

Schoolnet Report POLAND

What is a Schoolnet?

Similar to European networking projects for advancing ICT with partners in 23 countries Schoolnet is the network of national education networks and portal integrating national education portals. The Polish education portal "**Interkl@sa**"- <http://www.interklasa.pl> established by the Ministry of Education (MENiS) advances Polish schoolnetworks.

Many actions and projects are organised within the framework of Schoolnet, mainly to activate the biggest group of schools, teachers and students from all Europe and to create conditions for information transfer and to establish co-operation. These actions create conditions for dynamic and multidirectional, effective work of Schoolnetworks and the possibility of using some assets from the EU by most active schools, groups of teachers or students in Europe. Schoolnet exists thanks to quick and properly working internet connections as well as complex telephone networks.

Schoolnets and policy

The main aim for Poland is to join the process of building an information era by using new information and communication technologies, creating conditions for direct access to information, moulding society consciousness and developing its intellectual and economic potential.

Seym Resolution dated July 14th 2000 gave the government the grounds to take up coordination movements. On 28th of November 2000 Council of Ministers accepted "Standpoint of Seym Resolution dated July 14th 2000 regarding the build-up of a basis of information society in Poland", as well as another document "Aims and trends of developing information society in Poland" prepared by State Committee for Scientific Research co-operating with Ministry of Infrastructure.

Simultaneously, the Council of Ministries has made a commitment to undertake actions that would speed up the development of information society in Poland. The Minister of Infrastructure was obliged to prepare one of those actions. In detail he was responsible for "e-Poland- Strategy of information society development in Poland 2001-2006", based on the EU initiative - eEurope. The task was executed by collecting fragmentary strategies from all interested resorts and set-up up a plan of activities. "e-Poland" was inspired by a European initiative – "e-Europe 2002 – An Information Society for All", where the main aim was to speed up actions for shifting the European society into global information society. From the very beginning the initiative was one of the key elements of the strategy of the European Commission, with the aim to enforce competition of the European economy.

It is expected that it will stimulate the increase of employment, efficiency of work and competition of European products on the global market as well as it will have profitable effect on European society or economic life. The premises of the initiative have their full reflection in the main aims, which were accepted by membership countries:

- Introducing European residents to digital age within all areas of society-profession issues.
- Creating a competitive Europe, with regards to the rest of the world, prepared to finance and initiate new ideas.
- Ensuring that processes include society, economic and cultural conditions of particular European countries, creating trust and enforcing unity of societies.

The tasks for the information technology and development of the information society area in Poland were set until 2006 by the Council of Ministers on 13th January 2004 "Strategy of Polish Information Technology- e-Poland from 2004-2006". According to the records accepted by Sejm regulation dated 17th February 2005 regarding information technology of public services, the minister of information technology will present a five years plan of information technology for the country in January 2006. During the parliamentary discussions about the regulation project a need for creation of a plan was presented, updated through the development concerning communication tools and occurring economic and society changes.

The important aims from the point of view of the society:

- Creating knowledge and society conviction about usefulness of communication and resulting conscious advantages from its use.
- Introducing availability to society communication equipment, resulting in improving living standards, improving society communication, enabling full use of democratic rules.
- Assuring worldwide access to technology and service of information society as well as ability of its use, including support to elder, disabled and other people, to whom living conditions make it difficult to take part in information society;
- Creating trust and acceptance of public administration works by means of electronic communication.
- Assuring proper quality of internet – free from dangerous and potentially harmful contents, offering essential information to society.
- Enabling acquisition of electronic identification (e.g. ID) to all who are interested, and creating the mechanisms which will allow an individual access to database and matters being run in public administration offices (within projects Wrota Polski, ePUAP);

Details:

<i>Nr</i>	<i>Tasks</i>	<i>Coordinator</i>	<i>Time of realisation</i>
1	Completion of equipping the Gymnasium schools in ten stand Internet classrooms	MEN	End 2001
2	Equipping about 100 special Gymnasium schools in 4 stand sets with access to the Internet	MEN	End 2001
3	Providing the above Gymnasium schools in 15 stand Internet classrooms with a server.	MEN	End 2001
	Provision of 373 comprehensive secondary schools(Lyceum)		
	Graded provision of the rest of schools above the Gymnasium	MEN	End 2003
4	Creating school multi media information centres in the school libraries	MEN	End 2001
	Providing 373 libraries in comprehensive secondary schools in 4 stand sets with access to Internet		
	Graded provision of the rest of libraries in the schools above Gymnasium		
		MEN	End 2003
5	Providing elementary schools with information technology classrooms	MEN	End 2006
6	Building up the basis of educational supplies: Educational thematic portals Electronic libraries Educational servers Multimedia educational applications	MEN	Ongoing work

