Contribution by Spain on themes for the preparatory process for the World Summit on the Information Society (WSIS)

General ideas on a combined approach to distance learning and inclusion (e-learning from e-inclusion)

This input draws on the concepts and lines of action reflected in the document submitted by the European Union.

It is the initial input of the Spanish Administration's ongoing contribution, which will be expanded with inputs currently under preparation by various distinguished university representatives in Spain.

This first input will be built upon in future contributions culminating in a final document from Spain for submission in December 2003.

1 Introduction

This document contains a number of initial suggestions through which Spain wishes to assist in and contribute to the preparatory work for WSIS.

These ideas reflect, on the one hand, the experience acquired in implementing Spain's national strategy for the information society (e-strategy, known as INFOXXI), and, on the other hand, Spain's experience within the framework of the European Union in relation to the eEuropa 2002 and eEuropa 2005 initiatives.

This document was drafted with the participation of the Spanish Consultative Group for WSIS, comprising representatives of the various administrations, private sector and civil society, as well as distinguished experts in issues of relevance to the information society.

The purpose of the proposals set out in this document is to identify practical lines of action in the thematic areas in which Spain has most experience and which can be transferred to other geographical areas, paying special attention to activities addressing the digital divide between countries, pursuant to the goals of the Millennium Declaration.
2 Basic considerations for the preparation of a set of practical measures for action

2.1 Methodology

Following approaches already confirmed by experience in identifying practical measures for action, the following factors may be considered, among others:

– clear, precise and easily measurable objectives;
– indicators to measure the extent to which objectives are achieved;
– strategy for evaluating results or follow-up;
– supporting financial and/or policy tools.

As far as possible, for each objective one should identify an entity responsible for its implementation, a time-frame and a scheduled completion date. Measures or indicators serve to monitor progress in the implementation of the corresponding objectives, and so there must a direct linkage between the two. They may also be used as a basis for comparison between different regions and hence facilitate the elaboration of good practices. In order to maintain an overview of progress on the plan of action, periodic reports should be drawn up based on the indicators.
Last but not least, support tools are required in order to monitor and follow up the objectives identified. In some cases, these tools already exist and just need to be refined, or a new task added; in others, new tools need to be designed and the funds and capabilities allocated to execute the related tasks.

2.2 Factors to be taken into account

In addition to the methodology described in the previous section, this document also puts forward a number of other factors, described below.

* Analysis of three key elements for developing an information society:
  - content;
  - access;
  - infrastructure.

For example, in respect of content and services, a very wide array of disciplines and fields of activity can be identified, ranging from those closely related to public services, such as e-government and e-governance, tele-education and e-learning, e-health, e-inclusion and e-culture, to other more specific ones such as e-science, not forgetting e-business and e-commerce. Then there are the new legal implications that arise: personal data protection, intellectual property rights, establishment of new regulatory frameworks and adjustment of existing ones, security, etc.

No less important are the issues relating to infrastructure and access, since if people do not have the requisite media to have access to the information society, there is little point having a vast array of content. Access can be understood in two ways: on the one hand, access more in terms of infrastructure issues (and underlying issues such as universal service, pricing policy, infrastructure roll-out, infrastructure capacity, etc.), and, on the other hand, the intellectual ability necessary for access (with underlying issues such as the use of ICT tools, language, etc.). If it is to become a reality within everyone’s reach, the information society requires physical access facilities that are of a sufficient capacity, affordable and secure, and citizens have to be trained to know how to use those facilities. This document only addresses content-related issues and how to facilitate access to information society content through basic training in ICTs. The more infrastructure-related issues are not addressed, insofar as the key element in this respect is close collaboration with the private sector, and will be taken up in other preparatory activities for the Summit or addressed in more detail in other multilateral forums such as development and telecommunication summits.

The obvious question is in what order of priority and sequence these different elements are placed: content, training capability, infrastructure, all at once, or in series. The configuration of the relevant strategy has to be geared to the context in each country or region concerned; nevertheless, this document proposes an approach combining training, community access and content development taken together as a whole.

* Equation: information society = PC + Internet versus multiplatform approximation.

Another point of departure that can be adopted is the equation information society = access to the Internet from a computer. From the European and Spanish standpoint, the information society (although no definition has yet been adopted) is not the same thing as access to the Internet and use of a PC. This idea has emerged clearly in the eEuropa 2005 Plan of Action, which advocates a multiplatform approach to the information society. Certainly, Internet + PC is an important means, but we should not forget that if we think exclusively in those terms we are effectively, at least for the moment and in the short to medium term, leaving out a major portion of the population. Alternative methods (digital TV, 3G mobile, etc.) can provide a first contact with the information
society that is more than sufficient for many needs and services, and can in any event prepare the
way to move subsequently to a more mature and extensive access to the information society using
the most current medium at the time. In other words, the two approaches do not conflict, but are
complementary.

