



11. Organisations and Acronyms

There are many sources to the information collected in this chapter, so many that it is only possible to mention a few. An interesting one for computing terms in general, but not necessarily for acronyms, is "A Glossary of Computing Terms", edited by the British Computer Society. Another one is "Networking Glossary", compiled by N.E.T. Network Equipment Technology of Redwood City, California. Magazines, annual reports, technical reports and articles, and even dailies often contain lists of acronyms important to the subject they are treating. So, the sources are many, it is just a matter of compiling the acronyms...

11.1. Swedish Organisations

Cert is a Swedish organisation having the charter to disseminate information about security questions and issuing warnings for attacks from hackers. The idea is to create security for the Internet users;

Dataföreningen i Sverige (The Swedish Computer Association), is a professional association for people working with computers;

Edis, Svenska EDI-föreningen, the Swedish EDI association;

IMT, Institutet för Mediateknik, the National Institute for Media Technology;

IT-Delegationen is a government committee, charged with counselling the government members on ICT related questions;

IVA, Ingenjörsvetenskapsakademien, The Royal Academy of the Engineering Sciences, initiates, supports, and sponsors a large number of program for all engineering sciences, including ICT;

KFB, Kommunikationsforskningsberedningen, the Swedish Transport & Communications Research Board, is a central government authority, whose task it is to plan, initiate, coordinate, and support research, development and demonstration projects, by allocating funding in the following areas of research:

- * strategic communications research
- * telematics/information technology
- * physical transports
- * vehicles and fuel;

MTL, MobilTeleLeverantörerna, is the Swedish organisation for mobile telephony suppliers;

NUTEK, Närings- och teknikutvecklingsverket, is a government agency, charged with responsibility for the development of technology knowhow in Sweden, by collaborative efforts between Swedish enterprises, universities, and other research organisations;

PROMIS, Svenska Multimediaproducenter, an organisation for multimedia producers specializing in such legal matters as the right to information, copy-right etc. The organisation is also involved in standardising the Swedish terminology and nomenclature for the industry;

PTS, Post och Telestyrelsen, is the central authority for regulation regarding post, tele, and radio communication. Among other things, PTS distributes radio frequencies, and is responsible for telephone number plans in Sweden. According to the government's proposition to the parliament of March 12, 1997, PTS will be the agency responsible for the adherence of all partners to the Swedish telecommunications law;

SCB, Statistiska Centralbyrån, Statistics Sweden, is a public organisation in charge of public Swedish statistics;

SEIS, Säkrad Elektronisk Information i Samhället (Secured Electronic Information in Society), is an organisation, constituted in March, 1995, open to public agencies and private enterprises, interested in ICT security;

SEK, Svenska Elektriska Kommissionen, The Swedish electric standards institute, is representing Sweden in the European standardisation organisation CENELEC;

SICS, Swedish Institute of Computer Science, is a research organisation dedicated to technical research programmes in the field of information technology. Multimedia, broad band communication, and virtual reality, are examples of the research areas. SICS is a bridge organisation between academic research and industry research;

SIMBA, Stiftelsen insamling av miljöfarliga batterier, is an industry organisation for the recycling of batteries used by the ICT industry and by ICT users;

SIKA, Statens Institut för Kommunikationsanalys, The State Institute for Communications Analysis, is a government agency, responsible for official statistics and analysis of communications in the wide sense, including transportation of people, goods, and bits;

SITI, is the Swedish association of telecom and IT industries;

SIS, Standardiseringskommissionen i Sverige, is the Swedish standardisation commission, representing Sweden in ISO and CEN. SIS has nine industry related subcommittees. One such sub-committee is SIS-ITS — see separate entry;

SIS-ITS, Standardiseringskommissionen i Sverige — Informations-tekniska standardiseringen, (ITS) is the special subcommittee of the Swedish standardisation commission, handling all questions related to IT and telecommunications standardisation;

SISU, Svenska Institutet för Systemutveckling, is a Swedish industry association for research and development of system development;

SITO, Svenska IT-företagens organisation, is a Swedish organisation for IT businesses. Formerly, it was called LKD;

SRL, Sveriges radio- och hemelektroniklevernatörer, is an organisation for suppliers of home electronics;

Statskontoret is a government agency, charged with the task of rationalising and coordinating all public administration in Sweden. Among other things, Statskontoret scrutinizes and accredits suppliers to the public services, and regularly issues lists of accepted suppliers;

Svensk Programvaruindustri, The Swedish Association of Software Industry, has some 65 member companies, looking after the interests of Swedish software manufacturers;

Svenska Kabel-TV föreningen is an association for cable TV suppliers to the Swedish market;

Sveriges Tekniska Attacheer, STATT, is the Swedish Office of Science and Technology, an organisation with offices in nine OECD countries, among other things reporting on new technological developments in these countries to the Swedish public;

SWEDAC, Styrelsen för teknisk ackreditering i Sverige, issues accreditation to testing laboratories and certification organisations in Sweden;

SWIRA, The Swedish International Robot Association, is an organisation for industrial robot users.

VIS, Videotexföreningen i Sverige, is a national association of information providers for the videotex medium;

11.2. National and International Organisations

ACT, Association of Commercial Television;

ACTE is the EU committee for telecommunication connection standards, issuing the Common Technical Regulations, **CTR**, i.e. European telecommunications standards;

AIG, Arabian Interest Group, is the Arab regional organisation for GSM network operators within GSMoU. Early 1995, 14 network operators and 11 countries were members;

AIPA, The Authority for Information Technology in the Public Administration, is part of the Italian Prime minister's office. It is responsible for technical standards, procurement, and coordination of national Italian IT programs;

ANSI, American National Standards Institute, is responsible for the development of U.S. standards for transmission codes, protocols, media, and high level languages;

APIG, Asia Pacific Interest Group, is the Asian and Pacific regional organisation for GSM network operators within GSMoU. Early 1995, the organisation had 45 network operators and 22 countries as members;

ASTM, the American Society for Testing of Material;

ATM Forum is an industry organisation with 450 members, having as objectives to speed up the development, standardisation, and deployment of ATM products;

BOC, Bell Operating Company, is one of 22 local telephone companies spun off from AT&T as a result of the American divestiture. They are organised into seven Bell RHCs, known as RBOCs;

CIIBA, Comité Interministeriel de l'Informatique et de la Bureautique dans l'Administration, covers information technology in central ministries in France;

