areas of competence. For example, freedom of expression captures many more specific goals and objectives, from the protection of journalists to the avoidance of government Internet filtering and the empowerment of users to identify and resist online hate speech. By modularizing the achievement of broad global objectives, the work of accomplishing these aims can be distributed across multiple actors worldwide and at all levels, from the household and local community to the global stages of Internet governance.

Individuals, private and public organizations, government agencies and members of civil society can take up specific tasks that advance these more concrete goals in their particular arenas of action. Rather than fragment governance of the Internet, UNESCO and other international actors can help distribute the tasks of governance. For example, individual users can consider whether their use of the Internet is aligned with clear ethical principles. Internet intermediaries can engage users and authorities in discussions about terms of service. Government agencies can initiate public consultation processes to consider how to open public data for use by other agencies and organizations. By identifying specific and workable tasks that individuals and organizations from all walks of life can help accomplish, it will be possible to move forward in constructing the overarching keystones of a global Internet. Significantly, participants at the 'CONNECTing the dots' conference urged UNESCO to continue to "connect the dots" amongst internet stakeholders, using its role as a trusted broker and its experience to help build partnerships and dialogue among the Internet's diverse stakeholder communities.

Following and Tracking the Universality Principles

The Internet Universality concept is directly relevant to the keystone areas, and it provides a useful set of principles for initiatives to promote access, expression, privacy and ethics. Both respondents and conference participants pointed to the conclusion that UNESCO could continue to advance its strategic roles, positions and programmatic capacity on Internet-issues, guided by the Internet Universality principles, within the global Internet ecosystem. The Internet Universality concept is well suited to the nature of UNESCO's structure and mandate, and can become a clear identifier of the Organization's way of approaching the various fields of Internet issues.

The consultation highlighted that UNESCO could continue to call attention to the values of the Organization as relevant to the Internet within the wider UN system, including within the WSIS process, Internet Governance Forum (IGF) and the post-2015 development agenda. UNESCO could continue to recognize the value of WSIS and the IGF as participative contributions to global Internet governance issues, as well as processes that support and complement the work of the Organization, such as regional and national IGF initiatives of Member States.

In line with the general R-O-A-M principles, there was support from UNESCO stakeholders for specific activities that they imply. For example, in the area of access to information and knowledge, it was proposed that UNESCO could continue to support initiatives that not only enable the public to get online, but also support users once they are online, such as in training, access to technical skills, and Media and Information Literacy programmes. Efforts could engage youth as first-order citizens, and seek to reduce inequalities in access to information and knowledge. There could be continued promotion of openness, such as to scientific, medical and health information, and support for multilingualism, such as by creating international observatories for monitoring and promoting the availability and use of multiple languages on the Internet and increasing the visibility of content in multiple languages, such as through multilingual domain names. While progress has been made in creating multilingual domain names, only a small proportion are in languages that are not English or Latin-based.

The Internet Universality principles can reinforce sharing specialist information and expertise, such as on weather and tsunami warnings, which illustrates the potential for access to information to have huge benefits. The principles are relevant to putting small and medium sized enterprises online that can create major economic and social benefits, including in the domains of UNESCO's mandates. Many sources of online information are invaluable for meeting UNESCO aims, but users sometimes need to be alerted to their availability and quality. UNESCO can continue to highlight and promote these kinds of benefits of the Internet, helping to keep a balance to keep the opportunities in sight, and avoid being blinded by threats.

To track the impact of such work more concretely, Internet Universality indicators could be developed to help monitor the implementation of the R-O-A-M principles in particular activities. This could support UNESCO's work to build the foundations of Knowledge Societies through the benefits of an Internet based on human rights, open and accessible to all, and governed by a distributed and multistakeholder approach.

Multistakeholder Approaches

Time and again, both respondents and conference participants supported the role of multistakeholderism as the optimum process-setting modality for the creation of robust results for Internet governance. There was also recognition that this approach does not mean homogenising the different roles of the various actors in regard to any decision-making or implementation about a particular normative or policy issue under consideration. The value of participative process was notably contextualised in the 'Connecting the Dots' conference by

Professor Virgílio Fernandes Almeida, chair of the NETmundial conference. He observed that cyberspace governance should be approached sensitively, saying this could be understood through the metaphor of the rainforest:

The rainforest is a complex ecosystem. It is impossible for anyone to govern the rainforest. We can see in a rainforest that we have many processes at many levels operating simultaneously to shape its development. The same is true for the Internet. We can't govern it, but we can damage or destroy it with certain actions. Care is needed.

Multistakeholder processes are well placed to provide an understanding of potential consequences of proposed actions, and also learnings from good practices around the world.

Linked to the multistakeholder principle, there is a need to promote a more user-centric approach to the design of technologies, and applications, such as in privacy protection. Many applications and systems are not well designed for many users. For example, cybersecurity solutions are often designed in ways that make it very difficult for users to conform to the expectations of the technical community, such as in remembering many complex passwords. A closely related issue is technical and other support for users and organizations, such as small businesses, community media and civil society organisations, which often lack their own technical staff. Innovation in and around the Internet has been driven from the bottom up, and multistakeholder processes recognize the virtue of such sources of innovation.

By following up its existing recognition of the utility of multistakeholder participation[1], UNESCO can help Member States where requested by working to support the alignment of their Internet-related law and policies with international standards and good practices and utilizing a participatory basis. Similarly, UNESCO through its convening and bridge-building power can also support the processes of elaborating principles globally through inclusive multistakeholder processes.

UNESCO's Engagement with All Four Keystone Areas

Retain Focus on the Four Keystones

For UNESCO, the identification of the four keystones for a free and open Internet can play an integrative role. New issues and conceptions can be linked to these keystones, which in turn can be continually refined and elaborated by reference to these new issues.

There is support from this consultation for Member States to press ahead with UNESCO's attention to the four areas of access to information and knowledge, freedom of expression, privacy, and ethics, and their multiple interrelationships. Efforts to follow and track developments in these areas should be supported, especially in regard to their relevance to Sustainable Development Goals and to UNESCO's own priorities and thematic foci.

The Universality Principles as a Theoretical Framework

There has been a surfeit of statements on the major values and principles that should underpin the design, development, use and governance of the Internet. However, the Internet Universality principles provide a theoretical framework aligned to UNESCO to analyse the development of effective and equitable Knowledge Societies. These principles — rights, openness, access, and multistakeholder participation — can also be a basis from which to develop solutions. The R-O-A-M principles enjoy widespread support from stakeholders, as evidenced by the recommendations arising from the public consultations. The further advantage of these principles is that they provide an effective lens through which debates about new challenges may be clarified and understood. UNESCO could continue to promote the R-O-A-M principles, both across the four keystone areas and any future areas of study related to the Internet.

Media and Information Literacy: Education

The consultation underlined the importance for UNESCO to support initiatives to educate the public on the four keystone areas. This could be part of a more general effort to embed Media and Information Literacy into the curricula of schools, training in the workplace, and everyday life online.

The Organization's efforts to develop Media and Information Literacy provide excellent global and local goals. Frameworks for Media and Information Literacy education can be discussed within general international and national forums, and they are especially relevant within schools, households and workplaces. Even more specifically, within schools, for example, efforts need to focus on the training of teachers as well as students. Many teachers have been reluctant to use new media and information technologies in the classroom for example, for want of training, and concern over losing the respect of students if they cannot operate equipment (UNESCO 2011b; UNESCO 2013a). Access to quality educational resources, such as excellent teachers and engaging learning methods and materials, is a corollary of this need (UNESCO 2011a). For this reason, support for experimentation and continued innovation in distance and online learning is of value to meeting UNESCO's aims of empowering individual learners. This is in line with UNESCO work in promoting open educational resources more generally (Butcher 2014).

