CHAPTER ELEVEN

POLICY GUIDELINES FOR THE DEVELOPMENT AND PROMOTION OF GOVERNMENTAL PUBLIC DOMAIN INFORMATION*

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EXECUTIVE SUMMARY

PART 1: WHY GOVERNMENTAL PUBLIC DOMAIN INFORMATION IS IMPORTANT

One of the ultimate goals of any society is the empowerment of all its citizens through access to and use of information and knowledge, as a corollary to the basic rights of freedom of expression and of participation in the cultural life and scientific progress. In support of this goal, more and more governmental information is being produced and made available through the Internet and the World Wide Web. Some of this information has restrictions on public access and use because of intellectual property (IP) protection, national security, privacy, confidentiality, and other considerations. A great deal of it, however, can be openly disseminated through the Internet, libraries, and other means to citizens and to a broad range of development actors such businesses and schools. Whereas the focus of most policy analyses and law-making is typically on the protection of proprietary information, the role and value of public domain information, especially of information produced by the public sector, is not widely enough addressed and is generally poorly understood. The purpose of these Policy Guidelines is to help develop and promote information in the public domain at the government level, with particular attention to such information in digital form.

The UNESCO Recommendation on Promotion and Use of Multilingualism and Universal Access to Cyberspace provides the following definition: 'Public domain information refers to publicly accessible information, the use of which does not infringe any legal right, or any obligation of confidentiality. It thus refers on the one hand to the realm of all works or objects of related rights, which can be exploited by everybody without any authorisation, for instance because protection is not granted under national or international law, or because of the expiration of the term of protection. It refers on the other hand to public data and official information produced and voluntarily made available by governments or international organisations'.

Under this definition, information in the public domain covers two distinct notions:

- On the one hand, 'public domain information' can be defined as what is left outside the scope of copyright or other forms of statutory protection: it covers all that is not eligible or not eligible anymore, to such protection.

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- On the other hand, 'public domain information' also refers to information of an intrinsically public nature; that is, certain types of information that are produced by public authorities ('government' in the broad sense) in the course of their duties, and that are seen as a public good. This 'governmental public domain information' at the national and sub-national levels, to which can be assimilated some public domain information produced by public international organisations, is not, in principle, subject to appropriation.

Governmental public domain information is part of a broader category of 'public sector information'. Certain public sector information may be protected on specific grounds.

The body of governmental – and other – information in the public domain is massive and may be credited with contributing broadly to the economic and social development of the entire world, as illustrated by the following examples:

- One of the greatest values associated with placing governmental information in the public domain is *transparency* of governance and the promotion of democratic ideals: equality, democracy, openness. The more information that is openly available from the government and about the government, the less likely that government will be able to hide illegal acts, corruption and misrule.
- Open and unrestricted dissemination of public information also enhances public health and safety, and the general social welfare, as citizens become better able to make informed decisions about their daily life, their environment, and their future.
- Governmental public domain information can serve essential scientific and technical research functions in every society. Factual databases, many of which are collected by government entities or with government funding, are fundamental to the progress of science, to the advancement of technological innovation, and to an effective educational system.

Much of the value of public domain information derives from its use by the public. The positive effects of public domain information can be increased by enormous proportions when such information is placed on global digital networks.

Despite the great advances that have been made in ICT and information management technologies, well-documented and serious global imbalances exist in the form of a 'digital divide'. The development and promotion of access to public information can help bridge that gap in two significant ways:

- *At the national level:* In developing countries, where the production of information in the private sector may not be as active as that of the government, the information in the public sector typically constitutes a very large portion of the information produced within and about the country and can be an especially important resource for development.
- *At the international level:* Because the Internet is an international network of networks that transcends all political boundaries, all public information that is placed online immediately becomes a part of the global information commons, available for exploitation for the benefit of developing countries and their citizens.

In both these cases, however, one of the greatest barriers to the use of available information is likely to be linguistic, requiring strategies to reduce obstacles to accessing the multicultural human heritage available on the Internet and through other communication media.

PART 2: HOW TO DEVELOP AND PROMOTE GOVERNMENTAL PUBLIC DOMAIN INFORMATION

Governments have a critical leadership role in expanding access to and use of public domain information. To fulfil this role, governments need to develop an integrated and comprehensive national information policy to develop and promote the production, dissemination, and use of governmental information in the public domain. The establishment of such a policy involves decisions in three main areas:

Scope of information to be made available

As a guiding principle, information produced by public entities in all branches and at all levels should be presumed to be available to the public, and any formal exceptions preventing citizens from accessing public information should be specifically justified and formulated as narrowly as possible. National governments should be encouraged to expand access to various types of public information resources and, if necessary, to re-assess the balance between the existing policies and practices for making those information resources available and the legal protections that restrict use or re-use of such information. In addition, all publicly funded inter-governmental organisations should provide open access to all their publications and public databases, especially to potential users in developing countries, free of charge.

Access to and use of public information as a legal principle

One of the major elements of a comprehensive approach to promoting access to and use of governmental public domain information is the adoption of a national 'Freedom of Information' (FOI) law, providing for access by citizens on request to the information held by the government that is not otherwise made routinely available. Countries that do not yet have a FOI law for their public information should adopt one, following a comparative analysis of such similar laws in other countries, while those countries that already do have such a law may wish to further revise their existing legislation. Any exceptions to the principle of availability, such as national security restrictions, and the protection of personal privacy and of trade secrets, should be carefully balanced.

Freedom of Information laws are, however, not in themselves sufficient. In practice, such laws typically involve a bureaucratic, cumbersome, and relatively expensive process that the citizen must undertake in order to obtain information that is legally in the public domain and should be made public. Therefore, the government should also develop a comprehensive Information Policy Framework for the management and active dissemination of governmental information, as outlined below.

Comprehensive governmental Information Policy Framework.

The Policy Framework that addresses information management and dissemination should be broad enough to encompass information in both paper and digital formats, and should provide special guidance regarding electronic management and dissemination. The focus should always be on producing and disseminating public information that meets the needs of citizens as openly and inexpensively as possible, with special attention to multicultural or disadvantaged communities. Three main areas of action need to be addressed in developing the national public Information Policy Framework:

- Creating the appropriate public information management structure;
- Defining the public information management policy requirements; and

- Adopting strategies on information systems and information technology management.

The following key procedural elements should be taken into account in developing the national Information Policy Framework:

1. The Policy Framework must reference all supporting reports and laws on which it is based.
2. In developing the Policy Framework and associated detailed implementation plan at the national level, it is essential to involve representatives of all major stakeholder groups in a consultative process.
3. Analytical factors that need to be considered are: legal, economic, institutional, social and cultural, research and educational. Specific applications areas or sectors with special information objectives and implementation requirements, such as health, environment, energy, transportation, finance and defence, also need individual consideration.
4. Following the completion and formal approval of the Information Policy Framework, the Chief Information Officers (CIOs) of all major government entities need to develop detailed plans for implementation of all the guiding policies within the context of the official activities and subject matter purview of these entities.
5. Because of the rapid changes continuously taking place in the information and communication sectors, the Information Policy Framework should be periodically reviewed and updated to keep it relevant and useful. Such a review should take place perhaps every 4–5 years, on a schedule fixed by the Framework.
6. A useful supplementary activity is a review of the policy approaches to public information management and technology taken by other countries. The lessons learned from the experiences of other governments in this area can help the national authorities to avoid some of the failures or difficulties experienced elsewhere, and to identify successful legal and policy models that might be adapted to the specific national context.

PART 3: ACCESS TO AND USE OF GOVERNMENTAL INFORMATION THAT IS PROTECTED BY INTELLECTUAL PROPERTY LAWS

Copyright and other forms of IP protection are granted in some jurisdictions to public authorities for their works. Although these Policy Guidelines do not recommend this approach for the reasons presented above, a nation may decide to protect works produced by public entities because of traditions or to achieve national economic and cultural objectives in light of the costs and benefits.

It is important to emphasise that the application of IP laws to public information does not necessarily exclude the public from access to such information. Although IP laws can place extensive limits on the public's re-use of that information, these laws do give public entities a broad range of options on how to organise access to the information for the public good, taking account of the citizens' interests. Thus, government entities whose public information is protected by IP laws can provide open access to their information resources, or can even use permissive licenses that derogate from the full enforcement of available IP rights in order to allow greater freedom in the re-use of their information.

The information products and services provided by the private sector are frequently more efficient and of higher quality than those of the public sector, so that public-private partnerships can be highly beneficial in producing or distributing information on behalf of a

government entity. However, if the protection of IP laws applies to such information, the government should carefully consider the balance between the legitimate IP restrictions on the access to and use of the information on the one hand, and the citizens' rights and the broader social and economic interests of the nation on the other.

PART 1: WHY GOVERNMENTAL PUBLIC DOMAIN INFORMATION IS IMPORTANT

1.1. PURPOSE AND SCOPE OF THE GUIDELINES

According to article 19 of the Universal Declaration of Human Rights[1], the right to freedom of opinion and expression 'includes the freedom to seek, receive and impart information and ideas through any media and regardless of frontiers'. Article 27(1) of the same Declaration provides for the 'right freely to participate in the cultural life of the community . . . and to share in scientific advancement and its benefits'. Thus, one of the ultimate goals of any society striving for human development is the empowerment of all its citizens through access to and use of information and knowledge. In the current information revolution and the emerging knowledge societies, 'universal access' to information and communication technology (ICT), and particularly to global digital information networks[2] exemplified by the Internet, is essential for achieving this goal. Moreover, multilingualism in cyberspace is of vital and strategic importance in ensuring the right to information and cultural diversity.