CICCP, Committee for Information, Computer and Communications Policy, is the OECD organ, responsible for telecommunications and information technology. The committee publishes regularly "*The Communications Outlook*" and "*The Information Technology Outlook*" ;

CCIR, Comité Consultatif International des Radiocommunications, is the advisory committee of the ITU for radio related questions;

CCITT, Comité Consultatif International Télégraphique et Téléphonique, in English International Consultative Committee for Telegraph and Telephone, since 1993 the standardisation organisation of ITU-TE. CCITT was recently renamed the **Telecommunications Standardisation Sector, TSS**. It defines technical standards for all internationally controlled aspects of analog and digital communications. Some well known CCITT standards are X.21, X.25, etc. CCITT/TSS standards are often equivalent to ISO standards;

CCTA, Central Computer and Telecommunications Agency, is the United Kingdom's authority for information technology in the public administration;

CCTS, Comité de Coordination des Télécommunications par Satellites, is handling questions regarding telecommunications via satellite within CEPT;

CECD, Confédération Européenne du Commerce de Detail, is the European organisation for retailers;

CEN, Comité Européen de Normalisation, is the European standardisation organ, responsible for the European Norms, **EN**;

CEPT, Conference Européenne des Administrations des Postes et des Télécommunications, is the European association of PPTs;

CEST, Centre for Exploitation of Science and Technology, is the British organ for promoting – science and technology;

CLTA, Comité de Liaison des Télécommunications Transatlantiques, is the CEPT committee handling transatlantic telecommunications;

COS, Corporation for Open Systems, is a consortium established for conformance testing, certification, and promotion of OSI products;

Cose, Common Open Software Environment, was formed in 1993 by UNIX suppliers;

COSINE, Cooperation for Open Systems Interconnection Networking in Europe, is the European collaborative organ for OSI;

CSAIG, Central and Southern African Interest Group, is one of the African regional organisations for GSM network operators within GSMMoU. Early 1995, 11 operators and 9 countries belonged to the organisation;

CSI, Consejo Superior de Informatica, is a political body in control of coordination of computerisation in the public administration in Spain. It has an executive body called **CIABSI, Comisión Interministerial de Aquisición de Bienes y Servicios Informáticos**;

DSTI, Directorate for Science, Technology and Industry, is a group within OECD;

DTI, Department of Trade and Industry, U.K.;

EBU, European Broadcasting Union;

ECE, European Electronic Commerce, is a new umbrella organisation for associations and companies involved with electronic trading;

ECMA, European Computer Manufacturers' Association;

ECITC, European Committee for IT and Telecom Testing and Certification;

EEIG, European Economic Interest Grouping;

EFTA, European Free Trade Association;

EIA, Electronic Industries' Association, is a national trade organisation in Washington D.C., set up to promote domestic electronics. More than 1 000 U.S. electronic manufacturers are members;

EIG, European Interest Group, is the regional, European organisation for GSM network operators within GSMoU. Early 1995, 67 operators and 34 countries were represented;

EITO, European Information Technology Observatory;

EIUF, European ISDN Users Foundation;

EMUG, European MAP — Manufacturing Automation Protocol — Users' Group;

EOTC, European Organisation for Testing and Certification;

ETNO, European Public Telecommunications Network Operations Association, is the European telecom operators' industry association;

ETSI, European Telecommunications Standard Institute, is the European standardisation organ, having some 300 members, among those the Swedish standardisation institute, SIS-ITS;

EURESCOM, European Institute for Research and Strategic Studies in Telecommunications, is the institute for research and development of the European telecom operators;

EUROBIT, European Association of Business Machines and Information Technology Industry Organisation is an association of European IT industry organisations;

EUROSAT is a European association of 26 countries for transmitting telecom and TV signals via satellite. It also contributes to the commercial development of the European space industry;

EUSIDIC, European Association of Information Services;

Eutelsat, European Telecommunications Satellite Organisation;

EWOS, European Workshop for Open Systems;

FCC, Federal Communications Commission, is a U.S. federal agency that licenses and controls standards for all forms of radio and electromagnetic transmissions;

FEWITA, Federation of European Wholesale and International Trade Association;

Frame Relay Forum is an American organisation for frame relay equipment vendors and service providers;

GSMMoU Association is the global association for GSM operators, having its headquarters in Geneva, Switzerland. GSMMoU is divided into regional organisations and several expert groups;

ICA, International Communications Association, is an interest organisation for anyone involved in **CPE**, Customers Premises Equipment;

ICC, International Chamber of Commerce;

IEC, International Electrotechnical Commission;

IEEE, Institute of Electrical and Electronic Engineers, is an American group involved in recommending standards for the computer and communications industries;

IEPRC, International Electronic Publishing Research Centre;

IETF, Internet Engineering Task Force, is looking after the .com-addresses on the Net, among other things;

INMARSAT is organising communication between ships at sea;

INTELSAT is looking after intercontinental telecommunications via satellite;

InterNIC, the central Internet clearing organisation;

INTUG, International Telecommunications Users' Group, is a European users' organisation;

IRDA, Infrared Data Association;

ISO, International Standard Organisation, is the organisation issuing tele and data communication standards according to the OSI model;

ITI, Information Technology Industry Council, is an American organisation for ICT groups;

ITU, The International Telecommunications Union;

JEIDA, Japan Electronic Industry Development Association, a Japanese industrial organisation;

JESSI, Joint European Sub-micron Silicon Initiative, is a project within EUREKA, created in order to support European manufacturing of advanced integrated circuits;

KBSt, Koordinierungs- und Beratungsstelle der Bundesregierung für Informationstechnik in der Bundesverwaltung, is the Federal Government agency for ICT in Germany;

MEDIX, Medical Data Interchange Committee;

MSAF, Multimedia Services Affiliate Forum, is a group of leading IT, software, and telecommunications companies, working on the future development of Wide-Area Networking (WAN) and Internet applications;

NAIG, North American Interest Group, is the north American regional organisation for GSM network operators within GSMMoU. Early 1995, 1 network operator and 1 country were members;

NATA, North American Telecommunications Association;

NCUG, National Centrex Users Group, in an American organisation for Centrex users;

NEMA, National Electrical Manufacturers' Association, is an American industry organisation;

NIST, National Institute of Standards and Technology, is what the former American National Bureau of Standards is called today;

The **Nordic Radio Society** is dealing with radio communication systems adapted to mobile telephony, among other things;