7	Training for teachers in the range of using the tools, techniques and technologies of the information society.	MEN	End 2006
8	The continuation of the teachers improvement with the use of the elaborated model of classes in information end communication technologies during postgraduate studies in the frame of the following editions of central grants	MEN	Ongoing work
9	Organizing the courses or other education forms coordinated by school superintendent granted by regional (Wojewodztwo) authority	MEN	Ongoing work
10	Appointing the standards that should be fulfilled in order to get the accreditation for running courses and schooling concerning information and communications technologies	MEN	After consultations
11	Announcing and carrying out another competition for schooling centres – extension of the number of centres entitled for teachers` training concerning information technology	MEN	End 2001
12	Introducing the rule according to which obtaining the succeeding qualifying grades by the teachers should contain a clause about the necessity of acquiring up to the year 2006 a licence confirming the completion of professional qualifications concerning the use of information technologies	MEN	To discussion Not agreed
13	Training of the librarians in the field of usage of technologies in the information society	MEN	To discussion
14	Training of the headmasters in the field of usage of new technologies in the information society to management	MEN	To discussion

15	Introducing the information technology in the postgraduate studies in the form of 2 terms	MEN	To discussion
16	Working up the idea of continual learning system	MEN	To discussion

ePoland Policy Priorities:

1. Policy Priorities

Responsibilities of ICT integration

The Ministry of National Education and Sport (MoNES) is responsible for the integration of ICT in Polish schools. The main roles played by the ministry are:

- Preparation of legal acts concerning ICT integration (setting standards, approving core curricula, textbooks and educational software, etc.);
- Setting and financing national ICT projects for schools (e.g. equipment of schools with computers and software as well as content).

Local governments are generally responsible for financing schools, including the purchase of additional equipment (hardware and software), covering the costs of internet, financing teacher training etc.

Ministry of National Education Website Of Poland, 2001 (GOV) – <http://www.men.waw.pl/>

Policy Programmes

Poland supports the European Union's vision for ICT in education policy. In particular, the Lisbon strategy: "to make the European Union the most competitive and dynamic knowledge based economy with improved employment and social cohesion" was the basis of the Polish strategy. Consequently, eEurope and eEurope's action plans were followed. However, ICT in Polish education is not as widespread and modern as it is in other European countries.

The main aims and priorities of the policy are:

- Introduce the educational use of ICT in all schools,
- Prepare all teachers to become animators of ICT in their schools and to use ICT for pedagogical purposes,
- Assure the global access to rich educational content for all students.

ePoland – The Action Plan for the information society development in Poland for the years 2001–2006:

<http://www.mi.gov.pl>

Digital Inclusion Policy

MoNES established a programme oriented towards schools in poor rural regions, supporting the introduction of ICT for learning purposes, aiming at the digital inclusion of students from these regions. This programme is part of the rural development programme, co-financed by the World Bank loan. The programme consists of: teacher training, purchase of educational software and the establishment of an Internet based educational resource center.

Policy for Public – Private Partnerships

An example of a Public Private Partnership is an agreement between MoNES and Intel towards teacher training in the frame of “Intel Teach to the Future” programme. During the last three years over 50.000 teachers were trained.

Telecom arrangements

An agreement was signed between MoNES and TPSA (Polish Telecom) on special rates of Internet for Polish schools. The schools are entitled to 40 free hours of Internet connection per month.

2. ICT Practice in School

ICT and the Curriculum

Curricula in Polish schools are decentralized. There is a general, open and goal oriented “core curriculum” on the national level. Each teacher is allowed to prepare and teach the “detailed curriculum” based on the “core curriculum”.

ICT integration in primary, secondary and vocational education

In all types of schools (primary, secondary and vocational), ICT is integrated into the curriculum as a separate subject. ICT is also integrated into other subjects in “core curriculum” but the decision of how to use it depends on the teacher’s skill and on the equipment of the school.

3. Content and Services

Programmes

The Interkl@sa Programme is a nationwide co-operation network of thousands of schools, teachers, pupils and educational NGOs working together to bring Polish education closer to the standards of the European Union. It is a non-governmental programme, but it cooperates closely with the Ministry of National Education and is supported by private companies, especially from the IT sector.