Public awareness and education also need to be addressed at multiple levels, including that of Internet intermediaries. There is value in fostering awareness of the key principles and areas of UNESCO efforts and UN positions more broadly. The same goes for specific issues, whether open standards, digital safety for journalists, data protection principles, and ethical reflections.

Research and Study of Social and Cultural Implications

UNESCO could work even more closely with academia, experts, media and emerging media actors to explore and deepen knowledge on Internet-related issues. As it began with its reflection and analysis of the Internet in 2011 (UNESCO 2011a), the Organization could continue to build a greater understanding of the benefits, costs, and implications of the Internet. More ways could be found to foster and connect with leading research on the social and cultural implications of the Internet, which are becoming a focus of research centres across the world. It could be possible for UNESCO to play a highly significant role in critically discussing the findings and implications of research for policy and practice in all of the keystone areas. UNESCO could also be a core forum on Internet-related discussions from a human rights perspective, as well as creating a resource hub and observatory that could link the R.O.A.M principles to the monitoring of global progress in achieving Sustainable Development Goals related to UNESCO's mandate.

Coordination and Collaboration

At the 'CONNECTing the dots' conference, there was support among the participants for reaffirming UNESCO's role as a catalyst for international cooperation, capacity building, standard setting, and a clearing house for ideas. UNESCO should continue to engage with UN organizations and other international as well as regional organizations, civil society, academia, the technical community and others on Internet issues. UNESCO could also continue to contribute its perspectives to, and evolve them with, partners outside of the UN system, such as individual governments, civil society, academia, the private sector, technical community, and individual users. The Organisation's methods should include providing expert technical advice,

sharing of experience, such as on successes and achievements, offering forums for dialogue, and fostering empowerment of actors in their various roles. UNESCO could also continue to be an advocate for the Internet as a participatory and public space that advances many aspects of the UNESCO wider agenda.

To achieve these objectives, it was widely seen as important for UNESCO to deepen its collaboration with other UN agencies and partner institutions in the public and private sectors (UNESCO 2011a), such as strengthening collaboration with the UN's Human Rights Council (HRC), the International Telecommunications Union and the World Intellectual Property Organisation. Overall, numerous respondents and conference participants suggested that UNESCO is uniquely positioned to convene and converse with stakeholders, identify their interests, and maximise complementarity. In doing so, UNESCO could bring together these actors to create specialized norms and standards, based on R-O-A-M principles, especially in relation to the four keystone areas. It can then draw upon the specific competencies of the various stakeholders to help monitor and encourage compliance with agreed-upon principles.

Respondents and conference participants particularly encouraged UNESCO to deepen its relationships with non-governmental actors, such as civil society organizations and private companies, and encourage them to engage in greater intercultural and international dialogue. UNESCO could also work with the technical community and private sector, including Internet intermediaries, to encourage their technical standard-setting, self-regulation and terms of service to be more compatible with Internet Universality R-O-A-M principles. These actors can be further encouraged and supported to adhere to transparency and due process.

At the same time, in considering UNESCO's available options, some respondents also pointed out that focus and budget are important, and that the organization should be strategic in its approach to key Internet issues.

Possible Options for Future Action as regards UNESCO's role on Internet-related issues within its mandate

In light of the considerations above, the consultation processes of this study proposed a variety of overall options for Member States to consider for UNESCO moving forward, including to:

- In considering the Final Statement of the first WSIS+10 conference, endorsed by the 37th General Conference, affirm the on-going value of the World Summit on the Information Society (WSIS) outcomes, including the Internet Governance Forum (IGF), for the post-2015 development agenda, Internet governance issues, and the role and work of UNESCO
- Affirm that the fundamental human rights to freedom of opinion and expression, and its corollary of press freedom and the right of access to information, and the right to peaceful assembly, and the right to privacy, are enablers of the post-2015 development agenda
- Also affirm that increasing access to information and knowledge across society, assisted by the availability of information and communication technologies (ICTs), supports sustainable development and improves people's lives
- Promote the alignment of Internet-related laws, policies and protocols with international human rights law
- Support the Internet Universality principles (R.O.A.M) that promote a Human Rights-based, Open Internet is Accessible to all and characterized by Multistakeholder participation
- Strengthen the cross-cutting role of the Internet in all of UNESCO programmatic activities, including Priority Africa, Priority Gender Equality, support to Small Islands Developing States and Least Developed Countries, as well as in UNESCO's leadership of the International Decade for the Rapprochement of Cultures.

In addition to the above, the consultation process for this study also proposed the following specific options for UNESCO Member States to consider taking advantage of the Organisation's unique international role in order to:

- Reinforce UNESCO's contributions and leadership within the UN system, including continued implementation of the WSIS outcomes, the WSIS+10 review, the IGF and the post-2015 development agenda
- Engage as relevant with partners outside of the UN system, such as individual governments, civil society, news media, academia, private sector, technical community and individual users; including by providing expert advice, sharing of experience, creating fora for dialogue, and fostering development and empowerment of users to develop their capacities
- Support Member States in ensuring that Internet policy and regulation involves the participation of all stakeholders, and integrates international human rights and gender equality.

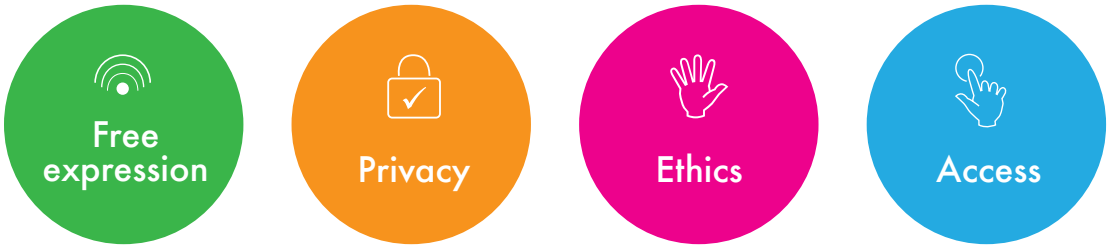
In summing up, the research for this study, including the consultation process, has reinforced the growing awareness of how the digital revolution is impacting on all spheres of public and private life.[2] More and more personal and public information is collected, stored, processed and shared electronically. All this brings with it unparalleled opportunities for social and sustainable economic development, such as around ICTs for development, as well as diverse challenges in such areas as access, freedom of expression, privacy and ethics. Cyberspace is especially complex and sensitive because of its transnational and multidimensional character, involving multiple actors and issues that are evolving rapidly over time across diverse social and cultural traditions and legal jurisdictions. This calls for a holistic approach to address the broad range of issues relating to access, participation and use. It is important that UNESCO works with others to 'connect the dots' amongst all Internet stakeholders, as underscored by the consultation processes of the study. The consultative process illustrated extensive global demand for dialogue and sharing of insight around key issues, and UNESCO's ability to convene such engagement.

This resulting study aims to support Member States in their deliberations, and to inform the building of inclusive Knowledge Societies. As noted earlier, it has drawn extensively from public submissions, commissioned research and UNESCO's previous reports and resolutions on Internet-related issues. The draft study was assessed, revised and enriched through the 'CONNECTing the dots' conference feedback by Member States along with that of other stakeholder groups. The results here are therefore commended to Member States for their 196th Executive Board in April 2015, and the exercise will also be reported to the Member States at the 38th General Conference in November 2015, within the framework of UNESCO's follow-up to the World Summit on the Information Society.

The consultation process of this study has produced 38 possible options for future action for consideration by Member States, outlined in the Chapters above, and consolidated in the conference outcome document (Appendix 6). For UNESCO Member States, and for other stakeholders, this knowledge resource represents panorama of insights of relevance to decision-making going ahead.