NORDTEL is an industry association for the Nordic telecom operators;

OECD, Organisation for Economic Co-operation and Development, was formed in Paris in December, 1960, in order to promote policies designed for its member countries to achieve the highest sustainable economic growth and employment; to contribute to sound economic expansion; and to contribute to the expansion of world trade. Member countries are: Austria, Australia, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxemburg, Mexico, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States;

OFTEL is a British government agency responsible for telecommunications and IT;

OMG, Object Management Group, is developing standards for distributed object management architecture;

OSF, Open Software Foundation;

PCCA, Portable Computer and Communications Association, is an industry association, aiming at developing standardised interfaces for mobile communications;

PCMCIA, Personal Computer Memory Card Industry Association, is an industry standard organisation for manufacturers of cards to PCs, PDAs, PDPs, etc.;

PTO, Public Telephone Organisation, is a governmental organisation serving as the common telephone provider in European countries, formerly known as PTT. Most European operators are PTOs;

PTTs, Post, Telephone, and Telegraph Operators, often publicly owned. The Western European former PTTs are being privatised by EU decree;

PUC, Public Utilities Commission, is a U.S. state regulatory agency that decides telephone tariffs in each of the states of U.S.;

RARE, Reseaux Associés pour la Recherche Européenne, is the united networks for research and development in Europe;

RBOC, Regional Bell Operating Company, see BOCs;

SOGT, Senior Officials Group on Telecommunications;

SPA, The Software Producers' Association;

SWIFT, The Society for Worldwide Interbank Financial Telecommunications, is a global user organisation for financial institutions, having as one of its objectives to create and support standards for international, electronic transmission of financial information;

The Advanced Digital Audio Committee keeps an eye on the developments of the various audio standards for hi-fi recordings, such as AC-3, developed by Dolby Laboratories, USA; and MPEG Musicam, developed by European companies like Philips;

TCA, Tele-Communications Association, is a U.S.-based organisation;

TSS, Telecommunications Standardization Sector, see CCITT above;

UNCITRAL, United Nations Commission on International Trade Law;

USITA, United States Independent Telephone Association;

USTA, United States Telephone Association;

VESA, Video Equipment Standards Association;

VISUAL, Vendor Independent Software Users Associates Ltd. is a British forum for independent software manufacturers;

WIPO, World Intellectual Property Organisation, is a UN organ responsible for the development of legal tools for the protection of intellectual property;

X/Open is a consortium of computer manufacturers, computer users, and standardisation committees, working towards common open standards.

11.3. Important Standardisation Organisations and Acronyms

Active cards are credit cards with built in computer chips, i.e. a microprocessor and memory. Thus they are called **smart cards**;

AMPS, Advanced Mobile Phone Service, is an analog cellular radio standard developed by AT&T. AMPS and GSM are the most widely used standards for mobile telephony — see chapter 2 for distribution;

American National Standards Institute is the standards institute of the United States;

ARA, Acoustic Renaissance for Audio, an international group of audio experts, working towards global audio standards;

ASCII, American Standard Code for Information Interchange, is a seven-bit binary code for use by PCs and some other types of computers to represent alphanumeric and graphical characters;

BECN, Backward Explicit Congestion Notification is the TSS's industry standard for a congestion notification methodology;

CCIR, Comité Consultatif International des Radio-Communications, International Radio Consultative Committee, was until March 1993 the main body responsible for technical standards for radio operations within ITU, see ITU and TSB;

CCITT, Comité Consultatif International de Téléphonie et Télégraphique, International Telegraph and Telephone Consultative Committee, was until March 1993 the main group within ITU responsible for telecommunications standards, see ITU and TSB;

CEN, Comité Européen de Normalisation, is responsible for all areas of standardisation in Europe, with the exception for the electrotechnical industry and telecommunications;

CENELEC, Comité Européen de Normalisation Electrotechnique, is the European organisation for electrotechnical standardisation;

DECT, Digital European Cordless Telephony, is the pan-European standard for wireless voice and data communications, ratified in July 1992;

ECITC, European Committee of IT & T Testing and Certification, is an organisation responsible for testing and issuing certification to IT and telecom products for all of Europe;

EDI, Electronic Data Interchange, is an international standard and a generic name for different techniques for computer-to-computer information and business interchange;

EDIFACT is a standard layout for electronic business messages, used in EDI;

EISA, Extended Industry Standard Architecture, is a PC bus architecture;

ETS, European Telecommunications Standard;

ETSI, European Telecommunication Standards Institute, is responsible for European telecommunications standard making;

EWOS, European Workshop for Open Systems, is responsible for functional standards;

FDDI, Fiber Distributed Data Interface, is a standard for local network transmission based on optical fiber, operating at 100 Mbit/sec;

GOSIP is the U.S. government OSI profile;

GSM, Groupe Speciale Mobile/Global System for Mobile Communication, is a digital cellular standard, and the most commonly used system for mobile communication, developed in Europe;

IEC, International Electrotechnical Commission, is responsible for global electrotechnical standardisation. Many of its activities are directly related to IT and telecommunications;

IETS, Interim European Telecommunications Standard;

Information Infrastructure Standards Panel is a US informal forum set up to facilitate consensus-making among all parties interested in the National Information Infrastructure;

ISA, Industry Standard Architecture, is the expansion bus in the IBM PC AT and PC compatible computers;

ISO, International Organisation for Standardisation, has several subcommittees involved in IT and telecommunications standardisation;

ITU, The International Telecommunications Union, is a global organisation for telecommunications, a subcommittee of which is **TBS, Telecommunications Standardisation Bureau**, responsible for international industry standards, see **TBS**;

JPEG, Joint Photographic Experts Group, is one of three primary standards for continuous tone picture compression/decompression used for video conferencing;

JTC1 and **JTC2** are **Joint Technical Committees**, specialising in different areas within **ISO**, see above;

MAP27 is a technical standard defining an interface allowing computers and other terminals to be connected to a mobile radio transceiver;

METTRAN, Managed European Transmission Network, is a standardised European transmission network for SDH connections, which is in preparation for future telecommunications;

MIME, Multipurpose Internet Mail Extensions, is a message standard for e-mail, including graphics, video, and sound;

MPEG, the Motion Picture Experts Group, is the agreed upon standard for compressing digital video and TV signals;

NET, Norme Européenne pour Télécommunications;

NMT-450, Nordic Mobile Telephone standard at **450** MHz;

