

“The ministry of education and science of RF”

“SIO "Academy of cognitive natural sciences"”

“The Saint-Petersburg state
electrotechnical university "LETI"”

**The topology and conception of organization
of the integration environment of “SIO "ACNS"”**

**The collection of scientific reports and multimedia-presentations (slides)
in the form of scientific monography on the rights of manuscript**

Saint-Petersburg city
2013 y.

Reviewers:

Vetrov A.N. The topology and conception of organization of the integration environment of "SIO "ACNS"": the collection of scientific reports and multimedia-presentations (slides) in the form of scientific monography on the rights of manuscript (philosophical sciences (natural, technical, economic, humanitarian, social, medical, sports and military sciences)) (spec. 01.02.01, 05.13.01, 05.13.10, 19.00.02 (19.00.03), 08.00.10) / A.N. Vetrov; "SIO "ACNS"". – SPb.: "SIO "ACNS"", "SPbSETU "LETI"", 2013. – 8 p. (+ 78 slides).

In the collection of scientific reports and multimedia-presentations (slides) in the form of scientific monography on the rights of manuscript presented directly the topology of organization of the integration environment of "SIO "ACNS"" and the conception of organization of the integration environment of "SIO "ACNS"".

It is intended for the scientists, staff of SRI, teachers and students of HEIs, and also the qualified specialists-experts on the scientific specialties: 05.13.01 – "The system analysis, control and information processing" (technics), 05.13.06 – "Automation of technological processes and manufactures" (industry), 05.13.10 – "Control in social and economic systems" (technics), 19.00.02 – "Psycho-physiology of perception" (technics and medicine), 19.00.03 – "Psychology of work, engineering psychology and ergonomics" (psychology), 08.00.10 – "Finance, monetary circulation and credit" (economics and finance), 08.00.12 – "The accounting and statistics" (the reporting documents of (credit) organizations), 08.00.13 – "Mathematical and instrumental methods of economics" (the financial analysis), 01.02.01 – "Theoretical mechanics" (the modeling of hybrid systems with difficult structure), 02.00.04 – "Physical chemistry" (the multi-nucleus chemical elements and nuclear polymers) and 03.00.03 – "Molecular biology" (the modeling of desoxyribonucleic acid).

on the rights of manuscript

© Vetrov A.N., 2013 y.

The table of contents

- I. The materials of “The XIXth international scientific-practical conference
"Modern education: contents, technologies, quality",
RF, Saint-Petersburg city, the 24th of April 2013 y.,
“The Saint-Petersburg state
electrotechnical university "LETI"” (“The SPbSETU "LETI"”)
- 1.1. The topology of organization of the integration environment of “SIO "ACNS"” 4
- 1.2. The conception of organization of the integration environment of “SIO "ACNS"” 6

Vetrov Anatoly Nikolaevich

The topology of organization of the integration environment of "SIO "ACNS""

the author of the unique cognitive modeling technology
RF, Saint-Petersburg city, www.vetrovan.spb.ru

"AUT CMT SFA" Vetrov A.N. (see www.vetrovan.spb.ru) was developed the topology of organization of the integration environment of "SIO "ACNS"" (see www.acns.spb.ru), which directly acts as at the same time the main component of the system of science and education of the modern post-industrial society (k – the codificator and (or) name of the country of arrangement (location), i – the codificator and (or) name of the region of arrangement (location), j – the codificator and (or) name of the area of arrangement (location)), and also provides:
1) the association of diverse information environments (according to licenses and permissions) [the information-educational environments of the modern educational organizations, the information-scientific environments of the modern scientific organizations and others];
1.1) the internationalization of information environments at the international level ["SIO "ACNS"_{kij} – the basic scientific noncommercial organization (establishment), "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N."_{kij} – the basic scientific-productional noncommercial organization (establishment), "SF "SFA CMT" n. a. Prokopenko N.A."_{kij} – the basic noncommercial organization (establishment) scientific fund, (V)BEE_{kij} – the (virtual) basic educational establishment (organization) and (V)SRC_{kij} – the (virtual) scientific-research centre (organization)];
1.2) the creation and association of regional inf. environments at the regional level [(V)RSRC_{kij} – the (virtual) regional SRC (organization), (V)RTC_{kij} – the (virtual) regional educational (training) centre (organization), R(V)U_{kij} – the regional (virtual) university (organization) and (V)RCC_{kij} – the (virtual) regional consultation centre (organization)];
1.3) the creation and modernization of local information environments at the local level [(V)RSRC_{kij} – the (virtual) representation of SRC (organization) and (V)RBEE_{kij} – the (virtual) representation of BEE (organization), (V)CCSRC_{kij} – the (virtual) consultation centre of SRC (organization) and (V)CCBEE_{kij} – the (virtual) consultation center of BEE (organization)];
2) the association of deficit and proficit subjects of the inf.-educational environments [the person without education as the potential subject of training, the pupil and graduate of the preschool educational establishment, the pupil and graduate of the special preschool establishment, the pupil and graduate of the (average) comprehensive school, the student and graduate of the professional (special) educational establishment, the student and graduate of the higher (special) educational institution, the specialist of top skills with the certain scientific (academic) degree and others – directly from the educational and scientific organizations of (not) residents (see two competitive units of Vetrov A.N. in the coll. monography of "IHEAS" ("IBI") "Factors of success in educational activity of modern HEI (higher education institution)", 2004 y.);