Having said all that, in order not to complicate matters, in this document we refer most of the time
to Internet access; nevertheless, this should always be taken to mean access to the information
society whether via the PC + Internet route or another platform + Internet route, including other
platform + information society services.

* Work context: world or regional. One of the basic factors is the context in which we work,
the starting point, the data available to us and the problems we wish to solve. In this regard, seeking
global solutions is an arduous and complex task. Situations vary enormously, there being no single
point of departure or similar work contexts. What is clear is that some countries are more advanced
than others in terms of the information society, and that the aim must be to usher in
recommendations and strategies to drastically reduce this difference. A regional approach might
perhaps be more appropriate on some issues. Nonetheless, in this document we have endeavoured to
approach the problem at the global level.

* Scope of the problem: minimalist policy. A further ingredient in addressing the question of
identifying practical measures is how many issues to target - all of them or just a few selected ones?
With respect to this input and with the aim in mind of producing an effective document, we have
focused on just a few issues. Furthermore, within these issues, we have opted for identifying only
proposals aimed at solving or mitigating fundamental problems, ones which we consider may be
common to a large majority of countries, at least initially. In other words, we have elected to follow
a minimalist policy. Obviously, there are many more issues, and the extent of problems relating to
the information society depends very much on the latter's level of development. As things move
forward new problems arise, but we do not believe that this plan of action should seek to find
replies to all of them. Far from it, since there exist specialized multilateral bodies for this purpose.
To sum up in a nutshell, this document puts forward a minimum proposal, with a set of suggestions
that is not exhaustive and can always be expanded according to each country's circumstances.

For each set of proposals, one or more basic goals have been defined for which it is important to
establish a date, and then a few others which call for a second stage but for which a future
time-scale of work can be established. It was wished to include a date for one or more of the
objectives, as a tentative proposal, but it is clear that much more reflection and work are required on
the subject. Obviously, many countries will have already gone beyond what is proposed here as a
first stage and may be in a position already to embark on the second stage. In any event, the
first-stage objectives may help to guide their policy of cooperation with other countries in respect of
the information society.

Lastly, taking into account the fact that the World Summit on the Information Society is planned in
two phases (Geneva in December 2003, and Tunisia in 2005), it is possible to provide for
monitoring of the progress made by the various countries in the proposed actions by those dates.

Another basic element which also, in our view, does not need to be stressed, is the need for
cooperation with the private sector and civil society. Naturally, such cooperation must be promoted
if there is to be any guarantee of success.

3 Proposal for practical measures

In connection with the initial considerations listed in the previous section, and as regards the key
elements referred to therein (content, access, infrastructure), this document will be confined to
putting forward suggestions regarding content and services. And within the area of content and services, our focus will be on:

- e-learning,
- e-inclusion or e-society.

Our contribution focuses specifically on proposing a rough guide to e-learning starting from e-inclusion. The two actions are complementary and must go hand in hand. In order to make e-learning viable for certain sections of society, policies of inclusion have to be promoted which develop aspects of basic ICT education, since if such education is not achieved, integration will be very difficult if not impossible. Thus, we can define learning as both a barrier and a catalyst. More learning gives rise to more inclusion and in turn promotes yet more learning. However, combined policies of learning-cum-inclusion are required to break the cycle which keeps so many citizens on the fringes of the information society. Those communities which, in one way or another, participate in the education system, either from school (institute, university, etc) or else from the workplace (companies which organize training courses for their employees) are more easily accessible. The most serious problems of inclusion affect, among others, those groups which have either completed their educational cycle, or have never really participated in any such cycle, or again which stand outside the system of employment (the unemployed, retired people) or are part of the system but on a very precarious basis and with no possibility of education (micro-enterprises, day labourers, piece workers, etc.), not to mention persons suffering from some type of disability.

Language also presents a barrier as we approach the information society, since the overwhelming bulk of content is developed in English, and this language may be unfamiliar to a large majority of people who nevertheless do possess rudimentary writing and reading skills in their own language. Hence, the development of local content is an essential instrument when promoting the inclusion of the most disadvantaged sectors.

A number of strategies which we consider to be potentially applicable in each of these fields are described below.

3.1 E-inclusion

A number of issues may be included under this heading, some of which fall in the category of access to the information society, others within content and services. This document focuses on proposing a number of measures to facilitate generalized and affordable access to the information society (i.e. to some extent infrastructure), on basic training for sectors of society at greater risk of exclusion, as well as on strategies of cooperation and development in this field ("cyber-voluntary service").