NMT-900, Nordic Mobile Telephone standard at **900** MHz;

NMT-F is a French variation of the NMT-900 standard;

Odette is another standard layout for computer-to-computer messages under EDI;

ONP, Open Network Provision, is a set of rules for standardisation and regulation of technical and commercial connections to and utilisation of former monopolised networks;

OSI, Open Systems Interconnection, is a set of protocols recommended by ISO for communication between computers of different types and makes;

OSI/RM is the **OSI Reference Model**;

OSI, Open Systems Interconnection, is a set of protocols recommended by ISO for communication between computers of different types and makes;

PCMCIA, Personal Computer Memory Card Industry Association, is an industry standard organisation for manufacturers of cards to PCs, PDAs, PDPs, etc.;

Px64 is a worldwide videoconferencing standard for twoway full motion video;

RIP, Routing Information Protocol, is a de facto international standard for intra-AS routing;

SET, Secure Electronic Transaction, is a standard for automated encryption of credit card numbers used for payment over the Internet;

SNA, Systems Network Architecture, is an IBM standard communications protocol;

SNMP, Simple Network Management Protocol, is a TCP/IP protocol, addressing network monitoring;

SOGITS, Senior Officials Group of IT Standardisation;

SONET, Synchronous Optical Network, is a set of standards for transmission over fiber optic networks at speeds as fast as 13 Gbps;

TBS, Telecommunications Standardisation Bureau, was formed in March 1993 as a main body within ITU, replacing CCIR and CCITT, responsible for coordination of the definitions of technical standards, as well as the ratification of these, and the recommendations for telecommunications and radio communications;

TCP/IP, Transmission Control Program/Internet Protocol, is a set of communication protocols, having become a de facto standard for communication between computers of different makes;

Token Ring is IBM's IEEE 802.5 LAN standard;

USO, Universal Services Obligations;

VESA, Video Equipment Standards Association;

W3C, World Wide Web Consortium, is an interest group of representatives of the largest actors in the World Wide Web. W3C developed the PNG standard;

X/Open is a consortium of computer manufacturers, computer users, and standardisation committees, working towards common open standards;

X.21 is a CCITT/TSS specification for layer 1 interface in X.25;

X.25 is a recommendation by ISO and CCITT/TSS for an interface between terminals and computers for packet transmission in public networks. Nordic telecom operators have based their Datapak services on X.25;

X.400 is an ISO and CCITT/TSS standard for handling and distribution of e-mail;

X.500 is an ISO and CCITT/TSS standard for distributed directory services.

11.4. Industry and Technology Acronyms and Terms

A

AAL, ATM Adaptation Layer, is converting non-ATM bit streams into ATM cells;

ACD, Automatic Call Distribution, is a system used to distribute high volumes of calls according to priority. It is also used to route calls to appropriate parties;

ACTS, Advanced Communications Technologies and Services, the fourth EU frame program for research and development in the area of telecommunications;

ADM, Add/drop multiplexor;

agent is a piece of software designed to carry out different tasks, for instancesearching for information on networks;

ALS, Asymmetrical Digital Subscriber Loop, is a new access network technology, making it possible to transfer 6Mbit/s — corresponding to the current quality of television sound and picture — via the existing access networks based on two pair copper lines;

AMPS, Advanced Mobile Phone Service, is an analog cellular radio standard developed by AT&T. AMPS and GSM are the most widely used standards for mobile telephony — see chapter 2 for distribution;

ANI, Automatic Number Identification, provides the receiver of a call with the telephone number of the caller, after having verified it;

APC, Association for Progressive Communication, is an association of computer networks having nodes in four continents;

API, Application Program Interface, is a set of programming conventions, providing access to protocols;

ARA, Acoustic Renaissance for Audio, an international group of audio experts, working towards global audio standards;

AS, Autonomous Systems, are part of the Internet Layer that routers use to relate to network connectivity and addressing;

ASCII, American Standard Code for Information Interchange, is a seven-bit binary code for use by PCs and some other types of computers to represent alphanumeric and graphical characters;

asynchronous means that a transmission rate is variable, without predictable time relationship to a specified event;

ATM, Asynchronous Transfer Mode, a broadband switching technology, offering continuous transportation of different bandwidth;

AWT, Alternative Window Toolkit, a software package for animation in Windows;

B

Backbone network is a primary transmission medium in a hierarchically distributed system;

bandwidth is a measure used for transmission capacity;

baseband is the frequency band occupied by a single or composite signal in its original form;

base station is a fixed radio transceiver in a cordless communications system;

BBS, Bulletin Board System, is an electronic bulletin board, run by for instance organisations, associations or other groups of users, having common interests;

BECN, Backward Explicit Congestion Notification is the TSS's industry standard for a congestion notification methodology;

B-ISDN, broadband ISDN, based on ATM;

bipolar signal is the predominant signaling method used for digital transmission services;

BITNET, Because IT is There NETWORK, is an American network, having a European equivalent in **EARN**;

BPR, Business Process Reengineering;

bps, bits per second, is a unit for measuring transmission speed. bps often has a prefix: k = kilo (10x10x10), M = mega (10x10x10x10x10x10), or G = giga (10x10x10x10x10x10x10x10x10), meaning that the transmission speed is augmented equivalently;

broadband is used for high-speed, high-capacity communications;

Broadband network is a transmission network running at minimum 2 Mbps;

broadcast is used when a simultaneous transmission to multiple receiving locations is made;

brouter is a device that combines bridge and router functions to route specific protocols and bridge others;

BTR, Basis for Technical Regulation;

C

CAI, Common Air Interface, is a definition of the technical parameters of control and information signals passed between a radio transmitter and a receiver, normally used in CT, cordless telephony;

card is a single printed circuit board for insertion in a slot in a computer, a switch or other electronic devices;

CASE, Computer Aided Software Engineering;

CATV, Community Antenna Television, is also known as cable television. Transmissions are received at a central site and transmitted to subscribers via a cable network;

CCD, Charge Coupled Devices;

CCIRN, Coordinating Council for Interncontinental Research

Networking, is doing just that, coordinating networking globally;

CCM, Commission du Control du Marché, the French governmental agency for market regulation;

CCMI, Commission du Control du Marché Informatique, controls the computer market in France, part of CCM;