Footnotes

1. See statement "Towards Knowledge Societies for Peace and Sustainable Development", endorsed at UNESCO's 37th General Conference in 2013.
2. This point was also underscored by the discussion paper prepared for UNESCO's 37th General Conference (UNESCO 2013d).


Free expression
Privacy
Ethics
Access

References

Bell, D. (1973), The Coming of Post-Industrial Society. New York: Basic Books.

Bennett, C. J., and Raab, C. D. (2003), The Governance of Privacy: Policy Instruments in Global Perspective. Hampshire, UK: Ashgate.

Bertoni, E. (2014), The Right to Be Forgotten: An Insult to Latin American History, The Huffington Post 9/24/2014. Available online at http://www.huffingtonpost.com/eduardo-bertoni/the-right-to-be-forgotten_b_5870664.html [last viewed 26 January 2015].

Birmingham, P. and Davies, C. (2005), 'Implementing Broadband Internet in the Classroom: Key Issues for Research and Practice', OII Working Paper No. 6. Oxford: Oxford Internet Institute, University of Oxford, January 1. Available online at http://ssrn.com/abstract=1326477 or http://dx.doi.org/10.2139/ssrn.1326477 [last viewed 20 January 2015].

boyd, d. and Crawford, K. (2012). Critical Questions for Big Data. Information, Communication & Society, 15:5, 622–679. Available online at: http://dx.doi.org/10.1080/1369118X.2012.678878.

Butcher, Neil, for UNESCO (2014), UNESCO and Commonwealth of Learning, Guidelines for Open Educational Resources (OER) in Higher Education. Paris: Commonwealth of Learning and UNESCO. Available online at http://www.col.org/PublicationDocuments/Basic-Guide-To-OER.pdf [last accessed on 30 December 2014].

Castells, M. (2000), The Rise of the Network Society, 2nd Edition. Oxford: Blackwell Publishers.

Castells, M., and Himanen, P. (2014) (eds), Reconceptualizing Development in the Global Information Age. Oxford: Oxford University Press.

Deibert, R., Palfrey, J., Rohozinski, R., and Zittrain, J. (2010) (eds), Access Controlled: The Shaping of Power, Rights, and Rule in Cyberspace. Cambridge, MA: MIT Press.

De Sola Pool, I. (1983), Technologies of Freedom. Cambridge, MA: Harvard University Belknap Press.

Dutton, W. H. (1999), Society on the Line. Oxford: Oxford University Press.

Dutton, W. H. (2004), Social Transformation in an Information Society: Rethinking Access to You and the World. Paris: UNESCO. Online at http://www.unesco.org/new/en/communication-and-information/resources/publications-and-communication-materials/publications/full-list/social-transformation-in-an-information-society-rethinking-access-to-you-and-the-world/ [last accessed 4 January 2015].

Dutton, W. H. (2009), 'The Fifth Estate Emerging through the Network of Networks', Prometheus, Vol. 27, No. 1, March: pp. 1–15.

Dutton, W. (2010), 'Programming to Forget', a review of Delete: The Virtue of Forgetting in the Digital Age by Viktor Mayer-Schönberger in Science, 327, 19 March, p. 1456.

Dutton, W. H., and Blank, G., with Groselj, D. (2013), 'Cultures of the Internet: The Internet in Britain', Oxford Internet Survey 2013 Report. Oxford, UK: Oxford Internet Institute. [Available online at http://oxis.oii.ox.ac.uk/reports/ [last accessed 21 Jan 2015]

Dutton, W. H., Dopatka, A., Hills, M., Law, G., Nash, V. (2011), Freedom of Connection, Freedom of Expression: The Changing Legal and Regulatory Ecology Shaping the Internet. Paris: UNESCO. Available online at http://unesdoc.unesco.org/images/0019/001915/191594e.pdf [last accessed 30 December 2014].

Gaglierdone, I. et al (2015): Hate Speech Online. Paris. UNESCO (Forthcoming)

Graham, M., and Dutton, W. H. (2014) (eds), Society and the Internet. Oxford, UK: Oxford University Press.

Gutierrez, A., and Trimmiño, A. M. (2009), 'Social Inclusion Through ICT: La Boquilla, Columbia', pp. 228–240 in Cardoso, G., Cheong, A., and Cole, J. (Eds), World Wide Internet. Macau: University of Macau.

Henrichsen, J. R., Betz, M., and Lisosky, J. M. (2015), Building Digital Safety for Journalists: A Survey of Selected Issues. Paris: UNESCO. http://www.unesco.org/new/en/media-services/single-view/news/building_digital_safety_for_journalism_unesco_launches_a_new_publication/#.VRa0kVVd0zIU

Haiman, F. (2000), 'The Remedy is More Speech', The American Prospect, 4 December: http://prospect.org/article/remedy-more-speech [Last accessed 23 March 2015]

Khatib, L., Dutton, W.H., Thelwall, M. (2012), 'Public Diplomacy 2.0: A Case Study of the US Digital Outreach Team', Middle East Journal, 66(3), Summer, pp. 453–472.

Kuzmin, E., and Parshakova, A. (2013), Media and Information Literacy for Knowledge Societies. Translated by Butkova, T., Kuptsov, Y., and Parshakova, A. Moscow: Interregional Library Cooperation Centre for UNESCO. http://www.ifapcom.ru/files/News/Images/2013/mil_eng_web.pdf#page=24 *[Last accessed 20 January 2015]*

Lee, F. L. F., Leung, L., Qiu, J. L., and Chu, D. S. C. (2013) (eds), Frontiers in New Media Research. New York: Tayor & Francis Routledge.

Liang, G., and Bo, G. (2009), 'ICTs for Interpersonal Communications in China', pp. 504–525 in Cardoso, G., Cheong, A., and Cole, J. (Eds), World Wide Internet. Macau: University of Macau.

Lisosky, J. M. and Henrichsen, J. R (2011), War on Words: Who Should Protect Journalists? Oxford: Praeger.

MacKinnon, R., Hickok, E., Bar, A., and Lim, Hae-in (2015), Fostering Freedom of Expression Online: The Role of Internet Intermediaries. Paris: UNESCO. Available online : http://unesdoc.unesco.org/images/0023/002311/231162e.pdf *[last accessed on 2 January 2015].*

Mansell, Robin, and Tremblay, Gaëtan (2013), Renewing the Knowledge Societies Vision: Towards Knowledge Societies for Peace and Sustainable Development. Available online at http://en.unesco.org/post2015/sites/post2015/files/UNESCO-Knowledge-Society-Report-Draft–11-February-2013.pdf *[last accessed 2 January 2015].*

Marsden, C. T. (2010), Net Neutrality: Towards a Co-Regulatory Solution. London: Bloomsbury Publishing.

Mayer-Schönberger, V. (2009), Delete: The Virtue of Forgetting in the Digital Age. Princeton, NJ: Princeton University Press.

Mayer-Schönberger, V., and Cukier, K. (2013), Big Data: A Revolution That Will Transform How We Live, Work and Think. London: John Murray.

Mendel, T., Puddephatt, A., Wagner, B., Hawtin, D. and Torres, N. (2012), Global Survey on Internet Privacy and Freedom of Expression. Paris: UNESCO Series on Internet Freedom. Available online at http://unesdoc.unesco.org/images/0021/002182/218273e.pdf *[last accessed 2 January 2015].*

Norris, P. (2005), Building Knowledge Societies: The Renewal of Democratic Practices in Knowledge Societies, a UNESCO World Report. Paris: UNESCO. Available online at http://www.hks.harvard.edu/fs/pnorris/Acrobat/UNESCO%20Report%20Knowledge%20Societies.pdf *[last accessed 3 January 2015].*

Pariser, E. (2011), The Filter Bubble: How the New Personalized Web is Changing What We Read and How We Think. New York: Penguin Press.

