



Recommendation 1332 (1997)¹

Scientific and technological aspects of the new information and communications technologies

Parliamentary Assembly

1. The Parliamentary Assembly, aware of the challenge posed to society by the extremely rapid development of the new information and communication technologies, has addressed various aspects of this matter on numerous occasions. It is aware that changes in this field succeed one another at a phenomenal rate and that therefore any ad hoc approach may well become obsolete before its effects are even felt.
2. It considers that the changes brought about by the new information and communication technologies will affect almost all areas of society and will have social, economic, cultural, ethical, legal and other consequences. The main fields of application of the new information and communication technologies include education and training, health and the ageing population, public authorities, the environment and transport.
3. It recalls [Recommendation 1324 \(1997\)](#) on the contribution of the Parliamentary Assembly to the 2nd Summit of Heads of State and Government of the Council of Europe, which asks the summit to decide that the Council of Europe's legal instruments be reviewed and that, where appropriate, new legal instruments (conventions) be drafted in the light of the development of the new information and communication technologies and its consequences for European society.
4. It considers that finding answers to the scientific and technological questions covered in the present recommendation would be a necessary step towards solving other problems posed by the new information and communication technologies.
5. To help bridge the gap between the extent of development of the new information and communication technologies and society's readiness for them, the Assembly recommends that the Committee of Ministers :
 - 5.1. analyse its work programme, taking into account the changes brought about by the new information and communication technologies in all fields of its activity;
 - 5.2. support and reinforce the work of the European Ministerial Conference on Mass Media Policy, which is to hold its fifth meeting in Thessaloníki on 11 and 12 December 1997, in particular with regard to the new information and communication technologies, human rights and democratic values, as well as efforts to harmonise the relevant legislation in Europe and at international level;
 - 5.3. invite governments of Council of Europe member states and the European Union to pursue, in co-operation with private companies, research institutes and non-governmental organisations, their scientific and technological efforts by implementing, inter alia, the following measures:
 - a. developing and adapting technologies to facilitate the development of teleworking, including for senior citizens and people with disabilities, while at the same time introducing regulations which, inter alia, will help avoid the isolation of workers;
 - b. developing computerised medical systems and telemedicine systems;
 - c. developing technological solutions that will allow the general public and companies to have electronic access to public services;

1. Assembly debate on 23 June 1997 (17th Sitting) (see [Doc. 7832](#), report of the Committee on Science and Technology, rapporteur: Mr Frey). Text adopted by the Assembly on 23 June 1997 (17th Sitting).



- d.* developing telematic systems for the monitoring and analysis of environmental data;
- e.* developing advanced telematic systems for the field of transport;
- f.* facilitating the installation of the hardware necessary to use the new information and communications technologies in all education and training institutions;
- g.* encouraging the development of multimedia applications and new teaching methods based on simulation and virtual reality at all levels of the education and training system, including aspects relating to cultural and linguistic diversity;
- h.* facilitating general access to all services created by the new information and communication technologies, for example by fiscal measures, and encouraging in particular the development of interactive multimedia services;
- i.* fostering interoperability between networks by stepping up international co-operation in the field of standardisation and particularly by encouraging the International Telecommunications Union to continue its work in this area;
- j.* encouraging and investing in the development of digital technologies and high-speed networks and in new direct transcontinental links, particularly to the United States;
- k.* assisting with the setting up of hardware and software manufacturing companies in all European countries and especially in countries in transition - which have a highly skilled workforce available at competitive rates - while supporting the development of communication-system infrastructures, emphasising their digitisation;
- l.* developing a specific privacy technology, particularly by encouraging more intensive research in information cryptography in order to provide a satisfactory level of security for data transmitted on the network, which will encourage the development of electronic trade and the security of all other personal information;
- m.* promoting the key technologies of the information society, which include communication and network technologies, software and system technologies, mobile communication technologies, including the use of satellites, interfaces using different means of expression (for example voice) and microelectronics;
- n.* gearing the development of generic technologies and basic research towards real-time, large-scale simulation and visualisation technologies, virtual-presence technologies, technologies for the creation of very high-performance computers and super-intelligent networks, and the creation of advanced high-speed networks for research;
- o.* supporting the development of filtering technologies which, combined with the adaptation of current legislation for conventional communication systems, will encourage the self-regulation of network operators at international level;
- p.* maintaining or setting up - and supporting the funding of - national research centres for communication and information systems, especially as liberalisation is likely to reduce the efforts devoted to research by telecommunications operators, and paying particular attention to compliance with standards set by the scientific patents system;
- q.* encouraging through every possible means, including financial, the creation of virtual centres of scientific research providing electronic access to sophisticated and expensive research equipment;
- r.* monitoring in particular the implementation of their scientific and technological policies so that these policies do not harm democratic values in Europe, but instead consolidate their development.