CDMA, Code Division Multiple Access, is a method used in mobile communications to spread radio spectrum;

cell for ATM technology is a basic 53-byte packet of information, including a constant five-byte address header;

cell related to cellular telephony, is a basic geographic unit in a cellular network, having a radio transmitter/receiver covering a specific area;

CERN is where the WWW was developed **see** chapter 6 on the Internet;

channel is an electronic communications path;

CISC stands for **Complete Instruction Set Computing** architecture for microprocessors;

CMIP, Common Management Information Protocols;

CMIS, Common Management Information Services;

common carrier is what a company offering data and voice communications services to the general public is called. A common carrier is regulated by the national agencies;

CTR, Common Technical Regulation;

CT2 and CT3, Cordless Telephone, second generation and third generation;

D

Datapak is Telia's X.25 networking service;

DATEX is one of Telia's networks for data communications;

DBMS, Database Management System;

DCS, Digital Cellular System, is a new, more efficient technology for digital mobile telephony, transmitting over a different band of frequencies than for instance the earlier NMT and GSM systems. Also stands for **Digital Cross Connect System**;

DECnet is a protocol for data communications developed by Digital Equipment Corporation;

DECT, Digital European Cordless Telephony, is the pan-European standard for wireless voice and data communications, ratified in July 1992;

DME, Distributed Management Environment, is an OSF program to develop a toolset providing common systems and network management functions;

DMI, Digital Multiplexed Interface, is a gateway providing 23 digital PCM channels plus one signalling channel;

DOS, Disk Operating System, is the most widely used operating system in PCs. It was originally developed by Microsoft;

downloading is the process of moving software or data from one node in a network to another;

DP, Device Processor;

DSP, Digital Signal Processor;

DSRR, Digital Short Range Radio;

DTMF, Dual Tone Multifrequency Signaling, is the basis for the signaling operation of the push-button telephones;

DTT, Digital Terrestrial Television, is a system for digital television transmission;

DVD, Digital Video Disc, a global industry standard for recording video pictures on high-density CD;

DWDM, Dense WDM, a technology by which the transfer channels are separated by a few millimeters;

DXC, Digital Cross Connect;

E

EARN, European Academic Research Network, is a European network for university based researchers. EARN is connected to the American BITNET;

Ebone is a European Internet Protocol backbone network, having nodes in Stockholm, Amsterdam, Geneva, Paris, and London. Some 25 regional networks are connected;

EDI, Electronic Data Interchange, is an international standard and a generic name for different techniques for computer-to-computer information and business interchange;

EDIFACT is a standard layout for electronic business messages, used in EDI;

EID, Electronic Identification Documentation, is a standard (under development) for electronic documents for identification;

EISA, Enhanced Industry Standard Architecture, is a PC bus architecture;

ELP, Electro-Luminescence Panel, is a technology for constructing flat displays;

EM, Element Manager, support systems for remote control of several network elements;

E-mail is a system for transmission of text based messages between different computers. In Swedish, e-mail is called **e-post**;

emulate is to imitate one system with another in such a way that both systems accept the same data and execute programs the same way;

E-Pin, Electronic Post-It Note;

Equal Access is a principle applied in order to make it equally easy to make calls independent of operator;

ERMES, European Messaging System, is a pan-European digital radio paging system;

ESPRIT, European Strategic Programme for Research and Development in Information Technology, is the present EU research program for information Technology, running 1994 — 1998;

Ethernet is a high speed computer network sometimes regarded as a variety of LAN, Local Area Network. Transmission can be made via several protocols simultaneously;

EUREKA is a European program for collaboration between companies in marketing oriented technical research and development. It started in 1985. 20 countries participate;

EuroCAIRN, European Cooperation for Academic and Industrial Research Networking, is a follower of the COSINE project;

EuropaNET is a European computer network, connecting a number of academic networks;

F

FDDI, Fiber Distributed Data Interface, is a standard for local network transmission based on optical fiber, operating at 100 Mbit/sec;
FDM, Frequency Division Multiplexing, equivalent to HDWDM;
FFOL, Fiber Follow On LAN, is an emerging LAN technology;
FidoNet is a public network, having several tens of thousands nodes globally, used by private users as well as companies;
file server is a LAN station dedicated to provide file and mass storage services to other stations on the network;
firmware is what a permanent or semi-permanent control coding implemented at a micro instruction level for an application program is called;
FITL, Fiber In The Loop, is a technology becoming economically feasible for telephony, narrow band ISDN, and cable TV distribution;
FMAS, Facility Management System, a support system for transmission networks, developed by Ericsson;
FNC, Federal Networking Council, is a US organisation coordinating research networks supported by different federal authorities;
FTTC, Fibre To The Curb;
FTTH, Fibre To The Home;

G

GDSS, Group Decision Support System;
Gif (Graphics Interchange Format), a standard for graphics, in certain contexts now being replaced by **PNG** — see separate entry;
GII, Global Information Infrastructure, is what vice president Al Gore's vision of the NII in its global version is called;
GIS is used by among others EITO as an abbreviation for the Global Information Society;
GK7, international standard for common channel signalling;
GOSIP is the U.S. government OSI profile;
GPS, The Global Position System, is a military system, also available for civilian applications, for geographical positioning via satellite;
GSM, Groupe Speciale Mobile/Global System for Mobile Communication, is a digital cellular standard, and the most commonly used system for mobile communication, developed in Europe;
GUI, Graphic Unit Interface;

H

handshake is in the electronic world an exchange of predetermined signals, occurring when the connection requested between two data sets is first established;
HDLC, High Level Data Link Control, is an ISO protocol for X.25 international communications;
HDTV, High Definition TV;

HDSL, Highbitrate Digital Subscriber Loop, is a new access network technology, making it possible to transfer 2 Mbit/s via the existing access networks based on two pair copper lines;

HDWDM, High Dense WDM;

HPCN, High Performance Computing and Networking, is a subprogram under ESPRIT;

HTML, Hypertext Markup Language, is a computer language used for creating home pages for the HTTP protocol by marking documents for WWW, showing links, texts, graphics, etc;

HTTP, Hypertext Transfer Protocol, is a communications protocol, developed for Internet;

hybrid network is a network comprising both public and private facilities;

hypermedia is an updated version of hypertext, including text, sound, graphics, video, etc.;

hypertext is a file of texts on hypercards, containing links to other texts;

I

ICT, Information and Communications Technology, is defined as equipment, software, and services related to computers, information technology and telecommunications;

IDA, Interchange of Data between Administrations;