Posetti, J. (2015) Privacy and Journalists' Sources, Paris: UNESCO (forthcoming)

Qui, J. L. (2009), Working-Class Network Society: Communication Technology and the Information Have-Less in Urban China. Cambridge, MA: MIT Press.

Rainie, L., and Wellman, B. (2012), Networked: The New Social Operating System. Cambridge, MA: MIT Press.

Samarajiva, R., and Zainudeen, A. (2008) (eds), ICT Infrastructure in Emerging Asia: Policy and Regulatory Roadblocks. Ottawa: IDRC/Los Angeles: Sage.

Souter, D. (2010), Towards Inclusive Knowledge Societies: A Review of UNESCO Action in Implementing the WSIS Outcomes. Paris: UNESCO. Available online at http://unesdoc.unesco.org/images/0018/001878/187832e.pdf *[last accessed 3 January 2015].*

Tambini, D., Leonardi, D., and Marsden, C. (2008), Codifying Cyberspace: Communications Self-Regulation in the Age of Internet Convergence. London: Taylor and Francis Routledge.

UNESCO (2003) Recommendation Concerning the Promotion and Use of Multilingualism and Universal Access to Cyberspace. Paris: UNESCO, October. Available online at http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/official_documents/Eng%20-%20Recommendation%20concerning%20the%20Promotion%20and%20Use%20of%20Multilingualism%20and%20Universal%20Access%20to%20Cyberspace.pdf *[last accessed 20 January 2015].*

UNESCO (2011a), Reflection and Analysis by UNESCO on the Internet. Paris: UNESCO, 29 April. Available online at: http://unesdoc.unesco.org/images/0019/001920/192096e.pdf *[last accessed on 30 December 2014].*

UNESCO (2011b), UNESCO ICT Competency Framework for Teachers. Paris: UNESCO. Available online at http://unesdoc.unesco.org/images/0021/002134/213475E.pdf *[last accessed on 30 December 2014].*

UNESCO (2011c), Paris: UNESCO General Conference, 37th Session. Code of Ethics for the Information Society Proposed by the Intergovernmental Council of the Information for All Programme (IFP). Available online at http://unesdoc.unesco.org/images/0021/002126/212696e.pdf

UNESCO (2013a), UNESCO Communication and Information Sector with UNESCO Institute for Statistics, Global Media and Information Literacy Assessment Framework: Country Readiness and Competencies. Paris: UNESCO. Available online at http://unesdoc.unesco.org/images/0022/002246/224655e.pdf *[last accessed on 30 December 2014].*

UNESCO (2013b), Ethical and Societal Challenges of the Information Society. Paris: UNESCO. Executive Summary is available online at http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/wsis/WSIS_10_Event/C10_Report_EXECUTIVE_SUMMARY_rev_30_01_13.pdf *[last accessed 2 January 2015].*

UNESCO (2013c), prepared by Lora Woodall and Michele Marius, Free and Open Source Software, Open Data, and Open Standards in the Caribbean: Situation Review and Recommendations August 2013. Paris: UNESCO, August. Available online at http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/ifap/open_solutions_report_en.pdf *[Last accessed 2 January 2015].*

UNESCO (2013d), Resolution on 'Internet Related Issues: Including Access to Information and Knowledge, Freedom of Expression, Privacy and Ethical Dimensions of the Information Society'. Paris: UNESCO General Conference, 37th session, 7 November 2013. Available online at http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/news/37gc_resolution_Internet.pdf *[last accessed 2 January 2015].*

UNESCO (2013e), Internet Universality: A Means Towards Building Knowledge Societies and the Post-2015 Sustainable Development Agenda. Paris: Division of Freedom of Expression and Media Development Communication and Information Sector, UNESCO, 2 September. Available online at http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/news/Internet_universality_en.pdf *[last accessed on 2 January 2015].*

UNESCO (2013f), Report on the First WSIS+10 Review Event:

Towards Knowledge Societies, for Peace and Sustainable Development. Paris: UNESCO, 25–27 February 2013. Available online at http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/wsis/WSIS_10_Event/wsis10_final_statement_en.pdf *[last accessed 10 January 2015].*

UNESCO (2014a), Building Inclusive Knowledge Societies: A Review of UNESCO's Action in Implementing the WSIS Outcomes. Paris: UNESCO, 19 Dec. 2014. Available online at http://en.unesco.org/post2015/building-inclusive-knowledge-societies *(last accessed 20 January 2015].*

UNESCO (2014b), Internet Comprehensive Study: Finalised Concept Paper, June. Paris: UNESCO. Available online at http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/news/Internet_questions_study_en.pdf *[last accessed on 2 January 2015].*

UNESCO (2014c), Model Policy for Inclusive ICTs in Education for Persons with Disabilities. Paris: UNESCO. Available online at http://unesdoc.unesco.org/images/0022/002272/227229e.pdf *[last accessed 2 January 2015]*

UNESCO (2014d), World Trends in Freedom of Expression and Media Development. Paris: UNESCO. Available online at http://unesdoc.unesco.org/images/0022/002270/227025e.pdf *[last accessed 2 January 2015].*

WAN-IFRA (2014), World News Publishing Focus: A Web-based Resource organized and produced by World Association of Newspapers and IFRA. Paris: UNESCO. Avaiable online at http://blog.wan-ifra.org/tags/unesco *[last accessed on 2 January 2015].*

Weber, Rolf H. (2015 forthcoming), Research on Internet Governance Principles. Paris: UNESCO.

Zheng, Y. (2008), Technological Empowerment: The Internet, State and Society in China. Stanford, CA: Stanford University Press.

Appendices

Appendix 1. Background and Structure of this Study

UNESCO works to build peace and sustainable development in the world through education, the sciences, culture, and communication and information. UNESCO is also the specialized agency within the United Nations that promotes freedom of expression and associated rights.

Over the past 15 years, UNESCO has been actively involved in all Internet-related areas under its mandate, particularly through advancing the concept of Knowledge Societies at the World Summit on the Information Society (2003 and 2005), and at the Internet Governance Forum. The Organization's Member States have adopted positions in favour of:

- Multilingualism and universal access to cyberspace (2003)
- Multistakeholder participation in the Internet-related debates (2011, 2013)
- Human rights protection online (2013)

UNESCO is also active in the UN Group on the Information Society (www.ungis.org), and is co-convenor with ITU of the Broadband Commission for Digital Development (www.broadbandcommission.org).

UNESCO has extensive experience that is directly relevant to the present study. From the mid 1990s, UNESCO organized a series of international expert meetings that led to the adoption in 2003 by the General Conference of UNESCO of the 'Recommendation concerning the Promotion and Use of Multilingualism and Universal Access to Cyberspace'.[1] Following this, UNESCO's concept of Knowledge Societies — based on freedom of expression, universal access to knowledge, quality education for all, and respect to cultural and linguistic diversity — has been positively received by all stakeholders. Later, in 2005, *The World Report on Knowledge Societies* (Norris 2005; also see Souter 2010) addressed these issues.[2] In addition, at the 36th General Conference in 2011, Member States adopted a decision titled 'Reflection and Analysis by UNESCO on the Internet' (UNESCO 2011a). UNESCO's Intergovernmental 'Information for All Programme' developed the 'IFAP Code of Ethics for the Information Society'[3] of which Member States took note, inviting the Organization to suggest possible ways of addressing the ethical perspectives on the information society (UNESCO 2011c). Subsequent consultations with Member States and other stakeholders led to the document 'UNESCO and the Ethical Dimensions of the Information Society', which was endorsed by the Executive Board at its 190th session in 2012.[4] UNESCO has also examined dimensions of online rights in three major publications — '*Freedom of Connection — Freedom of Expression: The Changing Legal and Regulatory Ecology Shaping the Internet*' (Dutton *et al.* 2011); a '*Global Survey on Internet Privacy and Freedom of Expression*' (Mendel *et al.* 2012); and '*Fostering Freedom of Expression Online: The Role of Internet Intermediaries*' (MacKinnon *et al.* 2015).