Today, more and more governmental information is being produced and made available through the Internet and the World Wide Web. Some of this information has restrictions on public access and use because of intellectual property (IP) protection, national security, privacy, confidentiality, and other considerations. A great deal of it, however, can be openly and usefully disseminated through the Internet, libraries, and other means to citizens and to a broad range of development actors such as businesses and schools. Whereas the focus of most policy analyses and law-making is typically on the protection of proprietary information, the role and value of public domain information, especially of information produced by the public sector, is not widely enough addressed and is generally poorly understood. Furthermore, consideration of the role of such information should not be limited to a national context, because the emerging knowledge societies, as well as the basic human rights cited above, support the building of a global cross-border network of information and knowledge for the broader benefit and progress of humanity.

There are numerous official resolutions, declarations, and reports issued by the United Nations and its specialised agencies, as well as by individual Member States, that support and justify the formulation of Policy for the Development and Promotion of Governmental Public Domain Information. Among the most directly relevant sources, listed in the Selected Bibliography at the end of these Guidelines, special mention should be given to the UNESCO Recommendation on Promotion and Use of Multilingualism and Universal Access to Cyberspace adopted in 2003,[3] and the provisions of the Declaration of Principles[4] and the Plan of Action[5] adopted later in that year by the World Summit on the Information Society (WSIS).

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[1] United Nations General Assembly (1948), referenced in the Selected Bibliography.

[2] i.e. networks combining informatics and telecommunications, also sometimes referred to as 'telematics' networks.

[3] See UNESCO (21 November 2003) in the Selected Bibliography, particularly the section on 'Development of Public Domain Content'.

The purpose of these Policy Guidelines is to build on this impetus to help develop and promote information in the public domain at the government level, with particular attention to information in digital form. The Policy Guidelines aim to better define governmental public domain information and to describe its role and importance, specifically in the context of developing countries; to suggest principles that can help guide the development of policy, infrastructure and services for provision of information produced by governments to the public; to assist in fostering the production, archiving and dissemination of government electronic public domain information for development, with emphasis on ensuring multicultural, multilingual content; and to help promote access of all citizens, especially including disadvantaged communities, to information required for individual and social development.

The scope of these Policy Guidelines is limited to the discussion of key issues, principles, policies and procedures that can help to develop and promote the production, dissemination, preservation, and use of governmental public domain information within developing and least developed countries at the national level. The Policy Guidelines do not address public-domain information issues in the private sector and civil society, notably those concerning access to works of private creators.

The Policy Guidelines are divided into three parts. Part 1 presents the definitions, context and rationale for developing and promoting governmental information in the public domain. Part 2 provides specific principles, policies, and procedures for producing, disseminating, and preserving governmental public domain information. Part 3 briefly addresses access to and use of governmental information that is protected by IP laws.

1.2. UNESCO'S DEFINITION OF PUBLIC DOMAIN INFORMATION

A review of the history of the term 'public domain' shows that it has traditionally been associated with public land and has never had a universally accepted meaning in the context of information. Indeed, there is little in official public documents or even in the scholarly literature that deals definitively with this subject[6]. Most legal scholars would define public domain information by what it is not; that is, any information that is not proprietary, the *yin* to the proprietary *yang*. But such a definition is insufficient, for it does not adequately characterise or describe what public domain information in fact is, and provides no basis on which to evaluate its positive role and its value to knowledge societies, especially in the context of economic and social development.

The UNESCO Recommendation on Promotion and Use of Multilingualism and Universal Access to Cyberspace provides the following definition:[7] 'Public domain information refers to

[4] WSIS (2003) in the Selected Bibliography; see in particular Article 26 specifies that 'A rich public domain is an essential element for the growth of the Information Society, creating multiple benefits such as an educated public, new jobs, innovation, business opportunities, and the advancement of sciences. Information in the public domain should be easily accessible to support the Information Society, and protected from misappropriation … '.

[5] WSIS (2003) in the Selected Bibliography, see in particular Action Line C3, paragraph 10.a) specifying the need to 'Develop policy guidelines for the development and promotion of public domain information as an important international instrument promoting public access to information'.

[6] However, for a recent, extensive treatment of the many important facets of public domain information, see Boyle, James, special editor (2003) in the Selected Bibliography.

[7] UNESCO (21 November 2003), op. cit., note 3, see the Appendix (Definitions).

publicly accessible information, the use of which does not infringe any legal right, or any obligation of confidentiality. It thus refers on the one hand to the realm of all works or objects of related rights, which can be exploited by everybody without any authorisation, for instance because protection is not granted under national or international law, or because of the expiration of the term of protection. It refers on the other hand to public data and official information produced and voluntarily made available by governments or international organisations'.

Under this definition, information in the public domain covers two distinct notions:

On the one hand, 'public domain information' can be defined as what is left outside the scope of any form of statutory protection including intellectual property rights, the protection of national security or public order, privacy laws and obligations of confidentiality.

With respect to intellectual property, this means all information that is not eligible, or not eligible anymore, to protection, including:

- All subject matter that previously fulfilled the conditions to be placed under copyright or other forms of intellectual property protection (such as patents or trade secrets) and was formerly protected, but that is not protected anymore because the term of protection has expired . For example, under copyright law, during the period of protection, the authors get economic rewards for their creations, but after the end of protection, everybody can freely access and use the work. Thus, once the period of statutory protection is over,[8] copyrighted works join the vast and ever-increasing body of literature, art, music, and other forms of expression included within the world's common cultural and intellectual heritage. The plays of William Shakespeare or old children's stories that are in the public domain are well-known examples. The opportunities afforded to every individual who has access to this common human heritage are vast and profound;
- All types of information elements that are genuinely ineligible for protection under any intellectual property right (e.g. those which cannot be considered as 'works' under copyright law or as 'inventions' under patent law) or do not fulfil the conditions set by IP laws (such as originality under copyright law).

On the other hand, 'public domain information' also refers to information of an intrinsically public nature; that is, certain types of information that are produced by public authorities ('government' in the broad sense) in the course of their duties, and that are seen as a public good. This 'governmental public domain information' at the national and sub-national levels, to which can be assimilated some public domain information produced by public international organisations, is not, in principle, subject to appropriation.

[8] The minimum term of copyright protection is 50 years after the creator's death, cf. the Berne Convention for the Protection of Literary and Artistic Works, Paris Act of 24 July 1971, as amended on 28 September 1979 (www.wipo.int/treaties/en/ip/berne/index.html). In the United States and the European Union, the term of protection is life of the author, plus 70 years. In addition, in the United States, the statutory period of protection for corporate works (works made for hire) is either 95 years from the first publication, or 120 years from creation, whichever is shorter. Many developing countries have enacted only the minimum terms of protection. Other forms of statutory protection, such as classification of documents under national security statutes, personal privacy, and other confidential information have various periods of protection as well. These other forms of statutory restrictions on governmental information are discussed in more detail in section II.3.

1.3. PUBLIC SECTOR INFORMATION

Governmental public domain information is part of a broader category of 'public sector information'. Public authorities at the intergovernmental, national, provincial and local government levels produce vast amounts of information. For example, there are policy documents written by government departments, national archives and records, national registers (e.g. electoral roles, land transfer records, housing and land valuations, automobile registrations and business registrations). There are the minutes and records of meetings, ordinances and laws, judicial decisions, myriad scientific databases, statistical compilations, cultural surveys, results of many kinds of research projects, official reports, and innumerable other data and information products produced by government entities for public purposes.

In these Guidelines 'public sector information' is defined as any *information* that is *produced* by a *public sector entity*.

The terms used in this definition can be defined as follows:

(i) A *public sector entity* is a national, sub-national or local level government body, or in certain cases an international organisation. The national government should certainly take the lead in organising access and dissemination of public information at the national level, but the role and importance of information produced by sub-national or local public authorities must not be underestimated, since it represents a large part of public sector information in every nation.

The notion of public sector differs from one country to another, deeply influenced by culture and history and, can for example, be considered to be composed of:

- Organisations charged by law with State authority or public service functions (functional definition);
- Organisations that are specifically stated to be part of the public sector in a specific law (institutional definition); or
- All bodies substantially financed with public funds (financial definition).[9]

Existing Freedom of Information (FOI) Laws,[10] can be of help in understanding the vision of many Member States regarding their definition of the public sector. Although the definition of public sector must be left to each Member State, a broad definition, for example, encompassing all three of the above definitions, would tend to enlarge the domain of available public sector information for the public good.

(ii) Public sector information must be *produced* by, or under the direction of, public authorities. The notion of production certainly includes active participation in the creation of data and information. It may also refer to the collection of information or to the funding of information and data creation under specific contractual arrangements. Some public authorities may produce public sector information by outsourcing to private companies.[11] A broad definition of production similarly would tend to enlarge the amount of public sector information and of governmental public domain information.

(iii) The definition of *information* itself also should be considered in determining what type of public-sector information should be accessible for the public good. 'Information' should not in any case be limited to just 'news' or 'facts'. The present Policy Guidelines adopt a definition of

[9] Commission of the European Communities (1999), Chapter III (referenced in the Selected Bibliography).

