

France and the global challenges of information and communication technologies

2011



Directorate-General of Global Affairs, Development and Partnerships

Information and Communication Technologies (ICTs) are transforming our societies in depth and changing the ways in which people communicate among themselves, enjoy themselves, trade, work, and so on.

As shown by the Arab revolutions in 2011, the Internet is a powerful **tool for demanding fundamental freedoms**. It plays a key role in providing **access to knowledge and culture**. The Internet is also a tremendous **growth accelerator** and expected to account for 20% of global GDP in 2030, while a study has forecast the creation of 450,000 jobs in the ICT sector by 2015.

At the same time, ICTs also carry **risks and dangers** for states and enterprises as well as citizens: recent events have shown that government and industrial information systems were not safe from cyber attacks. **Illegal content and behaviours** including invasions of privacy, economic

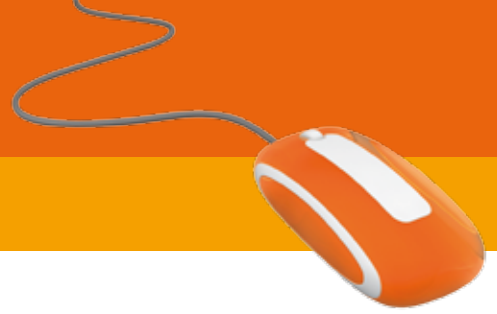
fraud, incitement to racial hatred and child pornography can also be carried over the Internet.

By putting the Internet on the agenda of a **G8 Summit** for the first time (G8 Deauville Summit of May 2011), France succeeded in convincing its partners that cooperation among States was required to ensure the harmonious development of a peaceful Internet in the service of human rights, democracy and economic growth.

The French Ministry of Foreign and European Affairs (MAEE) is working fully along those lines and maintains **a dialogue at European and international level** on a daily basis to promote **a safe digital area respectful of fundamental rights, serving development and governed by all Internet actors** on the basis of democratic and transparent principles.



European Space Agency Artemis experimental satellite. The satellite is a key means of developing information and communication technologies.
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A safe digital area respectful of all fundamental rights

In his speech for the inauguration of the **e-G8 Forum** on 24 May 2011, the President of the French Republic recalled that the Internet has “provided all citizens of the world with a freedom of speech that is unprecedented in history. This outstanding leap in individual freedoms cannot be taken at the expense of the rights of others.” In France’s view, all fundamental freedoms must be protected and safeguarded to the same extent in the Internet area and the real world.

Promoting freedom of expression on the Internet

A true **public area of the 21st century**, the Internet has established itself as a tremendous transnational tool for human expression. A third of humanity is interconnected by means of a network over which people can find information and exchange ideas. The Internet is therefore a powerful tool for political emancipation as evidenced by the “Arab Spring” revolts.

Violations of freedom of expression on the Internet nevertheless still occur in many countries. France condemns all censorship and arbitrary or general restriction of Internet access and seeks to promote

freedom of opinion, expression, information, assembly and association on the Internet in the various international bodies, within the limit of respect for the other fundamental rights.

The MAEE conducts actions to promote **freedom of expression on the Internet**, notably through its operator Canal France International (CFI) which organizes training courses for journalists wishing to gain a command of digital tools.

DIGITAL TECHNOLOGY IS CRUCIAL TO THE FUTURE OF CULTURAL AND CREATIVE INDUSTRIES AND MAEE CULTURAL POLICY

The new technologies have significantly changed the processes of creation, production and circulation of cultural works including through new forms of artistic creation, video on demand, digital books and online music. These changes impact both developed countries and developing countries where the swift expansion of mobile telephony and high-speed Internet is substantially changing and widening access to culture.

The issues of the new opportunities provided by the Internet for the development of cultural and creative industries, and of defence of cultural diversity and copyright in this new environment are priorities for the French Ministry of Foreign and European Affairs. Exceptional appropriations (of about €3.5 million) were therefore allocated in 2009 and 2010 to the adaptation of tools for promoting French cultural and creative industries and our cultural network overseas. The MAEE thus helped create the platform www.atelier-francais.org which promotes innovation overseas in all French cultural and creative industries and also seeks to put in contact French and foreign professionals from those industries. MAEE support for the festival www.myfrenchfilmfestival.com, the first online French film festival staged by Unifrance Films, the operator responsible for promoting French cinema overseas, is a further significant example of this cultural development. Lastly, the French Institute (IF), set up in January 2011 and supported by MAEE, plays a significant role in cultural development online.