Cyber-voluntary service is understood to refer to two concepts:

- ICT volunteers, who in turn have two profiles: a general profile of assistance in providing basic ICT training to different groups with problems of exclusion and marginalization or difficulty of access through traditional channels; and another more specific profile in respect of cooperation in an area of application of ICTs to development (for example, in order to create an epidemiological or pharmaceutical database).

- Online volunteers, who offer expert support on different issues online or on a network. This enables a country to have the assistance of professionals in various areas without having to pay travel, subsistence or other expenses in order to obtain their advice.

Set out below are proposals for a an initial set of actions in the field of e-inclusion. Rather than make estimates for social sectors at risk of exclusion, all of them are covered. However, this set of proposals could be expanded to include proposals that are specific to the different sectors. An approach focused on women would be worthwhile, since it has been observed that a larger
proportion of women are victims of poverty. Strategies may be proposed for developing countries involving actions geared to transforming women into change drivers, for example by associating them with micro-enterprise and family health schemes, which are usually successful. This more detailed estimation exercise may be the subject of later versions of this document. Generally speaking, the underlying idea is to enhance women's inclusion in the information society through training, the introduction of new networked employment models and policies for the reconciliation of occupational and family life, facilitated by ICTs.

Phase 1 proposals

- At least one public social centre in each locality (of between 2,000 and 10,000 inhabitants) to be given free, public and unrestricted Internet access and one person with basic ICT training by 2010. By 2005, it would be desirable for each country to have accomplished this goal for 20% of the populations concerned. These centres could be used as core establishments to provide basic ICT training courses. The development of local content should be promoted from these centres.

Public centre may be understood to mean, and where more appropriate to use, a municipal building, a hospital, a school, a national nature reserve, a post office, a library (or, of course, all libraries), a social centre (a youth centre, a centre for adults, a religious centre, a sports centre, NGOs, etc.) or any other institution with a social vocation or one of service to the entire community. The community will be informed of this fact by traditional means: the press, radio, television, etc. Phase 2 may provide for the creation in every community of a centre designed for this purpose (in all villages there will be a telephone, added value and reduced costs, which has the same cost, geographical accessibility and affordable prices, with some form of definition provided by each responsible entity).

- Each development project must be complemented, as far as possible, by an action in the ICT field, whether that action relates to training for local staff and providing the community in which it is carried out with some form of access to the information society, or to any other similar action.

For example, if a hospital, a school, a dispensary, a well, etc., is to be built, it may be planned at the same time to equip that same centre, or the village where it is to be built, or a nearby locality, with at least one element of access to the information society and, as a minimum, to train one person in ICT use so that he/she may then, in turn, train others. If there is no cable infrastructure, alternative means may be sought, such as radio, solar power, etc. This may also make it possible in the future to facilitate monitoring of the development of that community and contribute to the planning of future distance work (e-learning, for example).

- Launch, before 2005, a general ICT training campaign for the population of each country, giving priority to the most marginalized sectors such as those in remote areas and groups beyond the reach of educational or employment settings (disabled persons, women, the elderly, immigrants, and so on). Local NGOs should be involved in determining priorities, and cyber-volunteers could be called on to assist in carrying out training programmes.

- Cyber-volunteers: each country could link up with others to exchange cyber-volunteer services, consisting either of online volunteers, i.e. assistance via the Internet on various issues, or volunteers for delivering ICT training programmes. This strategy could be developed within the framework of bilateral and multilateral cooperation. The United Nations Volunteers programme could provide a list of possible cyber-volunteers to each country. By 2005, 50 per cent of countries should have cyber-volunteer schemes, consisting either of online assistance or ICT training.
Phase 2 proposals

- Ensure that an ICT support centre exists for NGOs in each country with a view to facilitating ICT management, and that NGOs themselves possess ICT resources.
- Encourage local communities to develop their own content and thereby preserve their natural and cultural heritage.

3.2 Facilitate e-learning and basic ICT training

At least two concepts need to be defined regarding education in the information society:

- basic ICT training;
- e-learning.

Basic ICT training enables people to acquire skills specific to the information society and therefore opens up access to one of the most important services offered by that society, namely e-learning, as well as many other services, such as e-administration and e-commerce. Such training includes basic security aspects.

E-learning may be called on to complement and reinforce traditional learning, in addition to opening up new learning possibilities. As described in this document, the concept of e-learning means a learning process that involves the use, to a lesser or greater extent, of ICT, and necessarily implies a connection to the Internet or other communication network at some stage of the process. However, there is sometimes confusion between the two concepts (basic ICT training and e-learning) because one cannot take place without the other. A person who does not know how to use a computer (or any other access platform), will be unable to take advantage of e-learning. So just because a particular establishment has a computer connected to the Internet, it may not necessarily be able to provide e-learning services. Students and teachers must also receive prior training, and the educational materials and software must be available to provide such training.