[10] For a more complete discussion of FOI laws, see section II.3.

[11] See Part III for a brief discussion of such public-private relationships.

information proposed by the European Commission: 'any content whatever its medium (written on paper, or stored in electronic form, or as a sound, visual, or audiovisual recording)'.[12] Several criteria can be used to categorise public sector information:

- Information produced by the public sector can be categorised as *administrative* information or *non-administrative* information. Administrative information includes administrative procedures, or explanations made by a public entity concerning its procedures, or other information related to governmental functions. Non-administrative information refers to information related to the 'external world', and gathered or generated by public entities when performing their public functions (e.g. commercial, cultural, technical, medical, scientific, environmental, statistical, geographical, or touristic information).
- Public sector information also can be categorised according to its potential *interest and audience*: Does it interest the general public, or does it exclusively interest a few people or groups of people? In particular, some 'official information' is necessary for all citizens to exercise their democratic rights, e.g. laws and regulations, or judicial decisions.
- Finally, public sector information may have an *economic value* for a specific market. Public bodies may produce information which is subsequently used or developed by the private sector which adds value, or public sector information can be further developed by the public sector directly, or through public-private partnerships.

The relationships among different types of public sector and private information can be summarised in the following table:

	PUBLIC SECTOR INFORMATION	PRIVATE INFORMATION
PUBLIC DOMAIN INFORMATION	*Governmental public domain information* Information produced and voluntarily made available without protection by governments or international organisations. As a general principle, information produced by the public sector may be presumed to be part of the governmental public domain, unless expressly protected.	*Unprotected information of private origin* Public domain information which is not in the governmental public domain. This includes information which is no longer protected, is unprotectable, or is expressly placed in the public domain by private rights holders.
PROTECTED INFORMATION	*Protected governmental information* Public sector information protected by intellectual property or by other measures, such as laws protecting national security or personal privacy.	*Protected private information* Information owned by private parties which is protected by intellectual property, by laws such as those protecting personal property or confidentiality (e.g. trade secret), or by contract.

As stated above, governmental public domain information is that part of public sector information that is publicly accessible and whose use does not infringe any national security restrictions, nor any legal right, nor any obligation of confidentiality. The decision on which

[12] Commission of the European Communities (2001), p. 16 (referenced in the Selected Bibliography).

types of public sector information are placed in the public domain is very much dependent on each country's approach to governance and information policies, as well as on its information dissemination capacity and practices (particularly concerning the Internet).[13]

In some jurisdictions, for instance, works created by public authorities which fulfil the usual conditions of originality and fixation are covered by copyright[14], while in others, such works are in the government public domain by statutory provision[15]. Many countries have for example chosen to deny copyright protection to official texts of a legislative, administrative and legal nature, and to official translations of such texts, which is permitted by international law. In practice, this choice generally derives from legal tradition.

These Policy Guidelines recommend that information produced by public entities in all branches and at all levels be presumed to be in the public domain, unless another policy option (e.g. a legal right such as an IP right or personal privacy) is adopted and clearly documented,[16] preventing it from being freely accessible to all. However, government copyright and other forms of IP protection do not prevent a government from making its protected works openly accessible and usable by citizens, and thus may be functionally similar to governmental public domain information. Therefore, while Part 2 of these Policy Guidelines formally addresses governmental information in the public domain, the key elements related to governmental information policy could also be applied in an environment of public sector information protected by IP laws. Part 3 concludes by addressing the issue of access to and use of governmental information that is protected by IP laws.

1.4. THE IMPORTANCE OF GOVERNMENTAL PUBLIC DOMAIN INFORMATION

The body of governmental – and other – information in the public domain as defined above is massive and may be credited with contributing broadly to the economic and social development of the entire world. In the context of the global information society, the objective is to provide universal access and to close the gap between the information-rich and information-poor. One important element of such a strategy is to expand the amount and quality of information in the public domain, particularly information that is created in the public sector or by public-interest institutions, and then to facilitate open and equitable access for all citizens to the knowledge and benefits to be derived from that information commons. But before these Guidelines address how this might be done, it is important to understand more fully why it should be done, both in economic and non-economic terms.

1.4.1. Benefits to society[17]

The benefits of public domain information are perhaps easiest to describe in non-economic terms. For information produced by governments, one of the greatest non-economic values

[13] See Longworth, Elizabeth (2000) in the Selected Bibliography.

[14] e.g., in the UK, the copyright in material produced by a government department ('public bodies with Crown Status') belongs to the Crown. Her Majesty's Stationary Office (HMSO) manages and licenses Crown copyright material.

[15] e.g., in the United States, federal government information is excluded from copyright protection under Title 17 of the United States Code, section 105 (2000). For a compilation of national copyright laws see UNESCO (2004) in the Selected Bibliography.

[16] See section II.3 and Part III.

[17] This section is based primarily on the study by Elizabeth Longworth (2000) – see the Selected Bibliography.

associated with placing governmental information in the public domain is *transparency* of governance and the promotion of democratic ideals: equality, democracy, openness. The more information that is openly available from the government and about the government, the less likely will it be that government is able to hide illegal acts, corruption and misrule. Conversely, excessive secrecy breeds tyranny.

Open and unrestricted dissemination of public sector information also enhances public health and safety, and the general social welfare, as citizens become better able to make informed decisions about their daily life, their environment, and their future. Indeed, there is a wide range of social objectives underlying the provision of public content. At one end of the spectrum are the 'public good' or 'public interest' policy objectives. In this context the public's welfare will be better served through access to or disclosure of information, rather than a paternalistic approach, in which decisions are made by the government on behalf of the people without informing or consulting them. An example is making information available concerning health services in cases where the health service provider, such as a laboratory or a hospital, has failed to provide diagnostic services or treatment at an adequate standard. Irrespective of the public or private ownership or status of that service provider, citizens are entitled to access this information for a number of reasons, such as to enable them to avoid risks to their health, or to choose another provider, or to apply pressure to rectify the failure. The same reasoning applies to concerns about environmental pollution, to the misuse of public funds, and so on.

The amount of public sector information is growing in response to what is known as consumer protection demands. The growth of consumer protection laws has had the effect of increasing the volume and categories of information in the public domain. There are now numerous reporting requirements in many countries for both private and public organisations that are designed to regulate certain behaviour or activities for the public's welfare. These include laws to ensure that consumers and shareholders have access to financial and market information to enable them to improve the quality of their economic decision-making. Another objective is to make it harder for agencies to monopolise and hide information to the detriment of the public.

The promotion of each nation's social capital is another reason for expanding the information commons through public domain information. There are many social benefits to be derived from a more knowledgeable population. Public funding of libraries, archives, museums, educational bodies and research institutes are all manifestations of recognition of these benefits, even if much of the information held by these institutions, although generally accessible, is protected by copyright. Public authorities have a critical role to play in each of these capacity-building areas, including by making available as much government-produced information in the public domain as possible.

Finally, governmental public domain information can support essential scientific and technical research functions in every society. The scientific and engineering communities are at the forefront of creating the information and technologies that advance the world's economy and development. Factual databases, many of which are collected by government entities or with government funding, are fundamental to the progress of science, to the advancement of technological innovation, and to an effective educational system. The open availability of publicly funded scientific data and the public domain status of unprotected factual information are one of the cornerstones of basic research.[18]

[18] See further comments on database protection in Part III, and generally OECD (2004) and National Research Council (1997, 2003, and forthcoming, 2004) - referenced in the Selected Bibliography.

1.4.2. The economic role and value of governmental public domain information

Neither the economic role nor the value of public domain information is easy to quantify. There are several reasons for this. One is that much of the information that is originally created in the public domain – either by government entities or through government funding – is created outside the market forces that govern the creation and dissemination of information covered by IP rights in the private sector. The value of information created at taxpayer expense for public-interest purposes is not always readily calculable. Part of the problem lies in distinguishing those public domain information products with redeeming economic or social value from others without such value or even having negative effects (e.g. erroneous, fraudulent, or malicious intent and results). But even when the information clearly has positive effects, these can be difficult to describe with much accuracy.

An indicative approach to estimating the value of governmental public domain information is just to add up the costs of producing it. For example, the United States federal government's fiscal year budget for 2004 is over US$ 2.3 *trillion*, of which a substantial fraction, totalling many *billions* of dollars, is spent on producing information that is in the public domain. Much of that information is now available online, freely and globally accessible.[19] If one adds the money invested by all the world's governments at all levels (intergovernmental, national, provincial, and local) in creating public domain information every year, on a continuing basis, one can obtain a simple understanding of the vast value of non-proprietary information.

But the analysis does not end here, as it should include secondary or 'spin-off' uses as well as primary use. Take, for example, meteorological data and information, which are collected and disseminated by government agencies in all countries as a public service. In the United States, the agency that collects and disseminates weather information, the National Weather Service of the National Oceanic and Atmospheric Administration, provides the data openly, without any legal IP or contractual protection. This has resulted in a huge public user base in many sectors of application, including education and research, and has enabled the development of a robust private, value-adding weather information sector, which generates over US$ 500 million annually in economic activity.[20]

In some other countries, the public-sector meteorological offices and weather satellite organisations sell or license their data at commercial rates and protect their data products with intellectual property laws. In those countries, the underdevelopment of the private weather information businesses raises economic questions: Are these businesses able to compete using the government's high-priced, IP-protected data, and can they generate profitable activity?[21] Legal questions may also be raised, for example in Europe where a public body can be compelled, by a court decision founded on the 'essential facilities' principle, to give access to public information at a reasonable price, despite copyright protection. Some other countries have taken no decisions yet about whether and under what conditions the information produced by public authorities is accessible by the private sector in order to generate substantial private revenue.