Externally, UNESCO has been a major actor in the World Summit on the Information Society since 2003, and has worked systematically on six Action Lines that it has been asked to lead.[5] In 2013, the 37th General Conference endorsed the Final Statement of the UNESCO-organized first WSIS+10 Review Event that was held at UNESCO Headquarters in February that year. UNESCO continues to track its activities in support of WSIS outcomes (UNESCO 2014a).

Appendix 2. The Consultations Held on this Internet Study

In April and May of 2014, UNESCO's Secretariat held consultations with Member States through meetings with each of the six regional voting groups, as well as the European Union, the G77 representing a coalition of 134 developing nations, and China. It also held

meetings in Paris alongside the international conference of World Press Freedom Day 2014, with the Multistakeholder Advisory Group of the IGF, the 8th Intergovernmental Council of the Information for All Programme, and the 29th meeting of the Intergovernmental Council of the International Programme for the Development of Communication.

UNESCO also held consultation meetings at a number of external events: Freedom Online Coalition meeting (Tallinn, Estonia), Stockholm Internet Forum (Sweden), Association for Progressive Communications members' meeting (Barcelona, Spain), the Global Multistakeholder Meeting on the Future of Internet Governance in Brazil, 7th EuroDIG (Berlin, Germany), Inaugural Global Cyber Security Capacity Centre Conference (Oxford, UK), WSIS+10 High Level Event (Geneva, Switzerland), and the Deutsche Welle Media Forum (Bonn, Germany).

In addition, the Secretariat solicited written responses to the study's concept note. It received contributions from 16 Member States,[6] two civil-society organizations (the Committee to Protect Journalists and Privacy International), and two individuals. These written submissions, as well as the summaries of the consultation events, are published on the Study's webpage.

In July 2014, UNESCO started the second phase of the consultation process when invitations to respond to the online questionnaire with inputs and research by 30 November were sent to more than 300 organizations, representing civil society, academia, the private sector, the technical community and intergovernmental organizations. The questionnaire contained 30 questions, divided between the four areas of the Study (access, free expression, privacy, and ethics), cross-cutting themes, and options for future actions (see Appendix 4).

Input was also sought at international forums such as at the Internet Engineering Task Force (IETF) 89 (March 2014, London), the Global e-Sustainability Initiative Stakeholder Dialogue 'Human Rights and the ICT sector — a thought leadership agenda for action' (June 2014, Helsinki), the Annenberg-Oxford Media Policy Summer Institute (July 2014, Oxford), the International Association of Media and Communication Researchers annual meeting (July 2014, Hyderabad, India), the 27th Session of the Human Rights Council's dedicated session on the Right to Privacy in the Digital Age (September 2014, Geneva),the 9th Internet Governance Forum (IGF, September 2014, Istanbul), the Global Internet Governance Academic Network (GigaNet, September 2014, Istanbul), the Council of Europe Expert Meeting on Internet freedom, (October 2014, Strasbourg), Geneva Internet Conference (October 2014, Geneva), the Omidyar Networks' Open Up? 2014 conference on Openness, Transparency and Data (November 2014, London), the UN Forum 2014 on Human Rights and Business (December 2014, Geneva) and the Berlin Summit on Cyberspace (December 2014, Berlin).

Appendix 3. The Major Events in Support of the Internet Study

UNESCO (2013b), *Towards Knowledge Societies for Peace and Sustainable Development: First WSIS+10 Review Event.* UNESCO, 19 December 2014. Details available online at http://www.unesco.org/new/en/communication-and-information/resources/news-and-in-focus-articles/all-news/news/towards_knowledge_societies_for_peace_and_sustainable_development_unesco_seeks_contributions_to_open_consultations/#.VJRx-CCA [Last accessed 2 January 2014].

UNESCO (2014), '*CONNECTing the Dots: Options for Future Action', Conference on UNESCO Internet Study, 3–4 March 2015.* Details available online at http://www.unesco.

org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/Events/connecting_dots_concept_en.pdf

The conduct of the present study has been consultative, incorporating 'an inclusive multistakeholder process which includes governments, private sector, civil society, international organizations and the technical community.'[7] Consultation has entailed a series of meetings with UNESCO Member States, as well as thematic debates at the governing councils of the Information for All Programme and the International Programme for the Development of Communication.

Another important forum for consultation has been UNESCO's World Commission for the Ethics of Science, Technology and Knowledge (COMEST).[8]

Given that Internet-related issues continue to be debated autonomously in other UN forums, the present study has sought also to monitor developments outside UNESCO. These included meetings in 2014 of the International Telecommunications Union (ITU), the Human Rights Council, and the UN General Assembly. Consultation was also undertaken through UNESCO participation in various international conferences and forums. These included UNESCO participation in the United Nations Group on the Information Society (UNGIS), the IGF, the WSIS forums, the Broadband Commission for Digital Development, and a range of other new initiatives. In addition, the declarations and statements issued by a range of relevant stakeholders around the world have been considered and analysed in order to inform the present research.

Appendix 4. Questionnaire for the Comprehensive Study

Please submit evidence-based studies, analysis, research or other documents to questions below where you have a contribution to make. We also welcome reference material pertinent to the fields of the study. Where possible, submissions will be put online or referenced as part of the process of gathering information for the study.

The submissions will be complemented by literature surveys and additional research into areas identified as gaps. All materials will be taken into account for the study based on the extent to which they are in alignment with international standards of human rights law and UNESCO values, and have relevance to the specific mandate and scope of the study.

In regard to the questions below, UNESCO is interested in gender-disaggregated data, as well as answers that consider gender dimensions. Similarly, UNESCO would like to know if the answers to the questions vary when considering communities of various levels of economic development, varying levels of access to ICTs, minorities and other vulnerable groups across the four fields of the study.

1. Questions related to the field of Access to Information and Knowledge

What can be done to reinforce the right to seek and receive information in the online environment? What mechanisms can develop policies and common standards for open-licensed educational resources and scientific repositories, and for the long-term preservation of digital heritage? How can greater progress be made as regards inclusive strategies for women and girls as well as marginalized and disabled people? How can accessibility be facilitated through increases in locally produced and relevant content in different languages? What can be done to institutionalize Media and Information Literacy effectively in national educational systems?

2. Questions related to the field of Freedom of Expression

What are the current and emerging challenges relevant to freedom of expression online? How can legislation in a diverse range of fields which impacts on the Internet respect freedom of expression in line with international standards? Is there a need for specific protections for freedom of expression for the Internet? To what extent do laws protect digitally interfaced journalism and journalistic sources? What are the optimum ways to deal with online hate speech? How can Media and Information Literacy empower users to understand and exercise freedom of expression on the Internet? What are the optimum systems for independent self-regulation by journalistic actors and intermediaries in cyberspace?

3. Questions related to the field of Privacy

What principles should ensure respect for the right to privacy? What is the relationship between privacy, anonymity and encryption? What is the importance of transparency around limitations of privacy? What kinds of arrangements can help to safeguard the exercise of privacy in relation to other rights? How can openness and transparency of data be reconciled with privacy? What may be the impact of issues relating to big data on respect for privacy? How can security of personal data be enhanced? How can Media and Information Literacy be developed to assist individuals to protect their privacy?