Nevertheless, since both the availability of equipment and the provision of relevant training are prerequisites for e-learning to take place, we often put them in the same category as e-learning. Therefore, even though the two concepts may not be synonymous, we shall, in line with that approach, take the two concepts together when discussing employment and educational settings.

Also in accordance with the traditional approach, the issue of the basic training of the various groups most at risk of exclusion from ICT skills will be addressed in the section on e-inclusion. It may be impossible to reach certain groups through educational or employment settings, either because they may have already left such settings or because they may never have been there in the first place. Methods of reaching out to all these sectors of society will be addressed under the heading "e-society, e-inclusion".

In general terms, we may all benefit from e-learning at some time in our lives, if the concept of life-long learning catches on. Nevertheless, there are two settings in which it is easier to experience e-learning for the first time: firstly, in schools or other educational establishments, and, secondly, in the workplace.

3.2.1 Educational settings: Internet in schools

While clearly, in the light of the above, it is not enough simply to install a computer (or any other access platform to the information society) in a school, with an Internet connection, for e-learning to take place, we must all agree that it is the first step.
Consequently, one of the steps we propose in this section is to ensure that schools are connected to the Internet. Within the realm of educational establishments, we have highlighted secondary schools in particular; however, here again it will be for each country to make its own decisions in the light of its social context.

In some countries, secondary education may not be mandatory, in which case another setting may be more appropriate. We also considered that governments should have prime responsibility for promoting this initiative, with, it goes without saying, the indispensable support of the private sector and civil society. The objective may not be so difficult to achieve, if it is combined with other possible measures in the field of cooperation, such as the recycling of computers (see the section on development).

We have not mentioned universities, on the assumption that this process is more likely to occur there anyway; however, once again, the particular national or regional context will determine how each of the proposals set out here is followed up.

**Phase 1 proposals**

- Ensure that every secondary school has a computer connected to the Internet for educational purposes (or any other suitable access platform to the information society) by the period 2005-2010. At least one teacher in every establishment should receive basic training in ICT skills. Every country should have achieved at least 20 per cent coverage of schools in this respect by the time of the Tunis Summit.
- Encourage pupils to develop content in their own language.
- Equip secondary schools with educational software, taking the greatest possible advantage of freeware.
- Foster twinning arrangements between schools in different countries.

**Phase 2 proposals**

- Extend coverage to primary schools.
- Train the majority of teachers.
- Include an ICT training module as part of mandatory education, at both the primary and secondary levels.
- Encourage teachers to use these skills in practice through specific courses on e-learning courses.
- Include training in the use of ICT tools and e-learning in teacher training courses.

**3.2.2 Employment settings**

**Phase 1 proposals**

- Include, by 2010, a common ICT training module in all government-supported courses for the unemployed or for working people. At least 30 per cent of courses in every country should include such a module by 2005.

**Phase 2 proposals**

- Provide workers with the possibility of acquiring new skills through e-learning in the workplace. Such a possibility should be provided by 2010 by all companies with at least 200 employees, at least in fields relating to ICT. In 70 per cent of all companies with at least 500 employees, it should be possible by 2005. In this respect, private sector commitment is vital.
3.3 Horizontal issues: security training

Some activities should also be carried out in this area, given its vital importance. Only a few guidelines are given in this document, designed to form the basis of a more security-conscious culture.

Phase 1 proposals

- Include a description of basic security procedures in every introductory ICT course.

Phase 2 proposals

- Launch campaigns for security training with private sector support. At least an initial campaign should have been carried out in 50 per cent of countries by 2005.

The following are a number of initial horizontal proposals for achieving the objectives mentioned above:

- Establish a United Nations programme (supported by local bodies) for the recycling of computers. It would be a good idea to inform every donor, even *a posteriori*, of the eventual beneficiary of its equipment, as well as to devise a slogan for use by participating companies (which could then, for instance, use that slogan in their advertising campaigns).
- Establish a repository of computer programmes, based in particular on freeware. This would facilitate the provision of information society services at low cost.
- Strengthen the United Nations Volunteers programme, given its potential for bridging the digital divide.

Besides these measures, the exchange of good practices should be encouraged in all areas of work (content, infrastructure, access). Each country has had its own experiences with regard to the development of the information society, and those experiences may be useful to other countries. The exchange of good practices must be encouraged at both the political and technical levels.

Subsequently, Spain plans to develop a national plan of action, with a view to producing support materials for the Summit. In particular, a group that has already been set up, comprising representatives of public administrations, civil society and the private sector, has been given the task of producing:

- a publication setting forth suggested good practices in each of the proposed lines of action and recommended steps for practical implementation;
- an Internet version that will allow the debate to be extended and enriched through a process of online communication.