Beyond the 'value' of information based on the costs of producing it and the sales generated by it, its value to the larger economy and society is magnified greatly by the economically

[19] See the U.S. federal government information portal at: www.firstgov.gov/ .

[20] Weiss, Peter (2003), 'Borders in Cyberspace: Conflicting Government Information Policies and Their Economic Impact', in National Research Council (2003) - referenced in the Selected Bibliography.

[21] A similar comparison and result can be made with regard to publicly generated geo-spatial data and other categories of information – see Pira International (2000), referenced in the Selected Bibliography.

productive and socially beneficial uses to which the information is put.[22] Information with the lowest barriers to access and use will potentially have the widest audience, and the positive effects of public domain information can be increased by enormous proportions when such information is placed on global digital networks (e.g. the Internet) with their rapidly expanding user base. Like telephones and fax machines, digital networks have a high positive feedback and strong amplification of value with increased numbers of users. In economic terms, this is known as a network effect. This factor, alone, provides a compelling argument in favour of increasing network connectivity in the developing world and increasing the amount of information available at no cost and without restrictions on re-use.

1.5. GRAND CHALLENGES AND OPPORTUNITIES

1.5.1. Bridging the digital divide

Much has been written about the broad and, in many cases, widening gap between the information-rich and information-poor, both at the national and international levels. Despite the great advances that have been made in ICT and in information management techniques, well-documented and serious global imbalances persist.[23]

There are many factors and approaches that can help to bridge that gap that are beyond the scope of these Policy Guidelines. However, the development and promotion of access to governmental public domain information can help in two significant ways. First, *at the national and sub-national levels*, every country has a great deal of information, important for both the general public and economic actors, that is produced by the public sector, either by government agencies themselves or with government funding. In developing countries, where the production of information by the private sector may not be as active as that by the government, the information in the public sector typically constitutes a very large portion of the information produced within and about the country. The broad and open availability of such public information is an important part of building participatory democracy, fostering open debate, and promoting effective government processes. It also provides all citizens with a means to learn about their country, their fellow citizens, and their government that in many cases will not be available from any other source. Moreover, easy access to public information supports the growth of the private sector, especially small businesses, for which information costs can represent a real difficulty.

Secondly, *at the international level*, because the Internet is an international network of networks that transcends all political boundaries, all public sector information that is placed online immediately becomes a part of the global information commons. This, too, has important implications for economic and social development and for bridging the digital divide. In particular, it means that all of the world's public domain materials become a shared or common resource and constitute a global heritage for the benefit of all people. To the extent that the more economically developed, 'knowledge-based' societies produce and make available a much larger amount of information in the public domain; they contribute a larger proportion of the openly pooled information that potentially can be exploited beneficially by all developing countries and their citizens. Although a lot of information may be location-specific and not of

[22] See Pira International (2000) op. cit., note 21.

[23] See in the Selected Bibliography, The World Bank (1999) and United Nations Development Programme (2001).

broad interest or useful application, much of it is nonetheless relevant beyond the immediate institutional or community borders where it was produced.

In both these cases, one of the greatest barriers to the use of available information is likely to be linguistic. Language, of course, constitutes the foundation of communication between people and is also part of their cultural heritage and tradition. For this reason, a user's language should not constitute an obstacle to accessing the multicultural human heritage available through the Internet and other communication media. Harmonious development of knowledge societies and economies is thus promoted by the availability of multilingual and multicultural information. Many countries have two, and in some cases many more, official as well as unofficial languages used within their jurisdiction. The diversity of the population in terms of different languages and traditions raises substantial public information management challenges.

1.5.2. Promoting the production, dissemination, and preservation of digital information in the public domain

Governments have a critical leadership role in expanding access to and use of public domain information. A major challenge is attitudinal. Policymakers must have a willingness to consider the benefits of making public information available.[24] This requires an appreciation of the implications of access to information for good governance, for the development of social capital, and for economic welfare. To serve these goals, governments need to develop an integrated and comprehensive national information policy that commits to a coordinated plan of action in each of the key areas of legislation and regulation; technical, human, and institutional infrastructure development; information management; and research. While some governments already have a comprehensive national information policy in place, many still do not or are only now beginning to develop one.

Although improving access to ICT and to all types of information is a crucial goal in the quest for social, cultural and economic development, it is also important not to oversell the concept. Universal access to such information resources is a necessary, but insufficient, condition for development. ICT and the information it delivers will not bring instantaneous literacy, cure diseases, feed the hungry, or eliminate poverty. They do, however, provide key resources needed to effectively and sustainably promote the economic and social benefits described above, and can eventually lead to the evolution of a knowledge-based societies based on good governance values. Attention given to these issues now will be rewarded many times over in the future.

Part 2 focuses on important issues identified as priority areas by UNESCO as part of any comprehensive Information Policy Framework at the national level. Specifically, it identifies principles and policies that can: help guide the development of infrastructure and services for provision of governmental information to the public; assist in fostering the production, archiving and dissemination of an electronic public domain of information, with emphasis on ensuring multicultural, multilingual content; and promote access of all citizens, and especially disadvantaged communities, to information required for individual and social development. Because each country has its own particular development situation and requirements, these principles and policies provide only general guidance to be adapted and implemented in the context of specific national systems of governance and culture.

[24] See Longworth, Elizabeth (2000) in the Selected Bibliography.

PART 2: HOW TO DEVELOP AND PROMOTE GOVERNMENTAL PUBLIC DOMAIN INFORMATION

2.1. KEY POLICY ELEMENTS AND UNDERLYING ASSUMPTIONS

A comprehensive legislative and administrative policy approach is needed to successfully develop and promote the production, dissemination, and use of governmental information in the public domain. A national information policy requires the following three main elements to be successfully implemented:

- Define the scope of information of a public nature that should be made available according to the nation's needs (section II.2);
- Establish access to and use of public information as a legal principle (section II.3); and
- Develop and implement programs for the management of information resources and dissemination of public information, through a comprehensive governmental Information Policy Framework (section II.4).

The rationale for, and implementation of, these elements are based on the following assumptions:

a. Public sector information is a valuable national resource. The open availability of this information, recognised by law, helps to ensure the citizens' freedom of expression, as well as the accountability of government and its public bodies to manage the government's operations, to maintain the healthy performance of the economy, and to provide essential services to society. Maximising the open and unrestricted flow of information between the government and the public is a fundamental aspect of a democratic society and for the promotion of good governance.

b. In almost every country, the public sector is the largest single producer, collector, consumer, and disseminator of information. Because of the extent of public sector information activities, and the dependence of those activities upon public cooperation, the management of public sector information resources is an issue of continuing importance to all government entities and the public.

c. It is essential for the government, and other public bodies whose duties involve creating and making available information, to minimise the cost and burden on the public of its information activities, and to maximise the usefulness of its information. In order to do this successfully, the expected public and private benefits derived from public sector information should exceed the public and private costs of the information, recognising, however, that the benefits may not always be quantifiable.

d. A nation can benefit from information that is openly disseminated, not only by government entities at the national level, but by sub-national governmental entities at different levels, and in general by any public sector organisation. Because sub-national entities are important producers of public information for many sectors such as education, health, agriculture, environmental protection, social welfare, labour, and transportation, the national government should cooperate with them in the management of information resources. In particular, attention must be given to avoiding unnecessary duplication of effort by collecting information two or more times.

e. The strategic and systematic management of the official records of public organisations is essential. The long-term preservation of records protects the public entities' historical

records, helps to ensure public accountability, and protects the legal and financial rights of the public sector and the public.

f. Since the public disclosure of public sector information is essential to the operation of well-run national and local governments founded on democratic principles, the public's right of access to and use of this information should be ensured. At the same time, every citizen's right to privacy must be protected in all public information activities that involve personal information.

g. Open and efficient access to public scientific and technical information funded by the public sector, subject to applicable national security controls and the rights of others deriving from obligations of confidentiality, intellectual property and privacy protection, fosters excellence in research and effective use of public research and development funds.

h. Information technology is not an end in itself, but just one set of resources that can improve the effectiveness and efficiency of the services performed by public organisations. Nevertheless, the application of up-to-date information technology presents opportunities improve public organisations, their work processes, and their interactions with the public. The availability of public sector information in diverse media, especially in digital formats, permits greater flexibility in using the information for both government workers and the public. In this context, public entities should be aware of the importance of choosing the most appropriate format for ensuring the long-term preservation of the information.

i. Both the producers and users of public information resources must have the requisite skills, knowledge, and training to effectively perform their functions and make optimal use of those resources.

j. The willingness of government to promote access to information and to establish a comprehensive policy is essential. An effective, modern public information policy, however, requires the implementation of a national technical information infrastructure.