IEC, Interexchange Carrier, is a long distance provider;

IGP, Interior Gateway Protocol;

infotainment is provided by the integration of computer and cable TV (interactive TV), providing opportunities for the viewer to participate directly in TV programs, or to manipulate a TV program to the personal taste;

Interface (in Swedish gränssnitt) is a shared boundary defined by common physical interconnection characteristics;

Internetwork is what you call two or more connected networks, similar or dissimilar;

IP, Internet Protocol, is part of the protocols used in TCP/IP;

ISA, Industry Standard Architecture, is a PC bus architecture;

IR, Infra Red;

ISDN, Integrated Services Digital Network, is a multiservice network, transmitting speech, data, and video via one single transmission line;

ISM, Industrial, Scientific and Medical, is a range of frequencies allocated for general purpose use, in for instance microwave ovens, medical probes, and scientific instruments;

IT, Information Technology, is defined as traditional hardware, software, communications, and services related to computers;

ITSEC, Information Technology Security Evaluation Criteria;

IXC, Interexchange Carrier, in the U.S. synonymous with IEC, long distance carrier;

J

Java is the current craze in programming languages for www and the Internet;
Jpeg, Joint Photographic Experts Group, is one of three primary standards for continuous tone picture compression/decompression used for video conferencing. This standard is now being replaced by PNG in certain contexts — see PNG below ;

L

LAN, Local Area Network, is a local network for data communications, for instance within a company;
LCD, Liquid Crystal Display, is a technology for constructing flat displays;
leased line is a dedicated circuit permanently connecting two or more locations;
LED, Light-Emitting Diode, is a technology for building flat displays;
LEO, Low Earth Orbit satellite system, which will be the base for the Iridium global wireless communications system;
LMDS, Local Multipoint Distribution Service;

M

MAC, Media Access Control, is an IEEE standard LAN protocol;
MAN, Metropolitan Area Network, is a wider version of LAN;
MAP, Manufacturing Automation Protocol, is a component of OSI;
MAPI, Messaging Application Program Interface;
MBS is Telia's national network paging from telephone to FM radio. MBS tells the paged person which number to call. Is being replaced by the **Minicall** service;
METON, Metropolitan Optical Network;
METRAN, Managed European Transmission Network, is a standardised European transmission network for SDH connections, which is in preparation for future telecommunications;
MIB, Management Information Base;
microseconds appear frequently when you are dealing with switches and computers. One microsecond = one millionth of a second;
MIME, Multipurpose Internet Mail Extensions, is a message standard for e-mail, including graphics, video, and sound;
MMF, MultiMode Fiber, is a fiber optic cable that will be replacing coaxial cables and shielded twisted pair as the high speed backbone for computer networks;
Mobitex is a public national Swedish network for mobile digital communication. Text, data, and voice can be transmitted simultaneously;
MODEM, MODular-DEModular;

Mosaic, or rather NCSA Mosaic after the National Center for Supercomputing Applications, University of Illinois, is a multimedia user program, important to the breakthrough of WWW in 1993— 1994;

MPEG, the Motion Picture Experts Group, is the agreed upon standard for compressing digital video and TV signals;

multimedia generate computer based presentations, combining several types of presentations — text, graphics, video, and sound. The user is able to manipulate the presentation interactively;

MWTN, Multi-Wavelength Transport Network, an optical transmission network, is the result of a multinational RACE project for the development of new technologies for optical transmission. The project has the following participants: BT Laboratories, UK; CSELT, Italy; Ericsson Telecom, Sweden; Ericsson Telecomunicazione, Italy; France Télécom CNET, France; Italtel, Italy; Pirelli Calvi, Italy; Telia and Ellemtel, Sweden; The University of Essex, UK; and the University of Paderborn, Germany;

N

NAC, Network Adapter Card;

NC, Net Computer, is a very simple, low cost computer for mass distribution without a harddisc that fetches the programs it needs to execute an application on the Internet;

NFS, Network File System, is a file system allowing computers access to several hard discs;

NIC, Network Interface Card, is a workstation or PC adapter card that provides connectivity to a LAN or a WAN;

NII, National Information Infrastructure, is a political initiative by the American vice president Al Gore, aiming at creating the national infrastructure for the information society;

NGO, Non-Governmental Organisation;

NMT-450, Nordic Mobile Telephone standard at **450** MHz;

NMT-900, Nordic Mobile Telephone standard at **900** MHz;

NMT-F is a French variation of the NMT-900 standard;

NORDUnet, NORDic University network, is a collaborative network between the national academic networks in Denmark, Finland, Norway, Iceland, and Sweden;

NOS, Network Operating System, is network control software, overseeing resource sharing;

notebook is a portable computer, the size of an A4 pad of paper;

NSFnet, National Science Foundation network, is a backbone network in the US, connecting a number of regional American networks for research;

NTM, Network Traffic Management, is a system for switching and supervision of telecommunications traffic;

NVOD, Near Video on Demand, is a simplified version of Video on Demand;

O

OCA, Office, computing and accounting equipment;

ODBC, Open Data-base Connectivity, is an interface for data access in a mixed environment, supporting many different databases without specific adaptations;

Odette is another standard layout for computer-to-computer messages under EDI;

OEM, Original Equipment Manufacturer, is a manufacturer of Equipment which is marketed by another vendor under the name of the reseller;

OLTP, On-Line Transaction Processing;

ONP, Open Network Provision, is a set of rules for standardisation and regulation of technical and commercial connections to and utilisation of former monopolised networks;

OSI, Open Systems Interconnection, is a set of protocols recommended by ISO for communication between computers of different types and makes;

OSI/RM is the **OSI Reference Model**;

P

PAMR, Public Access Mobile Radio — in France, Germany, and the UK competing services are provided by regional and independent operators;

PAD, Packet Assembler/Disassembler, is a protocol conversion device, allowing end users access to X.25 and other packet switched networks;

PBX/PABX, Private (Automatic) Branch Exchange, is a type of switch used by companies and other organisations, needing their own switch to handle voice and data and to connect to the public network;

PCA, Personal Communications Assistant, is a pen-based handheld computer, combining communications with sophisticated organiser software, see **PDA**;

PCM, Pulse Code Modulation, is a digital transmission technique used to transmit analog signals;

PCN, Personal Communications Network;

PCS, Personal Communication Services, are a new set of wireless capabilities offered to users of mobile equipment by licensees of frequencies, often in the gigahertz spectrum. It may include telecommunications services in combination with cable television services;