The programme also closely co-operates with Polish media: Public TV, Public Radio and the biggest Polish daily newspaper. The aim of Interkl@sa is to equip all secondary schools by the end of 2004 and all Polish primary schools by the end of 2007.

Interkl@sa started, in co-operation with the private company Intel, the teachers training programme "Intel – teach to the future". Thanks to the cascading structure of the programme, over 40 000 teachers had been trained in using Information and Communication Technology for teaching and for their own work by the end of 2002.

Coordination

The organisation of the required works within the Interkl@sa Programme suits the decentralised and networked structure of the whole initiative. The programme is operated by a Task Force, which works and makes decisions under the leadership of the co-ordinator. Its members include the representatives of the Ministry of National Education, local self-governments, professional educators, companies and NGOs. The Interkl@sa programme benefits from the co-operation with renowned experts. The Task Force has created working groups to develop specific topics.

The Task Force is composed of 26 representatives from the teachers' community, educational NGOs, the Ministry of Education, local authorities from all over Poland and representatives of the private sector. The Task Force and the Programme coordinator are supported by a permanent secretariat which co-ordinates the implementation of all [Interkl@sa](#) programmes.

Range of the national network

Polish Educational Portal: Interkl@sa WWW.INTERKLASA.PL

The Interkl@sa Portal is the first, Poland-wide, non-commercial educational portal, which provides educational content, innovative Internet tools and supports educational initiatives. The educational portal forms a common information platform to be used by various groups of people. There are teachers who co-operate with the national and social initiative Interkl@sa, learners, school administrative staff, local institutions and students' parents who use the service. There are also companies offering software or educational resources and educational organisations that create the Internet-based news bulletins.

Educational Services

Since December 2002 on the Polish Educational Portal Interkl@sa www.interklasa.pl you can find the content of the portal Eduseek, <http://www.eduseek.interklasa.pl/> and since April 2002 you can find the second portal 6plus on the Interkl@sa Internet platform <http://www.6plus.interklasa.pl/> . With the content of Eduseek, Interkl@sa became the biggest non-commercial educational Internet portal in Poland. A few more educational portals targeted at various groups of people have appeared on the Polish market. Interkl@sa does not compete with their offer, but it provides personalised access to their content, as well as to other online and offline information and software sources.

Public–Private Partnerships for hardware

Computers in Polish schools are mostly purchased by the Ministry of National education and Sport, and local governments.

Interkl@sa directs sustained efforts towards organising the collection of computers previously used by Polish companies or their importing from other European countries in a systemic way. In this field Interkl@sa Programme is running two Programmes:

- Notebook for Education

The project Notebook for education aims at providing teachers and educators with possible high quality and favourable notebooks. Interkl@sa runs this project together with IBM. Interkl@sa provides teachers with IBM notebooks to reduced prices. Interkl@sa started the process of implementing mobile computers at Polish schools together with IBM and gives the opportunity to deploy mobile teaching. More information: <http://www.interklasa.pl>

- Second Hand Computers

Aid provided by the state is not enough to satisfy the demand for computers at schools. Still in many highly developed countries most of the computer hardware currently used for educational purposes has been acquired second-hand.

More information: <http://www.komputery.interklasa.pl>

Monitoring

There is a system of official approval of learning material (educational software) based on opinions of independent experts. Schools and teacher may choose the content that is appropriate for their pedagogical ideas, even if it is not on the approval list. Production of educational software is open to all interested companies.

An Internet-based educational resources centre is under construction within the framework of the World Bank project: Rural Development Programme.

4. Teacher Training for ICT

Integration and sharing of responsibilities

Universities in Poland are autonomous and can decide on their curricula. Therefore, they can also decide individually on strategies of teacher training. Their programmes of initial teacher training vary, but all take into account the new technologies and include ICT in their programmes. On the other hand local governments are, together with the head teachers, responsible for in-service teacher training.

Teacher Training Programme/ type of provision

On the Polish educational Interkl@sa portal platform supported by the Polish American Freedom Foundation, educational support of the National Foundation for Computer Literacy – OFEK in cooperation with the Teachers Training Centre in Lodz, Interkl@sa Programme launched the pilot phase of the Computer Long Distance Training Programme. The programme addresses 3 000 teachers (1,500 participants of the Computer for Teacher Programme and 1,500 cooperating with [Interkl@sa Portal](#))

Teachers get training in using Information and Communications Technology for teaching and for their own work. The programme contains 2 phases: an e-learning part and a face-to-face teacher's training near the place of living. 80.000 teachers were trained by the end of 2002 in the programme "Intel - Teach to the Future", which aims to train teachers in using ICT for teaching and for their own work.