2.2. FIRST KEY ELEMENT: DEFINE THE SCOPE OF AVAILABLE PUBLIC DOMAIN INFORMATION PRODUCED BY GOVERNMENTS ACCORDING TO THE NATION'S NEEDS

As discussed in Part 1, there are many reasons for making the greatest possible amount of information produced by government entities openly available at the lowest possible cost to the public. It is worthwhile to summarise them:

- Transparency of governance and democratic values are undermined by restricting citizens' access to and use of public data and information. As a corollary, citizens' rights of freedom of expression are compromised by restrictions on re-dissemination of public sector information, and particularly of factual data. It is no coincidence that the most repressive political regimes have the lowest levels of available information and the greatest restrictions on expression;
- The tax-payer pays for the production of the information. Therefore, a government entity needs no legal incentives from exclusive property rights that are conferred by intellectual property laws to create or invest in the production of information, unlike authors or investors in the private sector. Both the activities that the government undertakes, and the information produced by the government through those activities, have 'public good' characteristics;

- There are numerous supplementary benefits that can be realised on an accelerated basis by the open dissemination of public domain data and information on the Internet. Many such benefits are not quantifiable and extend well beyond the economic sphere to include social welfare, educational, cultural, and good governance values – all supportive of national development objectives.[25]

These benefits of openness in the management of public sector information and the legal designation of that information as being freely available are not absolute, however. They must be balanced against legitimate countervailing and superseding interests arising from the protection of national security, personal privacy, obligations of confidentiality, and private intellectual property rights. The level of active dissemination of public sector information also should be considered in the broader framework of national policies and priorities.

Nevertheless, as a guiding principle, information produced by public entities in all branches and at all levels should be presumed to be available to the public, and any formal exceptions preventing citizens from accessing public information should be specifically justified and formulated as narrowly as possible. National governments should be encouraged to expand access to various types of public information resources and, as appropriate, to re-assess the balance between the existing policies and practices for making those information resources available and the legal protections that restrict use or re-use of such information.[26] In addition, all publicly funded inter-governmental organisations should provide open access to all their publications and public databases, especially to potential users in developing countries, free of charge.

2.3. SECOND KEY ELEMENT: ESTABLISH THE LEGAL RIGHT OF ACCESS TO AND USE OF PUBLIC INFORMATION

One of the major features of a comprehensive approach to promoting access to and use of governmental public domain information is the adoption of a positive legal right of access through national legislation. This could be called either a 'Freedom of Information' (FOI) law, or a 'Freedom of access to public information' law.

There has, in fact, been a recent global trend toward greater government openness with public information. Over the past decade, many countries have enacted such legislation, which is an essential aspect of this trend. Over 40 countries now have legislation that facilitates access to governmental information and over 30 more are in the process of enacting such a law.[27]

Freedom of Information laws reverse the presumption of government secrecy in favour of a principle of availability. Under such laws, the information held by the government that is not otherwise made routinely available can be accessed by its citizens on request. FOI laws are intended to guarantee the right of citizens to access the information that was created by their government on their behalf.

Therefore, countries that do not yet have a Freedom of Information law for their public information should adopt one, following a comparative analysis of such similar laws in other

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[25] Uhlir, Paul, 'Discussion Framework,' in National Research Council (2003), p. 6 - referenced in the Selected Bibliography.

[26] See, for example, Council of the European Union, 29 January 2002, Directive on public access to environmental information, Brussels, 11878/01 REV 1, promoting open or low-cost access to and minimum restrictions on re-use of environmental information by the E.U. Member States.

[27] See Banisar, David (2002) in the Selected Bibliography.

countries.[28] Those countries that already do have such a law may wish to further revise their existing legislation. The following guidelines should be considered:

a. The right of citizens to access governmental information should have its basis in law through the national Constitution, and be implemented by statute;

b. The type of governmental information that should be actively disseminated should be defined. It is also important for the legal system to recognise the legal value and authenticity of electronic formats. The concerned information sources should be defined as well. In this process, there is a great opportunity for a nation to achieve a more complete understanding and appreciation of its information richness and diversity.

c. A public body requested to give access to a given item of information should not control the particular interest the requestor has in accessing it.

d. Exceptions to the principle of availability should be carefully balanced. There may well be interests that justify the withholding of certain governmental information, just as there may be for not designating certain types of information as being in the public domain. For this reason, FOI laws contain exemptions to allow a public entity to refuse to release requested information on the specific grounds set out in the law.

   Common reasons for withholding governmental information are: to protect the privacy of individuals, to safeguard a country's intelligence and national security secrets, to avoid prejudicing a criminal investigation, to enable advisers to give frank advice to their ministers, or to protect a commercial confidence or private proprietary information. Provisions that restrict access to protected governmental information are frequently enforced by the use of criminal penalties. Specific considerations in this context include the following:

   National security restrictions. Many developing countries still protect the vast majority of their governmental information under national security and administrative confidentiality statutes, thereby withdrawing most governmental information from public domain status and availability to the public. While legitimate national security priorities must be protected through information confidentiality, national security concerns should not be used to create unnecessary secrecy over governmental information.[29] Any classification regime also must include a declassification schedule that establishes a timetable for placing previously restricted information in the public domain.

   Protection of personal privacy. Many countries have already enacted legal protection for data related to individuals. The protection is usually based on legislation covering data held by both the private and public sectors. The UN guidelines[30] on the matter state several basic principles that Member States need to take into account when implementing national rules:

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[28] For a comprehensive survey of all FOI laws worldwide see Banisar, ibid.

[29] See, e.g., the Open Society Institute's Justice Initiative and the Campbell Public Affairs Institute of Syracuse University, 'National Security and Open Government: Striking the right balance', at: www.maxwell.syr.edu/campbell/opengov/.

[30] United Nations High Commissioner for Human Rights' Guidelines for the Regulation of Computerised Personal Data Files (Resolution 45/95 of 14 December 1990) at: www.unhchr.ch/html/menu3/b/71.htm - the guidelines concern computerised personal data files (from both public and private sectors) and leave to Member States an option to extend the guidelines to manual files. See also, OECD (1980) in the Selected Bibliography.

- The lawfulness and fairness of data collection and processing;
- The accuracy and relevance of the data;
- Respect for the purpose served by the information, which means *inter alia* that personal data cannot be used or disclosed without the consent of the person concerned;
- Access to the data by the person concerned (with the right to obtain the change or deletion of inaccurate personal information);
- No compilation of data likely to give rise to unlawful or arbitrary discrimination;
- Exceptions to protect national security, public order, public health or morality, or the rights and freedom of others are allowed, but only within limits and safeguards given by the domestic law (and by the Universal Declaration of Human Rights for cases related to the prohibition of discrimination); and
- Effective data security.

If a nation has already adopted personal data protection legislation, this legislation and the FOI law should be mutually consistent.

Protection of trade secrets. Secrecy over commercial know-how can also be a legitimate reason to restrict access to information held by the government. A trade secret is commercially valuable information that is legally protected as long as it remains secret, by laws that prevent the acquisition of the secret by commercially unfair means or through unauthorised disclosure. In the context of government activities, a public entity must protect a private sector trade secret that is disclosed to the government in confidence. Also, in many jurisdictions, a trade secret can be protected by a publicly-funded organisation, such as a state-owned company.

e. If the information is not directly accessible through an electronic network, the public authority allowing or denying access should be required to take its decision in a certain specified period, and the reasons for denying access should be sufficiently detailed, so that the requestor can determine the basis for an appeal of the decision.

f. An independent office needs to be established to handle appeals of decisions denying access to the information. This office may be referred to as 'ombudsman'. The boundaries for determining what information can be released and what should remain confidential to the government can in some cases be quite subtle, however, and difficult to apply. The approach adopted in many FOI laws has been to apply a 'harm test', which allows the government to withhold the disclosure of the information, and the concept of an overriding public interest, or 'public-good test', to require the disclosure of the requested information.

g. The process by which the ombudsman is asked to intervene has to be clearly stated and must be performed on a reasonably expeditious basis and be sufficiently transparent. States should define whether the ombudsman's decisions are binding or not, and establish a mechanism for a final review of access denials. An effective model should avoid charges for filing an FOI request that are so high as to amount to a barrier to access preventing ordinary citizens from obtaining requested information.

h. Although Freedom of Information laws are an essential factor in implementing the presumption that governmental information is of a public nature, and in promoting an open society and transparency in governance, they are not in themselves sufficient. In

practice, such laws typically involve a bureaucratic, cumbersome, and relatively expensive process that the citizen must undertake in order to obtain information that is legally in the public domain and should be made public. Moreover, the citizen also may need to investigate what information the government may have in order to identify what information to request. Government bureaucracies frequently resist the release of their information and the access and enforcement mechanisms may be weak or unenforceable. Finally, political pressures on either the government entity that holds the information, or on the citizen requesting its release, may make a FOI request ineffective or even unwise.[31] Such situations can be alleviated by the development of a comprehensive Information Policy Framework for the management and active dissemination of governmental information, as outlined in section II.4 below.

2.4. THIRD KEY ELEMENT: DEVELOP AND IMPLEMENT A COMPREHENSIVE GOVERNMENTAL PUBLIC INFORMATION POLICY FRAMEWORK FOR THE MANAGEMENT AND DISSEMINATION OF PUBLIC INFORMATION RESOURCES

The third major aspect of public information policy is a comprehensive national Information Policy Framework that addresses information management and dissemination.[32] This framework should be broad enough to encompass information in both paper and digital formats, and should provide special guidance regarding electronic management and dissemination. The policy framework outlined below identifies only the high-level principles, issues, and objectives, and concludes with an outline of the main procedural considerations for implementation. Specific details based on each country's situation and needs must be developed as appropriate. However, the focus should always be on producing and disseminating public information that meets the needs of citizens as openly and inexpensively as possible, with special attention to multicultural or disadvantaged communities.