An anti-government protester holding a placard during clashes in Cairo on 3 February 2011. © John Moore/Getty Images.

Promoting respect for intellectual property in the digital area

The environment of **intellectual property rights (IPRs)** is crucial to artistic creation and innovation. Yet the digital revolution is fundamentally transforming ways of consuming cultural goods and hence the economic models that provide creative artists with an income.

A creative, prosperous and dynamic digital economy cannot exist and flourish without a strong commitment to protect IPRs. France, which is a pioneering country in this area, adopted the Act on "Creation and the Internet" in 2009 that helped establish a **preventive and pedagogical mechanism** to promote IPR compliance and is known as the High Authority for the circulation of works and rights protection on the Internet (HADOPI). Other countries like the United Kingdom, Ireland and South Korea have adopted a similar approach to counter piracy on the Internet.

Together with the French Ministry of Culture and Communication, the MAEE helps promote an IPR-friendly approach among its partners because piracy, which reduces the remuneration of creative artists, financing of production and the economic efficiency of distribution, significantly jeopardizes the diversity of works and vitality of artistic creation.

THE EUROPEAN DIGITAL AGENDA

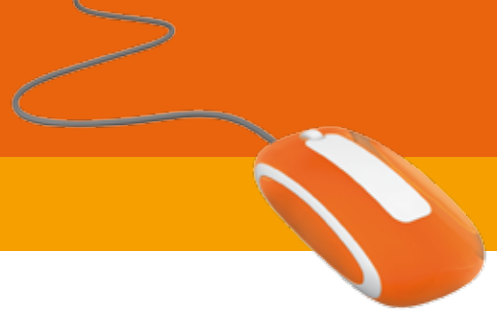
Under the Europe 2020 Strategy for smart, sustainable and inclusive growth, in 2010 the European Union launched a Digital Agenda for Europe with seven priorities, namely to:

- establish a single digital market;
- increase interoperability;
- build confidence and security;
- develop high-speed and very high-speed Internet access;
- support research and innovation;
- promote digital culture, skills and integration;
- use ICTs to address the major challenges of society.

In collaboration with the General Secretariat for European Affairs (SGAE) and the Directorate-General for Competitiveness, Industry and Services (DGCI) of the French Ministry of the Economy which is responsible for the Digital Economy, the MAEE participated in the work to draw up the European Digital Agenda and is actively following its implementation. France is in a good position, particularly as regards high-speed Internet access.



Supercomputer TERA-10, with a performance exceeding 50 teraFLOPS (50 trillion floating point operations per second), developed by Bull for the French Atomic and Alternative Energy Commission (CEA). © CEA.



Promoting respect of privacy in the digital area

The effective protection of personal data and privacy on the Internet is vital to ensure user confidence and security. It is necessary, therefore, to prevent acts constituting violations of the right to respect of privacy, such as illegal storage of personal data, misuse or unauthorized disclosure, etc., in order for individuals to retain control of their personal data, and all intermediaries to respect this fundamental right.

The MAEE makes its partners aware of the need, and encourages them, to define common human rights-based approaches to protecting personal data and respecting Internet user privacy.

Promoting a safe digital area

Security in cyberspace is addressed at two levels: by combating criminal uses of cyberspace and protecting information and communication systems against damage to their proper functioning.

The Council of Europe's Convention on Cybercrime signed at Budapest in 2001 promotes legal cooperation

among States on offences against confidentiality, integrity and availability of computer data and systems as well as computer falsification and fraud and infringements of intellectual property. It also criminalizes the electronic distribution of child pornography. Promoting the Convention is one of the priorities of France which is actively participating in work on the new EU Directive on attacks against information systems.

Protecting these information systems calls for better cyberspace regulation. This is why France is in favour of defining standards for behaviour in cyberspace, targeted at States in particular, and of all measures to enhance protection of critical information infrastructure at national and international level.

PARTICIPATION BY FRANCE IN INTERNATIONAL FORUMS ON CYBERSECURITY

In February 2011, France published its Strategy for the defence and security of information systems in which it asserts its ambition to become a global power in cyberdefence and cybersecurity.

It hence takes an active part in international exchanges on cyberspace, especially in the framework of the United Nations, and makes a useful contribution to framing cyberdefence policy within the European Union and the North Atlantic Treaty Organization.

France supports efforts by the European Commission to enhance the resilience of critical information infrastructure. In this connection, it will also help establish a Computer Emergency Response Team (CERT) at the level of European institutions.