4. Questions related to the field of Ethics

How can ethical principles based on international human rights advance accessibility, openness, and multistakeholder participation on the Internet? What conceptual frameworks or processes of inquiry could serve to analyse, assess, and thereby inform the choices that confront stakeholders in the new social uses and applications of information and knowledge? How does ethical consideration relate to gender dimensions of the Internet? How can ethics, i.e. the simultaneous affirmation of human rights, peace, equity, and justice, inform law and regulation about the Internet?

5. Broader issues

What international, regional and national frameworks, normative guidelines and accountability mechanisms exist of relevance to one or more fields of the study?

How do cross-jurisdictional issues operate with regard to freedom of expression and privacy?

What are the intersections between the fields of study: for example, between access and freedom of expression; ethics and privacy; privacy and freedom of expression; and between all four elements? Responses may wish to distinguish between normative and empirical dimensions to these questions.

What pertinent information materials exist that cut across or which are relevant to the four fields of the study?

6. Questions related to options

What might be the options for the role of UNESCO within the wider UN system in regard to the distinct issues of online Access to information and knowledge, Freedom of Expression, Privacy and Ethical dimensions of the information society?

What might be options for the role of UNESCO in relation to stakeholders outside the UN system such as individual governments, Internet companies, civil society and individual users, in regard to the distinct

issues of online Access to information and knowledge, Freedom of Expression, Privacy and Ethical dimensions of the information society.

For each study field, what specific options might UNESCO Member States consider, including for the Organization's Global Priorities of Africa and Gender Equality, shaping the post-2015 development agenda, supporting the goals of Small Island Developing States, and taking forward the Decade for the Rapprochement of Cultures?

Appendix 5. Summary Report of Responses Received to the Online Questionnaire Consultation

Following UNESCO's launch of a global questionnaire during July-December 2014 to collect inputs and research from a range of stakeholders on Internet study, around 200 responses and submissions were received which provide diverse and substantial inputs in the areas of access to information and knowledge, freedom of expression, privacy, and ethical dimensions of the information society as well as options for future actions.

The questionnaire consultation consists of two components: a global consultation through UNESCO website and a regional pilot one in the Latin America through a portal website of Observacom as ensured by UNESCO Advisor for Communication and Information in Montevideo Office.

UNESCO website includes 95 responses and submissions submitted by all stakeholders:

Governments (14): Burundi (2), Kenya (3), Lebanon, Oman, Sierra Leone, Mexico, Switzerland, Sweden, Austria, Freedom Online Coalition countries (24), and a joint submission by Nordic countries (Denmark, Finland, Iceland, Norway and Sweden);

International Organizations (5): Council of Europe (CoE); Office of the High Commissioner for Human Rights (OHCHR); International Telecommunication Union (ITU); International Federation of Library Association and Institutions (IFLA); European Broadcasting Union (EBU);

Civil Society and NGOs including individual users (42): Association for Progressive (APC); AccessNow.org; Just Net Coalition (JNC); Article19; European Digital Rights (EURi); DotConnectAfrica; Independent Music Companies Association (IMPALA); Forum d'Avignon; Human Rights in China; Hivos International IGMENA; africaninternetrights.org; institute Destrée as well as a number of individuals;

Private Sector (3): Microsoft; the Walt Disney Company and an individual;

Academia (27): African Centre of Excellence for Information Ethics (ACEIE) and 26 academic and individual experts from all continents;

Technical Community (2): Internet Corporation for Assigned Names and Numbers (ICANN) and Internet Society (ISOC) Yemen Chapter;

Others (2): Expert Committee on Communication and Information of the German Commission for UNESCO, and an individual.

In the regional consultation in Latin America, the invitation was done through an open invitation on social networks and a personalized list of experts, organizations, academics and regulators in Latin America, as well as its promotion through the monthly newsletter Observacom and its website. A total of 102 questionnaires were completed.

The actors who participated in the consultation were from the following countries: Argentina, Brazil, Bolivia, Canada, Chile, Colombia, Costa Rica, Ecuador, USA, El Salvador, Spain, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, Dominican Republic, Uruguay

and Venezuela. According to the record participation stemmed from the following sectors: Civil Society and NGOs, including individual users (32.65%), Academia (36.73%), Private Sector (3.06%), Technical Community (1.02%), International Organizations (3.06%), Government (4.08%), Individual users (19.39 %).

We thank all of the participants for making this a successful consultation.

Information on Submitters

Name	Category of Stakeholder	Country	Region
AccessNow.org	A. civil society and NGOs including individual users	–	Africa
APC-Association for Progressive	A. civil society and NGOs including individual users	–	Global
Article19	A. civil society and NGOs including individual users	–	Global
DotConnectAfrica	A. civil society and NGOs including individual users	–	Africa
EDRi-European Digital Rights	A. civil society and NGOs including individual users	–	Europe and North America
Human Rights in China	A. civil society and NGOs including individual users	China	Asia and the Pacific
Hivos International IGMENA	A. civil society and NGOs including individual users	–	Middle East and North Africa
IMPALA-Independent Music Companies Association	A. civil society and NGOs including individual users	–	Europe and North America
Ahmed Swapan Mahmud	A. civil society and NGOs including individual users	Bangladesh	Asia and the Pacific
Anriette Esterhuysen	A. civil society and NGOs including individual users	South Africa	Africa
Marie-Anne Delahaut	A. civil society and NGOs including individual users	Belgium	Europe and North America
Carr	A. civil society and NGOs including individual users	Italy	Europe and North America
Charles Oluoch Oloo	A. civil society and NGOs including individual users	Kenya	Africa
Dr Michael Eldred	A. civil society and NGOs including individual users	Germany	Europe and North America
Dr Stephen Brown	A. civil society and NGOs including individual users	Switzerland	Europe and North America
Dr. Ghanshyam Choudhary	A. civil society and NGOs including individual users	India	Asia and the Pacific
Eleanor	A. civil society and NGOs including individual users	United Kingdom of Great Britain and Northern Ireland	Europe and North America
Ernesto Ibarra	A. civil society and NGOs including individual users	Mexico	Latin America and the Caribbean
Emma Llanso	A. civil society and NGOs including individual users	United States of America	Europe and North America
Everns Bagamuhunda Turyahikayo	A. civil society and NGOs including individual users	Uganda	Africa