Three main areas of action need to be addressed in developing the national public Information Policy Framework:

- Creating the appropriate public information management structure;
- Defining the public information management policy requirements; and
- Adopting strategies on information systems and information technology management.

2.4.1. Creating the appropriate public information management structure

The creation of an effective management structure requires:

- Assignment of key responsibilities;
- Development of a workforce capable of effectively implementing policy and managing the national public information infrastructure; and
- Determination and allocation of the appropriate budgets.

2.4.1.1. Assignment of key responsibilities

Assignment of the major responsibilities from the highest to the operational levels has to be appropriately structured and organised, as follows:

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[31] Banisar, op. cit., note 27.

[32] This section is based on section 8(a) of the U.S. Office of Management and Budget Circular A-130 (referenced in the Selected Bibliography).

a. Establishment of a high-level executive office for national public information policy

There are several compelling reasons for creating a high-level oversight and coordination position. First, a national information policy requires a comprehensive vision supporting common goals and aspirations. Second, the ability to create a national policy framework for access to information requires a national authority. Third, a high-level arbiter is needed to resolve disputes between government organisations, in order to ensure that the national interest will prevail over the parochial interests of administrative entities that only serve the needs of their specific organisation. Finally, overseeing and coordinating the public information policy for the nation, while reducing bureaucracy and administrative inefficiency, requires strong leadership.

Therefore, the direction of the development, implementation, coordination, and oversight of the public Information Policy Framework at the national level requires the establishment of an office and the appointment of an individual and a related office at a high level in the executive branch of government, together with a budget and mandate sufficient to carry out the assigned tasks. This person may be called the Director of National Information Policy and Programmes (referred to as 'the Director' below) or some equivalent title, reporting directly to the chief executive of the nation. The Director would also be the chair of a governmental Council of Chief Information Officers, whose individual functions are described below.

b. Designation of a Chief Information Officer in each major government organisation

Every major government organisation should appoint a Chief Information Officer (CIO) and supporting staff who will:

i. Have primary responsibility for managing the organisation's information resources and technical infrastructure.

ii. Ensure that the information policies, principles, standards, guidelines, rules, and regulations prescribed by the overarching national policy are implemented appropriately.

iii. Develop internal organisational information policies and procedures, and oversee, evaluate, and otherwise periodically review the organisation's information resources management activities for conformity with the established national policies.

iv. Oversee the acquisition and inventory of the information technology for the entire organisation.

v. Implement and enforce applicable records management policies and procedures, including requirements for archiving information maintained in electronic format, particularly in the planning, design and operation of information systems.

vi. Identify to the Director any statutory, regulatory, and other impediments to efficient management of the government's information resources and recommend to the Director legislation, policies, procedures, and other measures to improve such management.

vii. Support the work of the Director by making services, personnel, and facilities available for specific tasks and high-level projects, to the extent practicable.

viii. Prepare and present to the Director an annual report on the organisation's implementation of the national information policy, including a description of instances of failure to comply with the policy and their resolution.

c. Designation of a Chief Information Officer in each major local public entity

Local public information programs also need to be developed and implemented, taking account of the national Information Policy Framework. Locally appointed CIOs, in local governing bodies and administrative entities, should be in charge of defining and applying local policies, consistent with and in coordination with the information policy at the national level.

d. Establishment of responsible entities for other specific functions

Additional offices or positions may need to be created to fully implement all elements of the national Information Policy Framework and related programs. These should be assessed systematically. It is vital for the success of the information policy that the workforce be able to provide the proper knowledge, abilities and expertise in all key functional areas, as defined in sections II.4.2 and II.4.3 below.

2.4.1.2. Developing an effective work force

In order to enable the nation to effectively promote access to and dissemination of public information on a continuing basis, the government needs to institute policies and programs to prepare a sufficient number of future graduates and young professionals to apply and maintain all aspects of information policy. Toward this end, the Director and the Council of CIOs should work with the education sector to ensure that this requirement receives adequate attention. Opportunities for continuing education and lifelong learning should be developed for the existing workforce as well.

2.4.1.3. Determining and allocating the appropriate budgets

The Director, in consultation with the Council of CIOs, must determine an annual budget for implementing all the priority elements of the national Information Policy Framework, and allocate it as appropriate. The development of multi-year budget projections should be part of the annual budget planning process as well.

2.4.2. Defining the public information management policy requirements

The following functions need to be addressed in the development of a national and local information management policy:

- Providing access to governmental information for use by the public;
- Providing the best possible access to and use of information by multilingual or disadvantaged communities at a local level;
- Avoiding improperly restrictive practices on dissemination and use of public information;
- Information resource management planning;
- Management of information dissemination activities;
- Electronic information dissemination;
- Safeguards for public information.

Additional specific details and their implementation will depend on each nation's circumstances and needs.

2.4.2.1. Providing information to the public

All government entities have a responsibility to provide information to the public consistent with their legislative and regulatory missions. They should fulfil this responsibility by:

a. Providing information that describes their organisation, activities, programs, meetings, systems of records, and other information holdings, and how the public may obtain access to their information resources.
b. Providing access to their records under provisions of the *Freedom of Information Act* (see section II.3 above), subject to the protections and limitations provided for in this Act.
c. Making available such other information as is necessary or appropriate for the proper performance of the organisation's functions.
d. In determining whether and how to disseminate information to the public, each government entity shall:
    i. Disseminate information in a manner that achieves the best balance between the goals of maximising the usefulness of the information and minimising the cost to the government and the public;
    ii. Disseminate information on equitable and timely terms;
    iii. Take advantage of all dissemination channels in government at all levels, libraries, private-sector entities, and media that are appropriate to the dissemination function for each particular type of information; and
    iv. Help the public locate governmental information maintained by or for the government entity.

In order to facilitate these actions, it is necessary for public authorities to identify exhaustively all their accessible and useful resources through comprehensive online directories or searchable databases, containing all necessary metadata. Metadata means information on the information (such as: name of public authority, date of creation, content summary, terms of access, document updates, and format).

2.4.2.2. Providing the best possible access to and use of information by multilingual or disadvantaged communities at the local level

The following specific objectives should be implemented to address needs in providing access to and use of information by multilingual or disadvantaged communities at the local level:

a. All national and sub-national entities should seek to avoid linguistic segregation in providing access to their public information.
b. It is necessary to take advantage of technologies that facilitate access to and use of information in all the national languages in order to ensure maximum self-expression, and to promote education, science, culture and communication. Public information must be produced and disseminated in appropriate formats, and access strategies must involve disadvantaged communities in the production and use of locally relevant information. The introduction of modern information and communication technologies, such as digital networks, should complement the continued use of existing communication networks (such as local community centres and libraries) and small-scale audio-visual equipment (e.g. radio, audiocassettes, and video). The country's significant traditional modes of communication also need to be utilised.
c. The appropriate government entities should adopt a strategy to develop freely accessible language education materials, and disseminate those materials freely online and through other appropriate means. At the same time, the translation of the highest priority public information resources into local languages and dialects needs to be undertaken.

d. Private-sector initiatives that develop multilingual content and its dissemination, particularly to disadvantaged communities at the local level, should be encouraged and supported.
e. The appropriate government entities should work with national and international experts in the development of:
    i. Internet search engines and Web browsers with extensive multilingual capabilities;
    ii. Online dictionaries and reference materials;
    iii. Automatic Language Treatment (ATL) services such as software for automatic translation, including speech processing aimed at augmenting human capacity for communication through speech, and natural language processing, aimed at augmenting capacity for understanding language; and
    iv. Information products and services that can meet the special needs of people with physical disabilities.
    v. 2.4.2.3. Avoiding improperly restrictive practices on dissemination and use of public information

Information costs are of several kinds, and relate to data collection as well as information production, organisation, updating, retrieval, printing, dissemination, and archiving, among others. Indisputably, the question of the price of public information is a critical matter for both citizens and the private sector. Producing available, but high-priced, information can be an insurmountable barrier to public access to information, especially in disadvantaged communities.

In setting the terms and conditions for the dissemination and use of public information, government entities should:

a. Avoid establishing, or permitting others to establish on their behalf, exclusive, restricted, or other distribution arrangements that hinder the availability of information dissemination products on a timely and equitable basis.
b. Avoid restrictions or regulations, including the charging of fees or royalties, on the re-use, resale, or re-dissemination of public information products by the public.
c. Set user charges for information dissemination products at a level no higher than what is sufficient to recover the cost of dissemination (i.e. the marginal cost of fulfilling a user request). They should exclude from calculation the costs associated with the production of the information. Exceptions to this policy could be:
    i. Where other statutory requirements are at variance with the policy;
    ii. Where the organisation collects, processes, and disseminates the information for the benefit of a specific identifiable group of users whose needs and resources can be accurately determined;
    iii. Where the organisation plans to establish user charges at less than the cost of dissemination because of a determination that higher charges would constitute a significant barrier to properly performing its functions, including reaching members of the public whom the agency has a responsibility to inform; or
    iv. Where the information is digital and disseminated online, in which case it should be provided free of charge, since the marginal cost of providing the information to each additional user is close to zero.