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ICTs in the service of development

ICTs are **a powerful growth and innovation engine** that allows substantial productivity gains. A World Bank study has in fact shown that a 10% increase in mobile telephony penetration in a sub-Saharan African country generates 1.2% of GDP growth.

ICTs are thus a preferred tool for achieving each of the Millennium Development Goals (MDGs) on poverty reduction and health (telemedicine) and education (tele-teaching, digital classes, etc.).

In addition, ICTs also contribute to development by fostering democratic governance as they build transparency, facilitate access to information and enable citizens to make themselves heard more easily.

The MAEE fully incorporates ICTs in the various cooperation actions it conducts with developing countries (DCs) in a great variety of areas, including health, education, trade and civic life.

In its cooperation projects aimed at developing the ICT sector in general and the Internet sector in particular, the MAEE works with DCs on the basis of the following thrusts:

- **development of access to the Internet;**
- **help in establishing regulatory frameworks;**
- **skills building;**
- **development of related content and services.**

The MAEE intervenes operationally in different ways, either directly with its operators, or through its contributions to international organizations.



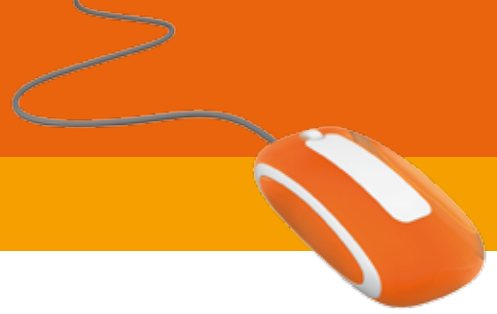
Making a diagnostic with the help of a telemedicine kit. © CNES.

MAEE SUPPORT FOR TELEMEDICINE TRAINING IN HAITI

Telemedicine enables, by means of ICTs, communication from a distance between a patient and one or several doctors or health professionals (and/or transmission of the patient's medical data), for a diagnostic or therapeutic decision to be made in accordance with the rules of medical ethics.

The introduction of e-health services facilitates access to health care whatever the geographical location and makes it possible for health institutions in different regions to work more closely together.

As part of the reconstruction efforts in the wake of the Haiti earthquake, in 2010 France launched an e-health training project in Haiti and financed up to 80% of the €600,000 required for its implementation. The project is intended for 150 teachers and 1,000 students in the health sector.



Direct MAEE actions

Since 2008, in collaboration with regional prefectures, the MAEE has been conducting a **policy of partnership with local government authorities** based on yearly and three-yearly calls for projects.

The last call for projects (2010-2012) included in particular the thematic thrust "Combating the digital divide". 68 cooperation projects conducted by French government authorities in the ICT sector were thus launched between 2007 and 2009. They essentially concern computer equipment, training and the production of content.

Regarding training and technical cooperation, the Quai d'Orsay/Entreprise project makes it possible to strengthen scholarship policy with the help of the private sector (including Orange France Telecom and Telekom Malaysia (TM) for the ICT sector) to make it possible for overseas students to train in France.

Actions by MAEE operators

The **French Development Agency (AFD)** is actively involved in projects for cable laying, developing mobile telephony networks and extending Internet networks to less-favoured areas. AFD support in the ICT sector amounted to €21 million in 2011. The AFD's subsidiary **Proparco** is especially active in the mobile telephony sector with the granting of €312 million in loans for 21 projects.

Canal France International (CFI), the MAEE operator specializing in media sector cooperation, provides assistance to the media in DCs to help them switch to digital technology.

Actions by international organizations

As part of its contributions to the budget of different international organizations, France is also participating in the development of ICTs and the Internet in DCs. These organizations include **EU institutions, the International Organization of La Francophonie (OIF), the World Bank and the International Telecommunication Union (ITU)**.

The **EU** is involved in many ICT-related cooperation projects with developing countries in a number of areas including infrastructure, education, health, research and e-administration. Estimated total financial contributions towards current projects amount to €160 million in 2011.



Cybercafé in Morocco. © Dominique Huet.

The OIF to which France is the leading contributor is helping bridge the digital divide in OIF member countries in Africa, Eastern Europe and Asia. It has, in particular, set up reading and cultural animation centres in remote areas. About 100 of these centres provide access to ICTs.

The World Bank and its private sector subsidiary **International Finance Corporation (IFC)** are among the leading actors involved in bridging the digital divide. The World Bank thus invested \$3 billion in 80 countries over the past five years.