The teacher is granted of getting a leader certificate after finishing the course (Master teacher - leader). Each trained teacher can then conduct similar training to 20 other teachers. The skills developed are largely coherent with the standards set for a school IT- coordinator.

5. Infrastructure and Access

The local funds spent on ICT by local governments are smaller and can be estimated at 30% of central funds. There is a large gap in ICT expenditures between rich and poor local governments. Between January 1998 and December 2002 Polish schools, under the programme of the Ministry of National Education, were equipped with a total of 100.000 computers. ICT workrooms have already appeared in all lower secondary schools in Poland.

The aim of Interkl@sa is to equip all secondary schools by the end of 2004 and all Polish primary schools by the end of 2007. By the end of 2002 over 40.000 teachers had been trained in using Information and Communication Technology for teaching and for their own work. About 50% of the computers are older than 4 years.

The connected schools are 14,000 on an overall of 30,568 (primary, secondary and vocational school education). The students per connected computer in 2002/2003 school year are 42 on overall: 60 in primary school; 33 in lower secondary school; 30 in upper secondary school and 32 in vocational school. Teachers participating in official ICT related teacher basic training programmes were 209.050 in 2001 and those who have attended advanced training courses were 122.959.

Who are Schoolnets designed for?

- Teachers
- School managers
- Pupils
- Students
- Press

Searching for information, professional training, internet courses, teaching aids, discussions, websites dedicated to subjects and teachers, data bases, e-mail, chat, etc.

What do Schoolnets contain?

- Common indexing of Internet education sources
- Collecting, evidencing and disseminating wide local and area information
- Wide access of e-information to the local society
- Computer trainings

Communication networks including a high bandwidth create new possibilities of scientific and research centres co-operation, enabling increases of common access to information sources. It allows combining efforts of scientists that are working in many places into one resilient system of developing and promoting new ideas. Efficient multimedia communication of scientific and academic circles is the basis of innovation not only in the scientific but also in the economic field.

The experience shows that often used solutions at universities in scientific institutes and research-developing units may become the solution used in each stage of life. An intense development of computer software has recently occurred, allowing free of charge use, especially software with so called source code, known as free of charge software or Open Source software.

Open Source software allows to overcome quickly technological barriers. Computer scientists from all over the world can equally take part in its development. Open Source software is a perfect didactical material and its creation allows acquainting proper team co-operation. The use of free software can also be a source of savings, financial benefits for schools are the advantage.

Aims:

Promotion of open source software in public and commercial application

Planned actions:

Cut costs and full access to source codes, increasing security level of network software systems in public and commercial application

Who is involved?

- IT teachers
- School Headmasters
- Commission of Education, Science and Youth
- Ministry Of National Education
- European Union

What research has been done about Schoolnets?

The use of information and communication technologies in enterprises and households in 2004:

http://www.stat.gov.pl/dane_spol-gosp/spoleczenstwo_informacyjne/2004/

Computers for students in schools and colleges during the school year 2003/2004:

http://www.stat.gov.pl/urzedz/zg/publikacje/rocznik_woj/edukacja_wychowanie/04w10_09.pdf

The premises of the information technology plan:

http://www.mnii.gov.pl/mnii/index.jsp?place=Menu06&news_cat_id=862&layout=2

Schedule of information society development for 2001-2006:

<http://www.kbn.gov.pl/cele/epolska.html>

Schoolnets in Schools

The essential factor of changes in surrounding world is to build the information society and its attributes including services. In a world of global competition, the country has to follow the changes, and as we started later than other countries, we have to put more efforts to level out outstanding works.

- Students and teachers use computers and the Internet to search, select and use information.
- School libraries with multimedia centres are access points to the Internet as well as to educational and informational sources.
- Teachers use computers and information technology, including the use of Internet, in didactical work.
- Students take part in inter-school competitions and contests, where computers and Internet are part of tasks concerning the content.
- Students design and running of school websites.
- Computer laboratories are used not only to teach given subjects but are also used in ventures – awaited by local society.