PDA, Personal Digital Assistant, is a powerful, multifunctional pocket computer with a pen and handwriting recognition, which is regarded as the successor of PCs, laptops, etc., see **PCA**;

PDP, Plasma Display Panel, is a technology developed for the construction of large, flat displays;

PEM, Privacy Enhanced Mail, is an Internet standard for encryption and verification of e-mail. A Swedish standard, **COST-PEM** is available;

One **Petabyte** is equivalent to 1000 **Terabyte**, i.e. one million **Gigabyte**, or one million billions of bytes;

PGP, Pretty Good Privacy, is a sophisticated program for encryption, available via the Internet: <http://pgp.stupi.se/pgp/>;

PIN, Personal Identification Number, is a standard used for, among other things, securing personal access to for instance mobile telephones and smart cards;

P-mail, Paper-based mail, can also be interpreted as **Primitive mail. Sometimes called Snail-mail**;

PN, Private Network, a network used exclusively by one single organisation or group of people;

PNG, Portable Network Graphics, is a standard for graphics, replacing old standards like **Gif (Graphics Interchange Format)** and **Jpeg (Joint Photographic Experts Group)**;

POTS, Plain Old Telephone Services, same as PSTN;

PPP, Point to Point Protocol, is a further development of **SLIP**;

protocol is what the rules needed to establish communications between nodes on a network is called;

PPV, Pay-Per-View, or paid TV, is a distribution service of entertainment;

PSTN, Public Switched Telephone Network, same a POTS;

PTO, Public Telecommunications Operator;

PVC, Permanent Virtual Circuit, is a packet-switching connection with a single dedicated transmission path;

PVN, Private Virtual Network, is a private network, available to a limited group of people, utilising public networks for transmission;

Px64 is a worldwide videoconferencing standard for twoway full motion video;

Q

QAM, Quadrature Amplitude Modulation;

QWL, Quantum Well Laser;

R

RAID, Redundant Array of Inexpensive Disks, are palmsized disk drives;

RAM, Random Access Memory, is a type of memory in which data is stored temporarily, while waiting for processing;

RARE, Réseaux Associés pour la Recherche Européenne, is a European organisation, coordinating academic networks;

RBOC, Regional Bell Operating Company;

RFI, Radio Frequency Interference, or Request For Information;

RHC, Regional Holding Company, see **RBOC**;

RIP, Routing Information Protocol, is a de facto international standard for intra-AS routing;

RISC, Reduced Instruction Set Computing, is a microprocessor architecture that eliminates a number of procedures to improve response time and processing speed;

router is a device that connects LANs;

ROA, Recognised Operating Agency, is the ITU nomenclature for operators;

S

SCAI, Switch to Computer Application Interface, provides the means for integrating CPE with host computers;

SCSI, Small Computer System Interface, is a common interface for computers and controller boards;

SDH, Synchronous Digital Hierachy, is a new generation transmission technology, increasing the capacity of existing optical networks up to 2.5 Gbit/s per fiber pair;

SDLC, Synchronous Data Link Control, is a protocol used with SNA Networks;

SDMS, Spatial Data Management System, is a project at the M.I.T. Media Lab aiming at developing multi-media in such a way that users can access data via computers in much the same way they access anything else — by reaching for it;

SEARN is the acronym of the Swedish EARN node;

SEED, Self Electro Optic Effect;

server is a computer that provides shared resources, such as applications, databases, printers, and so on, to a number of nodes;

SET, Secure Electronic Tansaction, is a standard for automated encryption of credit card numbers used for payment over the Internet;

SGN, Stockholm Gigabit Network, a demonstration facility for optical fiber transmission, involving Telia, Telia Research, The Royal Institute of Technology, Ericsson, Ellemtel, and SICS, The Swedish Institute for Computer Science;

SHPCnet, Swedish High Performance Computing Network, is a pilot network for super computer applications, included in **SUNET**;

SIM, Subscriber Identity Module, is a smart card carrying information about subscriber identity, that has to be inserted into certain mobile telephones before they can be used;

SLA, Synchronous Line Equipment, provides the user with higher transmission capacity and improved self supervision;

SLIC, Subscriber Line Interface Circuit, is an electronic circuit, built into every single telephone, handling the transmission of the call;

SLIP, Serial Line Internet Protocol, is a term used for modem connections to TCP/IP networks;

smart card is a plastic card provided with a micro processor, that can be loaded with information, see chapter 7 for cash cards;

SMS, Short Message Service, is a GSM message service;

SMTP, Simple Mail Transfer Protocol;

SNA, Systems Network Architecture, is an IBM standard communications protocol;

SNMP, Simple Network Management Protocol, is a TCP/IP protocol, addressing network monitoring;

SONET, Synchronous Optical Network, is a set of standards for transmission over fiber optic networks at speeds as fast as 13 Gbps;

SQL, Structured Query Language, a programming language for manipulating data base information;

STP, Shielded Twisted Pair, is a shielded telephone cable used to interconnect computers;

subnotebook is a portable computer that is smaller than a notebook but larger than a PDA;

SUNET, the Swedish University Network;

T

T1, T3, and T4 are various digital telecom transmission facilities;

TACS, Total Access Communications System, is an analogue cellular telephone network used in the United Kingdom;

TAG, Telematics in Administrations Group;

TBS, Telecommunications Standardisation Bureau, was formed in March 1993 as a main body within ITU, responsible for the coordination of the definitions of technical standards, as well as the ratification of these, and the recommendations for telecommunications and radio communications;

TCP/IP, Transmission Control Program/Internet Protocol, is a set of communication protocols, having become a de facto standard for communication between computers of different makes;

TCSEC, Trusted Computer Systems Evaluation Criteria;

TDD, Time Division Duplex;

TDMA, Time Division Multiple Access, is a technology allowing several simultaneous voice and data conversations over the same medium;

Telepoint is a cordless telephone base station, available to the public, owning compatible cordless telephone sets;

TETRA, Trans European Trunked Radio Access, is a pan-European digital trunked radio system;

TDM, Time Division Multiplexing, is a digital transmission methodology;

TMN, Telecommunications Management Network, is an international standard for the integration of the support systems of different operators;

TMOS, Telecommunication Management and Operation Support, is a platform for support systems, directly switched to defined parts of the networks;

Token Ring is IBM's IEEE 802.5 LAN standard;

