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The topology of organization of “The SIO "ACNS"” integrational environment

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

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

Recommended to study with following literature references:
 1. A.N. Vetrov 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); “The SPbSETU “LETI””. – SPb.: “The SPbSETU “LETI””, 2004, M.: “RAS”, 2007. – 141 p.: pic. – Bibliogr. 16 nom. – Rus. – Dep. in “RAS”.
 2. A.N. Vetrov The realization features of information-educational environments of automated training // “Automation and modern technologies”, №8, 2008. – SPb.: “The SPbSETU “LETI””, 2007 (Bibliogr. 13 nom. – Rus. – Dep. in “The VINITI” of “RAS”). – 10 p.).