Financial aspects of Schoolnets

The main sponsors of SchoolNet are the Ministry of National Education co-operating with Polish-American Freedom Foundation along with help from Poznań Supercomputing and Networking Centre at Polish Academy of Sciences. Interkl@sa created the first non-commercial educational portal. The project is under the auspices of: Polish Public Television, Polish Radio and "Gazeta Wyborcza".

The programme of teachers training in using computers to teach different subjects was financed by INTEL together with MICROSOFT. Within the first edition of the programme 40.000 teachers were trained till middle of 2002. Polish administrative unit society and Cisco Systems have signed an agreement to create 300 local science technology academies in secondary schools, which would offer courses for most wanted science technology professions, ending with world certificates.

The program of "Local Science Technology Academies" (LAI) was prepared together with world wide known companies. Its basis is Cisco Systems venture: „Cisco Networking Academy". Four additional companies have joined the program (Sun Microsystems, Alma Internet, Apple, Novell), creating together four training modules.

The project "Local European Information Centre" is running by Foundation for Economic Education together with Friedricha Eberta Foundation, European Commission, and Office of the Committee for European Integration and Ministry of National Education.

Organisational aspects of Schoolnets

Refer to question "Financial aspects of Schoolnets" and "Examples of Schoolnets".

Examples of Schoolnets

The portal www.interklasa.pl offers reliable, credible information - regarding European Union, Polish education and projects undertaken by Interkl@sa. The website is addressed to teachers, students and their parents and soon will be enlarged with additional branches. Among the recourses education service 6plus www.6plus.interklasa.pl is existing since April 2002. Recourses of Interklasa platform have also been extended with recourses from the popular education portal Edusek www.eduseek.interklasa.pl.

For the needs in educational area Interklasa platform has been equipped with many useful mechanisms like electronic mail, discussions, surveys, teachers on-line bookshop (project carried out together with CODN), free websites for schools and map of schools are worth to play attention on.

At present 27.000 Polish schools are registered in the interactive map. In May 2003 an electronic bulletin has been activated, and its popularity is still growing.

Social Network of Education Libraries project is connected with Polish Education Portal. Polish-American Freedom Foundation supports the project and its aim is to transform the school and other libraries into multimedia and internet information centres. For the needs of the project according to European standards and in co-operation with The European Schoolnet a structure of social network of education libraries is being organised. Libraries co-operate by means of internet and their aims are:

- Common indexation of Internet educational sources. Here it is the partner of European project: European Treasury Browser (ETB) <http://etb.eun.org>
- Collecting, evidencing and disseminating wide local and area information
- Wide access of e-information to the local society

Other important elements of library project are:

- Multimedia Library – full file of educational programmes available on the Polish market
- Development of library software and services of ETB project by OPEN SOURCE executed by young computer programmers.

Library network has its own central library server maintained and serviced by Poznań Supercomputing and Networking Centre at Polish Academy of Sciences.

Information: www.biblioteka.edu.pl

Institute of National Heritage supervises the creation of **Polish Culture Portal**, **which** is successively enlarged by historical and present information regarding Polish culture and national heritage, taking into consideration monuments and other cultural objects. It will become the starting point to prepare the internet Encyclopaedia of Polish Culture **Polish Culture Portal** <http://www.culture.pl/pl/culture> and National Cultural Information Service - KIOSK®.

Polish Gates is the proposal name for an integrated information system, allowing public services – the name of the project symbolises the opening of Poland to new technologies, co-operating with other countries as well as openness to the citizens needs. This programme aims to increase the effectiveness of public administration, connected with public services, by 10% and potentially by 40%. Transparency of public administration works should also to be improved - by access to reliable information.

IKONKA programme aims to activate Public Internet Access Points (PIAP) in public libraries of all communes and provinces. These places are called “internet reading rooms”. The aim of the programme is to ensure easy, free of charge access to internet to local communities according to the premises of Lisbon Strategy and Polish Strategy for Strategy of Polish Information Technology: e-Poland from 2004-2006.

Within the IKONKA programme – Ministry of Science and Information Technology equips libraries with computers along with software and ensures basic Internet training to all workers.

Each reading room receives three computers equipped with an operation system, office software and anti-virus programmes as well as equipment needed to connect to the Internet such as WI-FI allowing a direct Internet connection.