TOP, Technical and Office Protocol, is a component of OSI;

U

ULSI, Ultra Large Systems Integration;

UNIX is an operating system developed by Bell Laboratories in the early 60ies, widely used globally;

UPT, Universal Personal Telecommunication, is a personal telephone number, related to an individual rather than to a terminal. Thanks to a UPT, anyone can connect from any terminal, and get billed for the service he/she uses;

UTP, Unshielded Twisted Pair;

V

VA, Virtual Anything, is hereby launched and free for use for anything relating to the virtual world;

VAC, Value Added Carrier, is a vendor that designs and enhances communications networks and resells the services;

VANs, Value-Added Network Services, is used by telecom operators for their offerings of various packages, containing more than basic telecom services;

VC, Virtual Container;

VC, Virtual Channel;

VCC, Virtual Channel Connection, is a connection in an ATM network;

VDT, Video Display Terminal, is another way of describing commonly used desktop computer terminals;

VHF, Very High Frequency, is an operating band for television and radio, ranging between 30 MHz and 300 MHz;

Virtual LAN is an ATM software feature;

VLSI, Very Large System Integration;

VOD, Video-on Demand, a service offering entertainment via the telecom networks;

VP, Virtual Path;

VPC, Virtual Path Connection, is another type of connection in an ATM network;

VPN, Virtual Private Network, network capacity available for leasing from operators by for instance corporations and functioning as a private network within the public one;

VR, Virtual Reality, is what the research area of man-machine interface is called. Advanced sensor technology hooked up to fast computers, is used to create impressions of real life experiences in interactive, 3 D environments;

VRU, Voice Response Unit, allows incoming voice calls to be answered automatically by a computer;

VSAT, Very Small Aperture Terminal, is a parabol antenna of very small diameter for telecommunications via satellite;

W

WAN, Wide Area Network, is a network covering a large area, connecting an number of LANs of different protocols;

WATS, Wide Area Telephone Service, is a leased service for long distance calls;

WDM, Wavelength Division Multiplexing;

WLL, Wireless Local Loop, replaces the last bit in the network to the subscribers home, with radio based technology;

WORM, Write Once Read Many, is a type of optical disc that allows data to be written only once and to be read many times;

WWW, the World Wide Web, or just **”the web”**, is the part of the Internet that grows every single day. It is a global information system for Internet, developed at CERN. Documents are stored in hypertext systems and the links are transmitted from computer to computer. An alternative interpretation is:

www — world wide wait;

X

X.21 is a CCITT/TSS specification for layer 1 interface in X.25;

X.25 is a recommendation by ISO and CCITT/TSS for an interface between terminals and computers for packet transmission in public networks. Nordic telecom operators have based their Datapak services on X.25;

X.400 is an ISO and CCITT/TSS standard for handling and distribution of e-mail;

X.500 is an ISO and CCITT/TSS standard for distributed directory services.

Y

Y2K, Year 2 Kilo, the year 2000, and whatever may be its implications;

11.5. Cool Cyberspace Buzz Words

Attachment is a text file, a photograph, any picture, a video sequence, etc. attached to an e-mail message;

Brownout is a breakdown on one — or several — components of the Internet, which renders communication on the Net is impossible;

Browser is a web program for looking at text files in the Web. Several browsers are available, Netscape Navigator and Internet Explorer are two well known ones;

to chat is to communicate with other people interactively via the keyboard;

Cookies are small data packets, generated each time you visit a web-site. It registers who you are and make up your "cyber shadow". Cookies can be used to build a profile of a web-site-visitor — and they can be erased;

Cybernaut is what a person may be called when he/she is moving in new dimensions like cyberspace or a virtual reality of that person's choice, often using specific computerised interfaces to make the "journey";

Cyberpunk is described as an anarchistic culture created by William Gibson's book "Neuromancer", 1984;

Cyberspace is the total mass of electronic communication networks, databases, and whatever else is needed for global communication via the Internet;

Cyborgology, the knowledge of cybernetic organisms — see "*The Cyborg Handbook*" for more information;

FAQ, Frequently Asked Questions, some Web-sites provide answers to FAQs before they are being asked;

to flame is to inundate a person's e-mail by sending innumerable e-mail messages in order to block the account, often in order to punish someone who has offended the **Netiquette**;

GNN, the Global Network Navigator, is a site on the Internet, offering news and pointers to important events;

Homeless is everyone without a home page;

HTML, Hyper Text Markup Language, is the language used for producing pages for the Web;

HTML-editor is a program for editing home pages for the Web;

IAD, Internet Addiction Disorder, is as real as alcoholism, according to the Canadian Medical Association Journal. **Source: Wired, October, 1996**

IRC, Inter Relay Chat, is a system for direct communication via the Internet;

Java is the current craze in programming languages for www and the Internet for creating platform independent applications;

MUDs, Multi-User Dimensions, is a simple, text-based, on-line dimension of virtual reality;

Netiquette is a set of rules that any Internet user should adhere to. Breaking the Netiquette may result in the offender being flamed;

Netizen is an inhabitant of the Internet;

newsgroup is a forum for discussion about anything by anybody via e-mail;

PGP, Pretty Good Privacy, is an encryption program for e-mail on the Net, type: <http://www.ifi.uio.no/pgp> ;

smiley is the utilisation of characters on the keyboard like .:-/%-) etc. in order to express personality, emotions, spirit, and so on. Common smileys are: :-) = happy; :D = very happy, :- I = neutral; :* = drunk:-< = angry. Abbreviations can also serve as smileys, for instance CUL8R = see you later; U2 = you too, just to mention a few;

to spam is to massdistribute e-mail messages or advertising to large groups of e-mail accounts, not a very popular activity;

URL, Uniform Resource Locator, is simply a www address;

Usenet is a part of the Internet, made up of news groups and discussion groups;

Virtual Reality, VR, permits people to behave as if they were somewhere they are not. Current technology, including rather clumpy helmets and sensor-laden gloves, will be replaced by new and smarter interface technology, and faster computing. Lightweight "glasses", equipment integrated with everyday clothing and sensors transmitting from a distance will replace today's cybernaut gear. New technologies will also simulate human senses like the feeling of force, resistance, texture, and smell;

WWW, the World Wide Web, or just "**the web**", is the most popular Internet network, signing on new users every single day;

Yahoo is a site on the Internet, offering news and pointers to important events — also see GNN.