2.4.2.4. Information resource management planning

All government entities subject to the national information policy should:

a. Adopt an integrated life-cycle approach to the management of information resources; that is, from the planning stage, to production, organisation, dissemination, use, preservation and, in appropriate circumstances, purging (i.e. removing from official sources of availability, but not necessarily destroying the information that is outdated).
b. Consider the effects of the decisions and actions taken under this policy on members of the public and on other government entities, and ensure consultation with all relevant stakeholders.
c. Fulfil new information needs through partnerships for sharing of information, or through commercial sources, where appropriate, before creating or collecting new information.
d. Record, preserve, and make accessible sufficient information to ensure the effective management and accountability of government activities, and to protect the government's legal and financial interests.
e. Incorporate records management and archival functions into the design, development, and implementation of information systems, including the following requirements:
    i. Provide for public access to records where required or appropriate.
    ii. Collect or create information that is necessary for the proper performance of approved government functions, and that either has practical utility or addresses citizens' identified needs.
    iii. Use electronic information collection and creation techniques where such techniques reduce burdens on the public, increase the efficiency of public programs, reduce costs or provide better service to the public. Conditions favourable to electronic collection or creation include the following:
        - The information involves the production of a large volume of data, or needs to be disseminated to a large portion of the public;
        - The information production is performed on a recurring basis;
        - There is a need to routinely convert the information to electronic format;
        - A substantial number of the affected public are known to have ready access to the necessary information technology; and
        - Conversion to electronic reporting, if mandatory, will not impose substantial costs or other adverse effects on the public, especially for sub-national government and small business entities.

Each government organisation or entity should maintain and implement a management system for dissemination of all its public information, which will, at a minimum:

a. Assure the dissemination of information products which are necessary for the proper performance of the organisation's functions.
b. Consider whether an information product available from other government sources is equivalent and reasonably fulfils the organisation's dissemination responsibilities.
c. Establish and maintain inventories of all of the organisation's information products. These need to be linked with a searchable electronic repository or databases that will help to identify the available information.

d. Develop other aids to locating the organisation's information dissemination products, including catalogues and directories, which will help to achieve its dissemination objectives.
e. Identify in its information products the source of the information, if coming from another organisation.
f. Ensure that members of the public with disabilities, whom the organisation has a responsibility to inform, have a reasonable ability to access the information.
g. Establish and maintain communications with members of the public and with other government entities so that the organisation creates information products that meet their respective needs.
h. Provide adequate notice when initiating, substantially modifying, or terminating significant information products.
i. Ensure that a prompt and orderly transition to compliance with the requirements of organisational and national policy is made with regard to any existing inconsistencies.

2.4.2.6. Electronic information dissemination

Government entities should use electronic media and formats, including both public and private networks, as appropriate and within budgetary constraints, in order to make their information more easily accessible and useful to the public. As a general matter, government dissemination of electronic information on digital networks, now frequently referred to as 'E-Governance' services, have already improved governmental information services to citizens and businesses in many countries, and have improved the efficiency and effectiveness of both individual government organisations and intragovernmental activities.[33] The use of electronic media and formats for information dissemination may be justified by any of the following conditions, which are analogous to those provided for the electronic collection or creation of information under section 2.4.2.4 (e) (iii), above:

a. The organisation develops and maintains the information electronically.
b. Electronic media or formats are practical and cost-effective ways to provide public access to a large, highly detailed volume of information.
c. The organisation disseminates the information product frequently.
d. The organisation knows that a substantial portion of users have ready access to the necessary information technology and training to use electronic information dissemination products.
e. A change to electronic dissemination, particularly as the sole means of disseminating the information product, will not impose undue acquisition or training costs on users.

Attention must be given to the accuracy and updating of information, because disseminating inaccurate or outdated information is contrary to the public mission of an organisation and may result in unnecessary problems to the public. The date of any updates should always be identified.

2.4.2.7. Security of public information

It also is important to implement appropriate safeguards in the management of public information, both to protect any confidentiality, privacy, national security, or intellectual

[33] For a listing and description of E-Governance initiatives worldwide, see: www.egovlinks.com/.

property rights in the information, and to ensure the long-term preservation of the information. Government entities should:

a. Protect the security of the information by:
    i. Ensuring that information is protected commensurate with the risk of harm that would result from the loss, misuse, or unauthorised access to, or modification of, such information. Also, government entities should consider the effects of actions taken under the national information policy on the privacy rights of individuals, and ensure that appropriate legal and technical safeguards are implemented.
    ii. Limiting the collection of information that identifies individuals to not more than what is legally authorised and necessary for the proper performance of the entity's functions.
    iii. Limiting the sharing of information that identifies individuals, or is protected by national security statutes or intellectual property rights, to situations in which this is legally or contractually authorised, and imposing appropriate conditions on use where a continuing obligation to ensure the confidentiality of the information exists.
    iv. Providing individuals, upon request, with access to records about them maintained in the organisation's records, and permitting them to amend any records that contain errors.
b. Preserve the information through appropriate management and retrieval facilities for all official public records that should be retained permanently. Government entities subject to this policy should:
    i. Ensure that their records management programs provide adequate and proper documentation;
    ii. Ensure the ability to access records, regardless of their form or medium;
    iii. Establish appropriate selection and retention criteria as well as accession schedules for permanent archiving of records, in consultation with the national archives and in accordance with legislative requirements;
    iv. Provide training and guidance as appropriate to all public officials, employees, and contractors regarding their records management responsibilities; and
    v. Recognise that current electronic formats and tools cannot guarantee that digital information can be preserved in its original form for decades without being transferred to new formats and media[34], and make strategic choices that take this constraint into account.

2.4.3. Adopting strategies on information systems and information technology management

The proper management of information systems and technology requires information resource managers to:

- Develop management and technology frameworks;
- Strategically plan information resources management;
- Provide information systems management oversight; and

[34] For information about the UNESCO program for the Preservation of Digital Heritage, see Abid, Abdelaziz, and Boyan Radoykov, 'Access and Preservation in the Information Society', *Museum International*, Sept. 2002, p. 64.

- Evaluate and measure performance.

2.4.3.1. Develop management and technology frameworks

Government entities should create and maintain management and technical frameworks for using information resources that ensure linkages among mission needs, information content and information technology capabilities. These frameworks should guide both strategic planning and operational management of information resources. They should also address steps necessary to create an open systems environment. Government entities should implement the following principles:

a. Develop information systems in a manner that facilitates interoperability, application portability, and scalability of computerised applications across networks of heterogeneous hardware, software, and communications platforms. In order to facilitate the preservation of the information, as well as the exchange of information between public bodies and/or interoperability between the different networks or portals, public entities should choose a common model of information exchange, based on a common standard (e.g. XML). This should be done keeping in mind that cross-border exchange should be made possible and promoted, and that public domain information should be accessible by anybody from anywhere in the world Also, as far as possible, choices regarding information systems should be made taking account of the fact that access to and use of the information should not be dependent on specific software, which could create a barrier to effective access and use.

b. Ensure that the improvement of existing information systems and the development of new systems do not duplicate unnecessarily those within the same organisation, within other government entities, or available from the private sector. It is important to share available information systems and technological capabilities with other government entities to the extent practicable and legally permissible.

c. Establish a level of security for information systems that is commensurate with the risk of harm resulting from the loss, misuse or unauthorised access to or modification of the information contained in these information systems (see II.4.2.7).

d. Promote the use of public sector information through national initiatives involving the users of the information.

2.4.3.2. Strategically plan information resources management

Government entities should establish and maintain strategic planning processes for information resources management, which include the following components:

a. Strategic planning that addresses how the management of information resources promotes the fulfilment of the organisation's mission. The planning process should reflect and anticipate changes in the organisation's mission, policy direction, technological capabilities, and resource levels.

b. Consideration and promotion of the use of information throughout its life cycle to maximise its usefulness, minimise the burden on the public, and preserve the integrity, availability, and confidentiality of the information.

c. Operational planning that links information technology to anticipated program and mission needs, and forms the basis for budget requests. This process should result in the preparation and maintenance of an up-to-date plan, consistent with the government's planning cycle for other programs, which includes:

i. a listing of major existing and planned information systems
ii. a listing of planned information technology acquisitions
iii. an explanation of how the listed major information systems and planned information technology acquisitions relate to each other and support the achievement of the organisation's mission
iv. an analysis of the situation concerning computer security systems and procedures
v. coordination with other government organisations' planning processes, including consideration of human and financial resources.

2.4.3.3. Provide information systems management oversight

Government entities should establish information system management oversight mechanisms that:

a. Ensure that each information system meets the organisation's mission requirements.
b. Provide for periodic review of information systems to determine:
   i. how mission requirements might have changed;
   ii. whether the information system continues to fulfil ongoing and anticipated mission requirements; and
   iii. the level of maintenance needed to ensure that the information system meets mission requirements on a cost effective basis.
c. Ensure that the official who administers a program encompassing an information system is responsible and accountable for the management of that information system throughout its life cycle.
d. Provide for appropriate training for users of public information resources.
e. Ensure that information system requirements do not unduly restrict the prerogatives of other national or sub-national public bodies or groups within the country that have certain autonomous legal rights and standing.
f. Promote universal access to digital networks using broadband infrastructures to the greatest extent possible, paying particular attention to rural and disadvantaged areas, and provide services for access to public sector information that are in so far as possible independent of the specific technologies used.
g. Ensure that major information systems proceed in a timely fashion towards agreed-upon milestones, and deliver intended benefits to the organisation and users, through coordinated decision-making on the information itself as well as on human, financial, and other supporting resources.