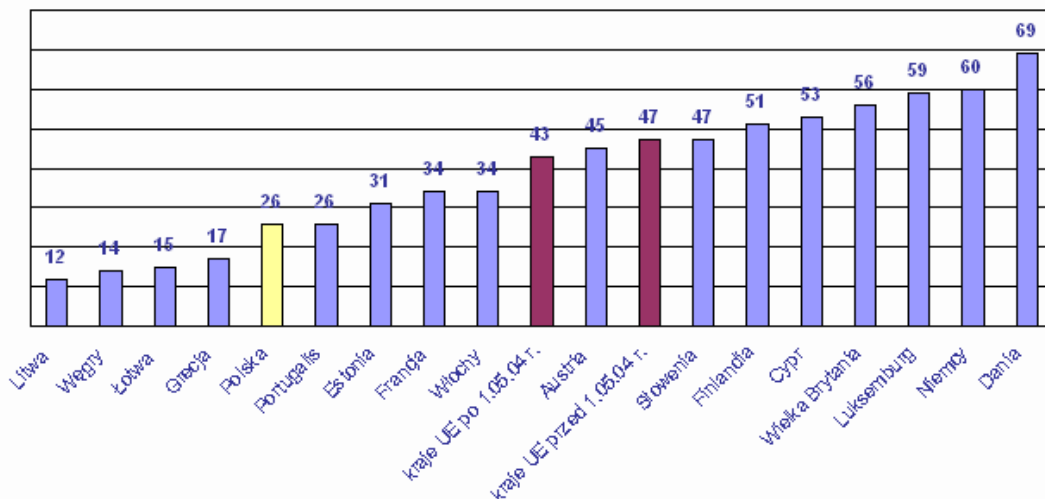
Use of ICT in schools

According to information by the World Bank, 1 dollar invested in communication causes investments of 10 dollars in other branches of economy. Proper working communication networks cause an increase of gross national product by 1%.

According to the report of Supreme Chamber of Control, dated 27th January 2005 regarding use of computer laboratories in schools, computer laboratories can be found in 68% of primary schools, 76% of grammar schools and less than 30% of secondary schools.

The number of all types of public schools with computer laboratories has increased between 2000 and 2004 from 8.000 to 18.000. Students use the laboratories mainly during science technology classes. Computers are occasionally used during other subject's classes. The reasons are complex: There are 20 students per 1 computer. Teachers of other subjects do not know how to use the computers during their classes. Schools had difficulties with proper organisation of such classes, since standard computer laboratories, bought by Ministry of Education, have only 9 posts.

Percentage of households with Internet connection at home in 2004. (%)



Why should we have Schoolnets?

The strategy of an united Europe initiated together with the e-Europe programme has its main aim in creating conditions of rapid economic growth based on dissemination of digital technologies. One of the basic means of achieving this aim is investment in education. Tomorrows' society is seen as "information society", "education society"; "where education process does not end at school but last for all our lives".

At present we are dealing with the education reform in Poland. That means: arduous transformation of 20 centuries module of education into bringing up and adjusting to active learning (whole life development). The determinants of the progress are the following three elements:

- Area of commonly accessed (digital) information
- Creative activity by people in his area
- Ability of co-operation with other partners.

Any other information, examples, research one Schoolnets

There are schools in our town that are connected with real wire-net , i.e. three separated buildings working on one line and operating all both office equipment and education rooms. It is possible to send messages via Internet from each place in the school to language laboratories, the library or the office. These are the schools of vocational and comprehensive profile, e.g. The Primary School is connected with Technical School and Secondary High School. Such type of school net works in following schools: Prywatne Szkoły im. Marii Skłodowskiej-Curie, Zespół Szkół Budowlanych , Techniczne Zakłady Naukowe, Zespół Szkół Technicznych.

Examples of European Schoolnets for schools

EUN Schoolnet (www.eun.org)

e-TEN

ENISA

CORDIS

References

ePoland – The Action Plan for the Information Society Development in Poland for the years 2001 – 2006. Contact: Jerzy Dalek, Ministry of National Education.

<http://www.mi.gov.pl>

Ministry of Science and Information Technology

<http://www.mnii.gov.pl>

The Polish Chamber of Information Technology and Telecommunications

<http://www.piit.org.pl>

Pro- Europe – European Multimedia Academy of Youth

<http://www.proeuropa.org.pl>

Polish Education Portal Interkl@sa

<http://www.interklasa.pl>

Library of Interklasa

<http://www.biblioteka.edu.pl>

Ministry of National Education

<http://www.menis.gov.pl>

Polish Culture Portal

<http://www.culture.pl>

Committee of Scientific Research

<http://www.kbn.gov.pl>

Observatories of the multi-media resources in education