

C Network and Other Project Acronyms

ARPANET Advanced Research Projects Agency Network, later Defense Advanced Research Projects Agency Network (1969–1983), United States Department of Defense, first packet-switching network and predecessor to the Internet.

ASU (*avtomatizirovannaya sistema upravleniya*): Automated system of management. The Soviet term for a management information and control system, or, effectively, a local network between an onsite computer and attending industrial processes that it supervises at a factory.

CEMI (*tsentralnyi ekonomicheskii-matematicheskii institut*): The Central Economic-Mathematical Institute of the Academy of Sciences in Moscow, proposed by Nemchinov, built on his Laboratory of Economic Mathematical Methods, founded in 1963, first directed by Nikolai Fedorenko, and an early collaborator with Viktor Glushkov's Institute of Cybernetics on the OGAS (All-State Automated System) Project and the EGSVTs (Unified State Network of Computing Centers) network projects.

CSA (*tsentral'noe statisticheskoe upravleniye*): The Central Statistical Administration (or Directorate) was, as part of the Council of Ministers (the highest executive council in the Soviet Union) between 1948 and 1987, the main organization in the Soviet state charged with statistical oversight.

EASU (*ekonomicheskaya avtomatizirovannaya sistema upravleniya*): Economic Automated Management System proposed by Anatoly Kitov (1959).

ESS (*edinaya sistema svyazi*): Unified Communication System, a comprehensive data communication network planned by Aleksandr Kharkevich (1963).

EGSVTs (*edinogosudarstvennaya set' vyichisletel'nikh tsentrov*): Unified State Network of Computing Centers, technical base of the OGAS (All-State

Automated System) Project, coauthored by Viktor Glushkov and Nikolai Fedorenko (1963). In other literature, associated with a complex series of other subdevelopments. The EGSVTs was a subset of the overall OGAS Project.

OGAS(U) (*obshche-gosudarstvennaya avtomatizirovannay sistema upravleniya*): All-State Automated System (of Management). Inspired by Anatoly Kitov's EASU (Economic Automatic Management System) and composed of a national network connecting and managing ASUs (automated system of management), it was proposed by Viktor Glushkov and others between 1963 and 1985, developed variously by the Institute of Cybernetics, CEMI (Central Economic-Mathematical Institute), and others. EGSVTs (Unified State Network of Computing Centers) was projected to be its the technical base. SOFE (System for the Optimal Functioning of the Economy) was projected to be its modeling system.

SAGE: Semi-Automatic Ground Environment, an air defense control system used by the United States and Canada from the late 1950s through the 1980s. Although ineffectual as a strategic network, it appears to have been an important site for developing online, real-time interactive computing over long distances.

SOFE (*sistema optimal'nogo funktsionirovaniya ekonomiki*): System for the Optimal Functioning of the Economy, developed under Nikolai Fedorenko at CEMI (Central Economic-Mathematical Institute), which pioneered systems models and theories for optimizing economic planning since the 1960s. Initially a companion program for developing the optimization and economic management software behind the OGAS (All-State Automated System) Project.