2.4.3.4. Evaluate and measure performance

Government entities should promote effective management of their public information resources through various review procedures, including the following:

a. Seek opportunities to improve the effectiveness and efficiency of public sector information activities, and particularly the application of information technology, through periodic reviews of the work process,
b. Prepare, and update as necessary throughout the information system life cycle, a cost-benefit analysis for each information system which is:
   i. at a level of detail appropriate to the size of the investment

ii. consistent with a formal, recognised methodology

iii. based on systematic measures of mission performance, including the effectiveness of program delivery, the efficiency of program administration, and the reduction of burdens imposed on the public including information-collection requirements.

c. Conduct analyses of investments in major information systems on an organisation-wide basis to maximise return on investment and minimise financial and operational risk

d. Conduct post-implementation reviews of information systems to validate estimated benefits and document effective management practices for broader use.

2.4.4. Key procedural elements for the development of a national Information Policy Framework

a. The national Information Policy Framework must reference all supporting reports and laws on which it is based. In those areas in which legislation is either outdated or missing, it may be necessary to enact to have enabling legislation before promulgating the framework. The public domain information policy is an important part of the broader national Information Policy Framework.

b. In developing a national Information Policy Framework and associated detailed implementation plan, it is essential to involve representatives of all major stakeholder groups in a consultative process. Such a consultative approach will help ensure that key issues are identified and addressed, and that the consulted groups feel some ownership in the final results.

c. A number of factors need to be systematically addressed for each individual policy element. Analytical factors that need to be considered are: legal, economic, institutional, social and cultural, research and educational. Specific application areas or sectors with special information objectives and implementation requirements, such as health, environment, energy, transportation, finance and defence, many of which correspond to the mandates of the nation's major ministries, departments or agencies, also need individual consideration. Policy formation and implementation factors should respond to the following specific questions:

i. What is the specific policy element being recommended?

ii. Why is it being proposed (i.e. what is the current situation and why does it need to be changed)?

iii. Who needs to be involved in the formation, approval and implementation of the policy (i.e. key individuals, institutions, and stakeholder groups)?

iv. At which level does the policy implementation need to take place (i.e. the international, regional, national, sub-national levels)?

v. When does the policy need to be implemented and updated?

vi. How, specifically, should the policy be implemented (the procedures or mechanisms by which the policy will be brought into effect)?

d. Following the completion and formal approval of the Information Policy Framework, CIOs of all major government entities need to develop detailed plans for implementation of all the guiding policies within the context of their official activities and purview. The development of specific implementation plans will help ensure that the policies are acted upon, and that they are implemented in an appropriate and efficient manner consistent with the specific conditions and needs of each organisation's

activities. These separate implementation plans should be completed soon after the formal adoption of the Framework (e.g. within one year).

e. Because of the rapid changes continuously taking place in the information and communication sectors, the Information Policy Framework should periodically be reviewed and updated to keep it relevant and useful. Such a review should take place perhaps every 4–5 years, on a schedule fixed by the Framework.

f. A useful supplementary activity that should be considered in the development of the Information Policy Framework is a review of the policy approaches to public information management and technology taken by other countries. The lessons learned from the experiences of other governments in this area should help the national authorities to avoid some of the failures or difficulties experienced elsewhere, and to identify successful legal and policy models that might be adapted to the specific national context.

PART 3: ACCESS TO AND USE OF GOVERNMENTAL INFORMATION THAT IS PROTECTED BY INTELLECTUAL PROPERTY LAWS

Throughout the world, original literary and artistic works are protected by copyright. Copyright protection applies to the expression of ideas resulting in original works, but not to the ideas themselves. Such protection is now broadly recognised as important to promoting human creativity through the production of all types of original works. It provides creators with incentives in the form of recognition and the possibility to derive fair economic rewards for their works. It also encourages broad dissemination by helping to assure that creative works can be made available to the public with legal protection against unauthorised copying or redistribution.

Copyright is intended as a means to enrich the cultural, social and economic development of a nation by protecting the personal recognition and economic rewards of the author.[35] Yet, the right granted to the author or to the subsequent rights holder is not absolute, but rather subject to limitations in favour of specific uses by third parties under certain conditions. Thus, as copyright law has evolved, a proper balance between the rights of the author or other rights holder, and the broader interests of society, has been of paramount concern.

As noted in Part 1, in some jurisdictions copyright protection and other forms of IP rights are granted to public authorities for their works. Although these Policy Guidelines do not recommend this approach for the reasons presented in sections 1–3 of Part 2, a nation may decide to protect works produced by public entities because of traditions or for other reasons, such as protecting the moral rights of authors.

For example, the Member States and Affiliated Member States of the European Union generally allow application of copyright protection to most types of public information, while excluding from such protection official texts of a legislative, administrative or legal nature, and their official translations, pursuant to the discretion provided by article 2(4) of the Berne Convention.[36]

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[35] While in the 'droit d'auteur' system prevalent in continental Europe, 'copyright law is based on respect for the artist's creative work and is centred on the author', the Anglo-American tradition aims rather at the proper exploitation of the work – see Lepage, Anne (2003) in the Selected Bibliography.

[36] European Commission (1999), op. cit., note 9, p. 15.

The European Union also has adopted a Directive on the Legal Protection of Databases,[37] which has established a new exclusive property right for database producers in the compilations of non-copyrightable information. The objective of this Directive was to promote and protect substantial investments in such compilations, in light of the perceived lack of protection for costly collections of unoriginal information. The right created under this Directive protects the database producer against unauthorised extraction or re-use of substantial parts of the database's content. This protection also may be applied to information collected and organised in databases by public entities.

This Directive, which has been implemented in the national legislation of all European Union Member States and most Affiliated States, has been criticised by some legal scholars, and by some scientific and library communities, for greatly diminishing the amount of factual information in the public domain by imposing restrictions on the use of otherwise unprotected data.[38] At the same time, the states that have adopted this new law have not to date reported any serious difficulties in its implementation.

Nevertheless, it is important to emphasise that the application of IP laws to public information does not necessarily exclude the public from access to such information. Although IP laws can place considerable limits on the public's re-use of that information, these laws do give public entities a broad range of options on how to organise access to the information for the public good, taking account of the citizens' interests. Thus, government entities whose public information is protected by IP laws can provide open access to their information resources, or can even use permissive licenses that derogate from the full enforcement of available IP rights in order to allow greater freedom in the re-use of their information.

Open access may be defined as a means to make protected information openly and freely available online or through other media by the rights holder, who retains some, or all, of the exclusive rights that are granted under statutory IP laws (e.g. the right to be named as author every time the work is quoted). All types of public and private sector sources may provide open access to their information products. Open access is therefore an important option for making IP-protected public information broadly available to the public, particularly using the Internet, and greatly improving its potential to support economic and social development.[39] It is also possible to use a permissive license to place an IP-protected work in the public domain, with an express waiver of all economic rights. The public domain status of the information in this case must be actively created by the rights holder.[40] Permissive, public-use licenses may be used as well to establish user rights that fall between all rights reserved under copyright and pure public domain status.[41]

Finally, governments are free to select the appropriate approach, or mixture of approaches, to manage their public domain or proprietary information in order to achieve national economic and cultural objectives in light of the costs and benefits.

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[37] Directive 96/9/EC of the European Parliament and of the Council on 11 March 1996 on the Legal Protection of Databases, 1996 O.J. (L77) 20.

[38] See generally, Reichman, J.H. (2002) in the Selected Bibliography.

[39] See, Commission on Intellectual Property Rights, United Kingdom (2002) in the Selected Bibliography. See also, National Research Council (forthcoming 2004).

[40] See, e.g., the permissive public-use licensing options developed by the Creative Commons at: www.creativecommons.org/.

[41] ibid. See also Reichman, J.H. and Paul F. Uhlir (2003) in the Selected Bibliography.

The important potential role of the private sector in creating information for a government entity or for distributing public information needs to be considered as well. The information products and services provided by the private sector are frequently more efficient and of higher quality than those of the public sector, so that public-private partnerships can be highly beneficial, so long as the public interest in any such arrangement is adequately considered and protected. Public-private partnerships can play an important role in creating and widely disseminating databases integrating public domain and proprietary information, for example in connection with large-scale digitisation projects of information in national archives, libraries and museums.

At the same time, as the Commission of the European Communities has pointed out: 'in some cases, the commercial re-use of public sector information may however raise questions as to the boundaries and limitations on the role of the different actors. Once private sector interests enter the market for public information the safeguarding of access for all citizens may become more difficult'.[42] This may occur when a Freedom of Information Act establishes access to and use of public information as a principle, without clearly specifying any responsibilities of or restrictions on the requestors concerning further dissemination or exploitation of the particular information requested. It also can happen in the case where a government entity provides an exclusive license to a single private-sector entity to distribute its public information, or where a private-sector entity obtains public information that subsequently becomes unavailable from the original government source.[43]

In conclusion, in those situations in which either the government applies the protection of IP laws to the public information that it produces, or the private-sector is involved in producing or distributing information on behalf of a government entity, the government should carefully consider the balance between legitimate IP restrictions on the access to and use of the information on the one hand, and citizens' rights and the broader social and economic interests of the nation on the other, as outlined above in these Policy Guidelines.

[42] Commission of the European Communities (1999), op. cit., note 9, p. 7.

[43] See section 2.4.2.3.1 above.

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