Name	Category of Stakeholder	Country	Region
Fotis Georgatos	A. civil society and NGOs including individual users	Luxembourg	Europe and North America
Ina Brecheis	A. civil society and NGOs including individual users	Germany	Europe and North America
Ignacio B	A. civil society and NGOs including individual users	Uruguay	Latin America and the Caribbean
Joana Varon	A. civil society and NGOs including individual users	Brazil	Latin America and the Caribbean
Katrin Nyman Metcalf	A. civil society and NGOs including individual users	Estonia	Europe and North America
Martha Giraldo	A. civil society and NGOs including individual users	Colombia	Latin America and the Caribbean
Mathias Schindler	A. civil society and NGOs including individual users	Germany	Europe and North America
Michael Gurstein	A. civil society and NGOs including individual users	Canada	Europe and North America
Morgan Hargrave	A. civil society and NGOs including individual users	United States of America	Europe and North America
Petra Söderqvist	A. civil society and NGOs including individual users	Belgium	Europe and North America
Maria Jose Roman	A. civil society and NGOs including individual users	Colombia	Latin America and the Caribbean
Poncelet Ileleji	A. civil society and NGOs including individual users	Gambia	Africa
Prasanth Sugathan	A. civil society and NGOs including individual users	India	Asia and the Pacific
Richard Hill	A. civil society and NGOs including individual users	Switzerland	Europe and North America
Solomon Akugizibwe	A. civil society and NGOs including individual users	Uganda	Africa
Timothy Vollmer	A. civil society and NGOs including individual users	United States of America	Europe and North America
Toby Mendel	A. civil society and NGOs including individual users	Canada	Europe and North America
Victor Montviloff	A. civil society and NGOs including individual users	France	Europe and North America
Anonymous	A. civil society and NGOs including individual users	Chile	Latin America and the Caribbean
Forum d'Avignon	A. civil society and NGOs including individual users	–	Europe and North America
JNC-Just Net Coalition	A. civil society and NGOs including individual users	–	Global
africaninternetrights.org	A. civil society and NGOs including individual users	Pan-Africa	Africa
ACEIE-African Centre of Excellence for Information Ethics	B. academia	–	Africa
Adrian Schofield	B. academia	South Africa	Africa
Bouziane Zaid	B. academia	Morocco	Arab States
Bryan Alexander	B. academia	United States of America	Europe and North America
Chuang Liu	B. academia	China	Asia and the Pacific

Name	Category of Stakeholder	Country	Region
Claudio Menezes	B. academia	Brazil	Latin America and the Caribbean
Denisa Kera	B. academia	Singapore	Asia and the Pacific
Desislava Manova-Georgieva, PhD	B. academia	Bulgaria	Europe and North America
Ebrahim Talaee	B. academia	Iran (Islamic Republic of)	Asia and the Pacific
Emily Brown	B. academia	Namibia	Africa
Gaetan Tremblay	B. academia	Canada	Europe and North America
Johannes Belt	B. academia	Netherlands	Europe and North America
John Laprise	B. academia	United States of America	Europe and North America
Kirsten Gollatz	B. academia	Germany	Europe and North America
Leonhard Dobusch	B. academia	Germany	Europe and North America
Marianne Franklin	B. academia	Uk	Europe and North America
Megan Case	B. academia	Sweden	Europe and North America
Olusola Oyero	B. academia	Nigeria	Africa
Prof. Marie-Hélène Parizeau	B. academia	Canada	Europe and North America
Prof. Dan Jerker B. Svantesson	B. academia	Australia	Asia and the Pacific
Prof.Josep Domingo-Ferrer	B. academia	Spain	Europe and North America
Rafael Capurro, Prof. em. Dr.	B. academia	Germany	Europe and North America
Suad Almualla	B. academia	Bahrain	Arab States
Dr Uta Kohl	B. academia	United Kingdom of Great Britain and Northern Ireland	Europe and North America
Prof. Vladimir Gritsenko	B. academia	Ukraine	Europe and North America
Wolfgang Benedek	B. academia	Austria	Europe and North America
Yves Théorêt	B. academia	Canada	Europe and North America
Byakatonda Simon Peter	C. private sector	Uganda	Africa
Microsoft	C. private sector	–	Global
The Walt Disney Company	C. private sector	–	Global
ICANN-Internet Corporation for Assigned Names and Numbers	D. Technical Community	–	Global
Internet Society (ISOC) Yemen Chapter	D. Technical Community	–	Arab States
CoE-Council of Europe	E. international organizations	–	Europe and North America

Name	Category of Stakeholder	Country	Region
OHCHR-Office of the High Commissioner for Human Rights	E. international organizations	–	Global
ITU-International Telecommunication Union	E. international organizations	–	Global
IFLA-International Federation of Library Association and Institutions	E. international organizations	–	Global
European Broadcasting Union	E. international organizations	–	Europe and North America
Ntamagiro Kabuto	F. Governments	Burundi	Africa
Jane Wairimu	F. Governments	Kenya	Africa
Daniel Obam	F. Governments	Kenya	Africa
Anonymous	F. Governments	Lebanon	Arab States
Coppens Pasteur Ndayiragye	F. Governments	Burundi	Africa
Israel Rosas	F. Governments	Mexico	Latin America and the Caribbean
Nicolas Rollier	F. Governments	Switzerland	Europe and North America
Sweden	F. Governments	Sweden	Europe and North America
Austria	F. Governments	Austria	Europe and North America
Oman	F. Governments	Oman	Arab States
Nordic Countries (joint submission)	F. Governments	Nordic Countries	Europe and North America
Kenya	F. Governments	Kenya	Africa
Sierra Leone	F. Governments	Sierra Leone	Africa
FOC-Freedom Online Coalition (24 countries)	F. Governments	–	International
Kishor Pradhan	G. Others	Nepal	Asia and the Pacific
Expert Committee on Communication and Information of the German Commission for UNESCO	G. Others	Germany	Europe and North America

Outcome document

The "CONNECTing the Dots: Options for Future Action" Conference held at UNESCO Headquarters 3-4 March 2015,
Noted the potential of the Internet to advance human progress towards inclusive Knowledge Societies, and the important role of UNESCO in fostering this development within the wider ecosystem of actors,
Affirmed the human rights principles that underpin UNESCO's approach to Internet-related issues, specifically that the same rights that people have offline must be protected online as per Human Rights Council resolution A/HRC/RES/26/13;

Recalled Resolution 52 of the 37th session of the General Conference, which mandated a consultative multistakeholder study with options for consideration of Member States, to be reported to the 38th General Conference within the framework of UNESCO's work on the World Summit on the Information Society,
Further recalled the establishment of principles in guiding documents that include the article 12 and 19 of the Universal Declaration of Human Rights, and article 17 and 19 in the International Covenant on Civil and Political Rights;
And, having reviewed the draft of the UNESCO consultative study,
Commend continued work on the related options below, and look forward to UNESCO Member States deliberations on them:

1. Overarching options for UNESCO

1.1 Considering the Final Statement of the first WSIS+10 conference, endorsed by the 37th General Conference, affirm the on-going value of the World Summit on the Information Society (WSIS) outcomes, including the Internet Governance Forum (IGF), for the post-2015 development agenda, Internet governance issues, and the role and work of UNESCO;
1.2 Affirm that the fundamental human rights to freedom of opinion and expression, and its corollary of press freedom and the right of access to information, and the right to peaceful assembly, and the right to privacy, are enablers of the post-2015 development agenda;
1.3 Also affirm that increasing access to information and knowledge across society, assisted by the availability of information and communication technologies (ICTs), supports sustainable development and improves people's lives;
1.4 Promote the alignment of Internet-related laws, policies and protocols with international human rights law;
1.5 Support the Internet Universality principles (R.O.A.M) that promote a Human Rights-based, Open Internet is Accessible to all and characterized by Multistakeholder participation;
1.6 Strengthen the cross-cutting role of the Internet in all of UNESCO programmatic activities, including Priority Africa, Priority Gender Equality, support to Small Islands Developing States and Least Developed Countries, as well as in UNESCO's leadership of the International Decade for the Rapprochement of Cultures.

2. Options for UNESCO related to the field of Access to Information and Knowledge:

2.1 Foster universal, open, affordable and unfettered access to information and knowledge, and narrowing the digital divide, including the gender gap, and encourage open standards, raise awareness and monitor progress;
2.2 Advocate for ICT policies that enhance access guided by governance principles that ensure openness, transparency, accountability, multilingualism, inclusiveness, gender equality, and civil participation including for youth, persons with disabilities, marginalized and vulnerable groups;
2.3 Support innovative approaches to facilitate citizen involvement in the development, implementation and monitoring of the Sustainable Development Goals, as agreed at the UN General Assembly;
2.4 Promote universal access to information and knowledge and ICTs by encouraging the creation of public access facilities, and by supporting users of all types to develop their capabilities to use the Internet as creators and users of information and knowledge;
2.5 Reaffirm the important contribution provided by open access to scholarly, scientific and journalistic information, open government data, and free and open source software, towards the building of open knowledge resources;
2.6 Explore the potential of the Internet for cultural diversity.