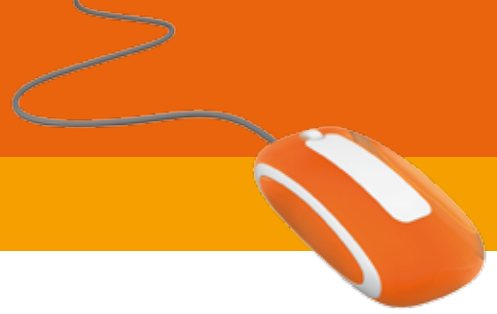
During the period 2007-2010 **ITU** implemented 70 new cooperation projects currently under way and worth more than \$40 million. ITU and the MAEE wrote a report on "Innovative ways of appropriating mobile telephony in Africa", which shows the significant impact that a technology can have on the development of societies: <http://www.diplomatie.gouv.fr/fr/IMG/pdf/itu-maee-mobile-innovation-africa-e.pdf>

THE MAEE CO-FINANCES THE INTERNATIONAL TELECOMMUNICATION UNION'S "CONNECT A SCHOOL, CONNECT A COMMUNITY" INITIATIVE

The MAEE is contributing €0.5 million to the ITU "Connect a school, connect a community" initiative to support developing countries wishing to define and implement a genuine policy on school connectivity. France's contribution will make it possible to establish some 10 pilot schools in 3 sub-Saharan African countries to be equipped with broadband connectivity and digital teaching aids. This material will serve the schools' teaching assignment and enable them to become proper collective centres for access to the Internet and community-wide online services, particularly for the most disadvantaged groups.



IT class at a school in Kenya. © UIT.



A multi-stakeholder, democratic and transparent Internet governance

France supports the multi-stakeholder governance model

Internet governance is based on a bottom-up multi-stakeholder model that comprises governments, the private sector and civil society. Internet governance is based on an empirical process and has decentralized itself among different institutions.

As one of the principal achievements of the **World Summit on the Information Society (WSIS)** meetings held in Geneva in 2003 and Tunis in 2005, the **Internet Governance Forum (IGF)** is more than ever a testing ground for new global governance, intended for discussing the challenges of Internet infrastructure and practices. It brings together all Internet governance stakeholders once a year. France participated at ministerial level in the 2009 Sharm El Sheikh and 2010 Vilnius IGF meetings.

The Tunis Agenda for the Information Society entrusted the **United Nations Educational, Scientific and Cultural**

Organization (UNESCO) with the coordination of the ethical, legal and sociocultural components of the information society.

The International Telecommunication Union (ITU) is in charge of coordinating the implementation of the key directions of policy on infrastructure development and strengthening cybersecurity. The Union also plays a central role in terms of radio frequency technical standardization and management, particularly via World Radiocommunication Conferences (WRC) that take place every three to four years. Our country is actively involved in related negotiations.

At EU level, **the European Commission** chairs the High Level Group on Internet Governance (HLIG) that is designed to coordinate the positions of Member States. For its part, the **Council of Europe** is working on Internet governance principles as a follow-up to its previous actions (for example, the Convention on Cybercrime).



Nathalie Kosciusko-Morizet, the then French Minister of State for the Digital Economy, speaking at the IGF Sharm El Sheikh meeting on 15 November 2009.
© Pierre Hounsfield.

THE ROLE OF GOVERNMENTS IN ICANN

Within the Internet Corporation for Assigned Names and Numbers (ICANN), the Governmental Advisory Committee (GAC) ensures the representation of governments and transmits opinions on issues of public policy to the ICANN Board of Directors.

France is represented on the GAC by the MAEE, with the participation of the Directorate-General for Competitiveness, Industry and Services (DGCIS) of the French Ministry of the Economy which is responsible for the Digital Economy,

and promotes greater internationalization of ICANN and Internet resource management, as well as the strengthening of governments' role in Internet governance.

In the GAC, France has supported in particular the implementation of internationalized domain names (i.e. domain names that are not written with Latin letters) and it participates actively in the definition of rules to implement new generic extensions such as ".paris", ".sport" and so on.



The ICANN Board of Directors votes to authorize implementation of new generic extensions, Singapore, June 2011. © ICANN.

