



Greek School Network and Networking Technologies Directorate

<http://nts.cti.gr>

The main activities of the **Greek School Network and Networking Technologies Directorate (GSN-NTS)** of **Computer Technology Institute** and **Press “Diophantus” (CTI)** are the design, implementation and support of large scale network infrastructures and Internet services. The **GSN-NTS** has a major role in the development of these technological areas, through its involvement in pioneer **National** and **European** research and development projects, especially those that concern the **Greek School Network** and **ICT infrastructures** at **Greek schools**.

Therefore, the key activities of the GSN-NTS analytically include:

- The planning, development and operation of large-scale broadband networks and networking services, especially those of the Greek School Network (GSN, www.sch.gr/en).
- The planning, development and operation of advanced e-services and Internet applications for e-Learning and e-Government.
- The provision of support and training services to Internet services users.
- The provision of technical advisor services on issues concerning the planning and implementation of network infrastructures and Internet services at schools and Public Sector.
- The planning, development and operation of cloud and grid infrastructures.
- The conduction of Research & Development at the area of networking technologies.

Greek School Network



The GSN (www.sch.gr/en) is the national network of the **Ministry of Education (MoE, www.minedu.gov.gr)**, which safely interconnects all schools of Primary and Secondary education, including educational units abroad, services and entities supervised by the MoE at central and regional level, service providers of lifelong learning, students, teaching staff, other educators and other entities of MoE.

Through GSN, the MoE provides the educational community, with communication and collaboration, e-learning services, e-government services as well as helpdesk and user support services. Therefore, the GSN provides electronic services to more than **220.000 users (>16.000 schools, >6.700 administrative units, >110.000 teachers and >70.000 students)**.

Recent projects

National projects

- The Greek School Network, <http://www.sch.gr/en>
- Grant beneficiaries system with Training Vouchers of the Ministry of Labour, <http://voucher.gov.gr/en>
- A portal for informing the citizens with the active programs in the context of the National Life Long Learning Program, <http://step.gov.gr>
- Network for the Prevention and Treatment of Bullying and School Violence phenomena, <http://stop-bullying.sch.gr/en>
- Scholarship system for graduates from schools of Technical Education, <http://mathiteia4u.gr>

European projects

- A large-scale research effort focusing on high-performance, low-energy and cost as well as small-size optical interconnects across the different hierarchy levels in data center and high-performance computing systems: on-board, board-to-board and rack-to-rack, <http://www.phoxtrot.eu>
- A novel application agnostic fault-tolerance solution for cloud infrastructures that make it possible for the first time to migrate critical enterprise workloads to the cloud without compromising on the availability and performance of the system, <http://www.orbitproject.eu>
- Virtual Microgrids for smart energy networks, <http://www.ict-vimsen.eu>
- Optical performance monitoring enabling dynamic networks using a holistic cross-layer, self-configurable truly flexible approach, <http://orchestraproject.eu>
- eTwinning: The community of schools in Europe, <https://www.etwinning.net>
- Monitoring energy consumption in schools, <http://gen6.sch.gr>

Specialties

- Broadband Networks • Next Generation Networks • Sensor Networks • Cloud Computing • e-Learning Services
- e-Government Services • Research and Development

Computer Technology Institute and Press “Diophantus”
Greek School Network and Networking Technologies Directorate



Director: Assist. Prof. Dr. Michael Paraskevas

Scientific Director: Prof. Dr. Emmanouel Varvarigos