3. Options for UNESCO related to the field of Freedom of Expression

3.1 Urge Member States and other actors to protect, promote and implement international human rights law on free expression and the free flow of information and ideas on the Internet;

3.2 Reaffirm that freedom of expression applies, and should be respected, online and offline in accordance with Article 19 of the Universal Declaration of Human Rights and Article 19 of the International Covenant on Civil and Political Rights (ICCPR) that any limitation on freedom of information must comply with international human rights law as outlined by Article 19(3) of the International Covenant on Civil and Political Rights;

3.3 Support safety for journalists, media workers, and social media producers who generate a significant amount of journalism, and reaffirm the importance of the rule of law to combat impunity in cases of attacks on freedom of expression and journalism on or off the Internet;

3.4 Noting the relevance to the Internet and digital communications of the international Convention on the Rights of Persons with Disabilities (CRPD), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), and the work of the Office of the High Commissioner on Human Rights, concerning the prohibition of advocacy of national, racial or religious hatred that constitutes incitement to discrimination, hostility or violence (Rabat Plan of Action 2012), promote educational and social mechanisms for combating online hate speech, without using this to restrict freedom of expression;

3.5 Continue dialogue on the important role that Internet intermediaries have in promoting and protecting freedom of expression;

4. Options for UNESCO related to Privacy

4.1 Support research to assess the impacts on privacy of digital interception, collection, storage and use of data, as well as other emerging trends;

4.2 Reaffirm that the right to privacy applies and should be respected online and offline in accordance with Article 12 of the UDHR and Article 17 of the ICCPR and support as relevant within UNESCO's mandate, the efforts related to UN General Assembly Resolution A/RES/69/166 on the Right to Privacy in the Digital Age;

4.3 Support best practices and efforts made by Member States and other stakeholders to address security and privacy concerns on the Internet in accordance with their international human rights obligations and consider in this respect the key role played by actors in the private sector;

4.4 Recognise the role that anonymity and encryption can play as enablers of privacy protection and freedom of expression, and facilitate dialogue on these issues.

4.5 Share best practices in approaches to collecting personal information that is legitimate, necessary and proportionate, and that minimizes personal identifiers in data;

4.6 Support initiatives that promote peoples' awareness of the right to privacy online and the understanding of the evolving ways in which governments and commercial enterprises collect, use, store and share information, as well as the ways in which digital security tools can be used to protect users' privacy rights;

4.7 Support efforts to protect personal data which provide users with security, respect for their rights, and redress mechanisms, and which strengthen trust in new digital services.

5. Options for UNESCO related to Ethical dimension of the Information Society

5.1 Promote human rights-based ethical reflection, research and public dialogue on the implications of new and emerging technologies and their potential societal impacts;

5.2 Incorporate, as a core component in educational content and resources, including life-long learning programmes, the understanding and practice of human rights-based ethical reflection and its role in both online and offline life;

5.3 Enable girls and women take full advantage of the potential of the Internet for gender equality through taking proactive measures to remove barriers, both online and offline, and promoting their equal participation;

5.4 Support policy makers in enhancing their capacity to address the human right-based ethical aspects of inclusive knowledge societies by providing relevant training and resources;
5.5 In recognition of the trans-boundary nature of the Internet, promote global citizenship education, regional and international cooperation, capacity-building, research, the exchange of best practices and development of a broad understanding and capabilities to respond to its ethical challenges.

6. Options for UNESCO related to cross-cutting issues:

6.1 Promote the integration of UNESCO's expertise on Media and Information Literacy (MIL) into formal and informal education systems, in recognition of the important roles that digital literacy and facilitating universal access to information on the Internet, play in the promotion of the right to education, as enumerated in Human Rights Council, Resolution 26/13;
6.2 Recognize the need for enhanced protection of the confidentiality of sources of journalism in the digital age;
6.3 Support Member States as requested in the harmonization of relevant domestic laws, policies and practices with international human rights law;
6.4 Support transparency and public participation in the development and implementation of policies and practices amongst all actors in the information society.
6.5 Promote research into law, policy, regulatory frameworks and the use of the Internet, including relevant indicators in the key areas of the study.
6.6 Promote UNESCO's participation in discussions on Network Neutrality as relevant to the fields of access to information and knowledge and freedom of expression.

7. Options related to UNESCO role

7.1 Reinforce UNESCO's contributions and leadership within the UN system, including continued implementation of the WSIS outcomes, the WSIS+10 review, the IGF and the post-2015 development agenda;
7.2 Engage as relevant with partners outside of the UN system, such as individual governments, civil society, news media, academia, private sector, technical community and individual users; including by providing expert advice, sharing of experience, creating fora for dialogue, and fostering development and empowerment of users to develop their capacities;
7.3 Support Member States in ensuring that Internet policy and regulation involves the participation of all stakeholders, and integrates international human rights and gender equality.

Footnotes

1. See http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/official_documents/Eng%20-%20Recommendation%20concerning%20the%20Promotion%20and%20Use%20of%20Multilingualism%20and%20Universal%20Access%20to%20Cyberspace.pdf [last accessed 20 January 2015].
2. Also, see Souter, D. (2010), Towards Inclusive Knowledge Societies: A Review of UNESCO Action in Implementing the WSIS Outcomes. Paris: UNESCO. Available online at http://unesdoc.unesco.org/images/0018/001878/187832e.pdf [Last accessed 3 January 2015].
3. Available online at http://unesdoc.unesco.org/images/0021/002126/212696e.pdf [Last accessed 3 January 2015].
4. Available online at http://www.unesco.org/new/en/communication-and-information/flagship-project-activities/unesco-and-wsis/implementation-and-follow-up/unesco-and-wsis-action-lines/c10-ethical-dimension-of-the-information-society/ [Last accessed 3 January 2015].
5. Action Lines are: 'Access to Information and Knowledge' (C3), 'E-learning' (C7), 'E-science' (C7), 'Cultural Diversity and Identity, Linguistic Diversity and Local Content ' (C8), 'Media' (C9), and 'Ethical Dimensions of the Information Society' (C10).
6. These were from Australia, Austria, Belgium, Benin, Brazil, Canada, China, the Czech Republic, Denmark, France, Germany, Greece, Latvia, the Netherlands, Oman, Portugal, Sweden, the United Kingdom of Great Britain and Northern Ireland, and the United States of America.
7. This is in line with Resolution 52 of UNESCO's 37th session of the General Conference.
8. COMEST is an advisory body and forum for reflection that was set up by UNESCO in 1998. See: http://www.unesco.org/new/en/social-and-human-sciences/themes/comest/

Acknowledgements

UNESCO is grateful to all those who have responded to Internet-based consultations, and those who have taken part in the consultation meetings that have been central to the findings of this report. All those who sent written submissions to the study are listed in Appendix 5 of this report. We are also appreciative of the contributions of the Quello Center at Michigan State University, led by Professor William H. Dutton and his team, including Frank Hangler, Alison Hartman Keesey, and F. Barbara Ball for their contributions to the analysis and drafting of this report.

Further, this publication benefited greatly from input by UNESCO's CI Sector, in particular the programme specialists in the Freedom of Expression and Media Development Division, and those in the Knowledge Society Division working on the Information for All Programme (IFAP), the World Summit on the Information Society (WSIS) follow-up, and Open Access. The Social and Human Science Sector also contributed.

9 789231 000898