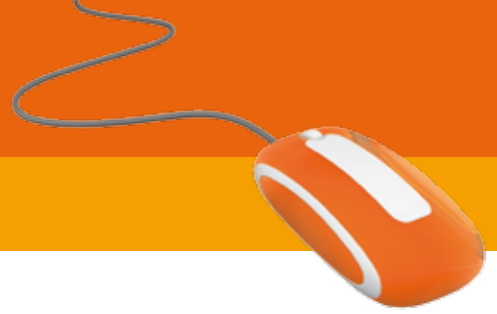
The Organisation for Economic Co-operation and Development (OECD) has been involved for some years in addressing issues of government policy on Internet governance. The OECD adopted a Communiqué on Principles for Internet Policy-Making at its High Level Meeting of 29 June 2011 on The Internet Economy : Generating Innovation and Growth.

The OECD Committee for Information, Computer and Communications Policy (ICCP) has drawn up studies and recommendations that are necessary for the development of the information economy.

Technical institutions such as the **Internet Engineering Task Force (IETF)** and the **World Wide Web**

Consortium (W3C) issue standards for the proper functioning of the Internet. The **Internet Corporation for Assigned Names and Numbers (ICANN)** is another important instrument for Internet technical regulation. ICANN is a Californian law corporation that manages the Top-Level Domain name system (for domains such as ".fr", ".us", ".com", ".net", etc.) and accredits registrars of names in TLDs.

France is active in each of these institutions. It acts to strengthen the multilateral nature of Internet governance, promote legitimate government action in the multi-stakeholder model and foster dialogue among these different institutions.



France is rallying its partners to address the major challenges of the Internet

For the first time in G8 history, the French Presidency placed the Internet on the agenda of the Deauville Summit of 26 and 27 May 2011. The Summit final Declaration argues in favour of developing an open Internet respectful of the same rights and values as those prevailing in the real world and serving growth, innovation and democracy. The Declaration also called for building confidence in the Internet by working towards enhanced security of the Internet area and continuing to bridge the digital divide.

Until now, governments have played a relatively small role in the Internet governance system. Without prejudice to the multi-stakeholder model, **governments nonetheless do have a role to play**. Internet users may legitimately demand that their governments ensure that all present or future governance provisions take account of the public interest, rather than merely expressing commercial or regional interests.

While acknowledging the central role of the private sector which ensures the daily operation of the Internet, **our country supports a balanced approach in which a framework for clear and solid public policy should contribute to creating a predictable environment conducive to confidence and investment**. To that end, governments should be able to monitor the application of such a framework and private bodies responsible for administration of the Internet thus be held accountable for Internet management.

INITIATIVES OF THE FRENCH PRESIDENCY OF THE G8 IN 2011

The e-G8 Forum took place in Paris on the two days prior to the G8 Deauville Summit, on 24 and 25 May 2011. With the contribution of the Internet to growth as its main theme, the Forum brought together the leading professionals in the sector.

The French President opened the Forum by saluting the spirit of innovation and entrepreneurship characteristic of the Internet sector. He spoke for a free Internet, yet respectful of fundamental rights. He called on the collective responsibility of all stakeholders to ensure the Internet's harmonious development in the service of everyone.

On 17 and 18 November 2011, a ministerial summit on Copyright in the digital age took place in Avignon, bringing together emerging countries, developed economies and international organizations. The Summit allowed a cross-cutting approach to common problems experienced in combating piracy, promoting cultural diversity and developing new economic models, and made it possible to suggest avenues for supporting and developing artistic creation in the digital age.

In addition, in October 2011, the French Minister of Industry, Energy and the Digital Economy organized a ministerial level seminar as a follow-up to the G8 Summit and the OECD High Level Meeting of June 2011.



The French President addressing the e-G8 Forum on 24 May 2011. © Élysée.

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Directorate-General of Global Affairs, Development and Partnerships of the French Ministry of Foreign and European Affairs

The missions of the French Ministry of Foreign and European Affairs are:

- summarize information on the changing global economy and put it into perspective, prepare decisions on the French government's foreign policy;
- draft France's foreign policy;
- coordinate France's international relations;
- protect French interests abroad and assist French nationals outside France.

The creation of the Directorate-General of Global Affairs, Development and Partnerships (DGM) in April 2009, as part of the reform of the Ministry, enables diplomacy to anticipate, identify and respond to the challenges of globalisation more effectively.

Confronted with global issues that have a direct impact on the lives of our citizens and multiple actors, the Ministry intends to emphasise the need to tackle global issues, in the firm belief that every major economic, cultural and societal issue calls for collective action with more outward focus, anticipation, interministerial coordination, responsiveness, interdisciplinarity and a resolutely European approach.



Directorate for Communication and Press

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