3) the association of diverse inf. resources of the information-educational environments [the primary source of information – the object, process or phenomenon of (in)animate nature at the isomorphism of condition generate the stream of signals of the def. kind, which are subjects to observe and registration to the inf. carrier by the person (org. individual) or to measurement by the tech. means (sensors, voltmeters, oscillographs and others); the secondary source of information – the information provided in the form of data, which are stored on the traditional (paper, punched-tape, punched-card and others) and electronic carriers of information of the electronic calculating machines (the information storages on the magnetic tapes Internal / External Streamers, the inf. storages on the flexible Int. / Ext. FDD and hard magnetic drives Int. / Ext. HDD, the laser storages of information on the optical disks Int. / Ext. CD / DVD / BR-RO(A)M, the information storages on the electronic disks Internal / External Electronic Drives and on the electronic memory cards of Internal / External Electronic Memory Cards); the primary receiver of information – sensor which is carrying out the measurement of continuously arriving signals as the information carriers of the first kind; the secondary receiver of information – the tech. means of collecting, receiving and address distribution of the information of different mission to the tech. information carriers; the consumer of information – the person (organic individual), the information requirement of which initiates the receiving of information on the subject area (problem environment); the traditional printing production – the book, textbook, monography, paper, journal, article, manual, collection of tasks, methodical book, laboratory practical work, dictionary, directory (reference book), report, normative documents, spec. and add. help literature; the electronic printing production – the information resources of local, regional and global computer networks, banks of data and DB, which contain the information in the form of data on the subject areas; the means of display – allow to trace the static and dynamic condition of studied object, process or phenomenon (alphanumeric-digital board, device on punched-tape, monitor, slide projector and plasma panel); the visualization means – allow to provide the visual interpretation of the shown information fragments (tables, schemes, drawings and models); the study and monitoring means – allow to study the diff. objects, processes and phenomena (lab. stand, recorder-registrator, oscillograph, voltmeter, microscope, telescope and model); the audio means – provide to record and reproduction of the audio-stream (the tape-recorder, dictaphone and language laboratory cabinet in the inf.-educational environment); the video- and TV means – realize to record and reproduction of the video-flow of information (the video-recorder, TV, multimedia-projector and SAT for receiving of TV signal)].

It is recommended to study with the following literature references:

1. Vetrov A.N. The evolution features of the theory of information and information technologies on a threshold of the XXIst century: Monography ("Philosophy") (spec. 01.02.01, 05.13.01, 05.13.10, 19.00.03, 08.00.10); "SPbSETU "LETI"". – SPb.: "SPbSETU "LETI"", 2004, M.: "RAS", 2007. – 141 p.: pic. – Bibliogr. 16 nom. – Rus. – Dep. in "RAS".
2. Vetrov A.N. The realization features of the information-educational environments of automated training // "Automation and modern technologies", №8, 2008. – SPb.: "SPbSETU "LETI"", 2007 (Bibliogr. 13 nom. – Rus. – Dep. in "VINITI" of "RAS"). – 10 p.).

Vetrov Anatoly Nikolaevich

The conception of organization of the integration environment of “SIO "ACNS””

the author of the unique cognitive modeling technology
RF, Saint-Petersburg city, www.vetrovan.spb.ru

“AUT CMT SFA” Vetrov A.N. (see www.vetrovan.spb.ru) was developed the conception of organization of “SIO "ACNS”” integration environment (see www.acns.spb.ru), which *directly acts as the essential strategic component* (in the long-term and medium-term horizon of planning – in the perspective) *and the extremely actually important operational-tactical component* (in the medium-term and short-term of horizon of planning – at the current moment of time) *of the system of science and education of the modern country*, because allows:

1) to choose the conception and strategy of informatization of the specified organizational structures based on the evolution of the existing formations of the post-industrial society [considers the purposes of political and social-economic development of the country, region, city, area and municipal district at the stage of history, the local, regional and int. programs of transition to the information society, the state policy of creation, introduction and use of the means of automation with taking into account the needs of profit and deficit subjects in (non)production spheres]; [“AUT CMT SFA” Vetrov A.N. and The Government of RF at support of The President of RF were chosen “The park of the 50th-century of The Great October socialist revolution named after V.I. Ulyanov (Lenin)” for the creation and effective use of “SIO "ACNS””, “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, “SF "SFACMT" n.a. Prokopenko NA”, “SPbEC n.a. Brezhnev LI.” at “EAST n.a. Sobchak AA.” and others org., which are the essential products (valuable monuments) of architecture, town-planning and landscape-gardening art, and also the important objects of historical, cultural, art and scientific heritage for the (non)residents at the international level, act as the essential basis of the federal and international politics and many different programs (actions) in the area of the state and municipal, economic and scientific-technical, educational (social) and cultural, national and international, ergonomic and ecological evolution of RF and the foreign countries according to the existing Constitution of RF and the international legislation at the territory of the countries of the world]; [The application have been sent to “The Nobel committee” through The Government of RF for the receiving “The Nobel prize” for the purpose of creation of the specified objects)];

2) to finish its essence and tactics according to the offered structure of organizations [reflects the purposes, plan, the problems of introduction, tasks, principles and approaches, the set fund. and applied areas of research and subject areas of use, the condition of the environment of introduction and use of the main and deriv. scientific results, directions, the kinds of different support, the system of complex assessment of quality, the main and additional sources of financing of construction and maintenance – due to means of “The Nobel prize” of the author and financial means of the countries(y), the target directions of expense of the mon. means, the classification of the means of automation – the level and kind of inf. systems of the class ISO 9000-14000, ERP SAP R3, Balanced score card and 1C];

3) the formation of diverse information resources, products and services [“AUT CMT SFA”, acad. of (nat.) sci. (“SIO "ACNS"”) Vetrov A.N. – www.vetrovan.spb.ru, “SIO "Academy of cognitive natural sciences"” – www.acns.spb.ru, “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” – www.sfacmt.spb.ru, “SF "SFA CMT" n. a. Prokopenko N.A.” – www.sfacmtfund.spb.ru; the designing of information storages of the specified economic subjects – the infological schemes of the databases of the information systems are interesting];

4) the support of possibility of the employment (work), vocational training, retraining and the increase of professional skills of the various (potential) employees [on physical-mathematical sciences (spec. 01.02.01 – “Theoretical mechanics” and others), on tech. sciences (spec. 05.13.10 – “Management in social and economic systems”, 05.13.01 – “The system analysis, control and information processing” and others), on social sciences (spec. 10.02.21 – “Applied and math. linguistics” and others), on econ. sciences (spec. 08.00.10 – “Finance, monetary circulation and credit” and others), on chemical sciences (spec. 02.00.04 – “Physical chemistry” and others), on biological sciences (spec. 03.00.03 – “Molecular biology” and others), on medical sciences (spec. 14.01.07 – “Eye illnesses and ophthalmology”, 19.00.01 – “Cognitive psychology”, 19.00.02 – “Psycho-physiology of perception”, 19.00.03 – “Psychology of work, engineering psychology and ergonomics” and others)];

5) the estimation of condition of the specified investment projects and organizational structures [the technological reserves of technological process of the scientific-research work, the intermediate and final scientific results for the sphere of education and science, the technics and technology, the social-economic, scientific-technical effect of actions, the questions of safe use of the means of automation by the available personnel];

6) the preparation of documentation on the state registration of the specified organizations [the normative basis of the state registration and licensing on ACKEA (OKVED), the charter, foundation agreement, documents for tax accounting in FS on taxes and fees of RF, the documents for opening of the settlement account in rubles and currency in the serving bank, the applications for the state registration of the specified essential objects, the official requests about the providing of the details containing in USRR, the documents in department of FSBE “FKP Rosreestr” across Saint-Petersburg city (atm. regulations), the documents for the registration in the simplified order of rights (of separate categories) of citizens on the separate objects of real estate (specified objects), the applications for the registration and licensing of geodetic and cartographical works, the applications concerning the official receiving of materials (data) FKGF, the applications concerning the registration of works for the creation (use) of GIS with the specified objects, the requests about the providing data on the certain cadastral engineer, the forms concerning the anticorruption activity (in the unforeseen situations) and the requisites for the implementation of payments through the serving (commercial) bank];

7) the analysis of recommendations and offers for feedback communications with “AUT CMT SFA” Vetrov A.N. [the modernization, change and adaptation of the modular structure and elements, the urgent addition of actual tasks of the current and future period of time are possible in the short-term, medium-term and long-term horizon of planning of life cycle, the correction of actual plans and working programs in the real scale time].

© Vetrov Anatoly Nikolaevich, 2013 y.
The topology and conception of organization
of the integration environment of “SIO "ACNS””
The collection of scientific reports and multimedia-presentations (slides)
in the form of scientific monography on the rights of manuscript

Editor

Translator

Accepted to printing 31.12.13 y. Format 60×84 1/16.
Paper offset. Printing offset. 0,50 pr. sh.
Set “Times New Roman”. Circulation ____ copies Order 000.

© Vetrov A.N., 2013 y.
RF, Saint-Petersburg city, www.vetrovan.spb.ru