

Glossary

Avant-project — research activities for justification of engineering method and feasibility of R&D aimed at achievement of technical leadership of the industry. The result of an avant-project is justified Terms of Reference (ToR) for R&D performance.

Back-end — the final stage of life cycle of nuclear facilities and materials.

VVER-TOI — typical optimized digital design of a two-unit nuclear power plant complying with the nuclear and radiation safety requirements.

Data-centric architecture — information arrangement and storage method in which the elements of storage and processing are separate databases and links. Alternative to data-centric architecture is document-centric system in which the element of storage and processing is a document.

Coolant supercritical parameters — the reactor coolant outlet temperature (5400C) and pressure exceeding 24 MPa.

Engineering — engineering and consulting services of design, calculation and analytical character, development of projects feasibility studies, recommendations in the field of production and management organization, i.e. the whole scope of commercial services for arrangement and support of the process of manufacture and sales of products, service and operation of industrial, infrastructural and other facilities.

Metadata — data that provide information about other information or data, additional information about the contents or the object. Metadata disclose information about the features and properties characterizing some substance, making it possible to automatically trace and manage them in large data flow.

Ontology (in system engineering) — explicit specification of conceptualization where conceptualization means a description of a set of objects and relations between them. Formally, ontology is related to definitions of terms organized in a taxonomy, their description and rules of arrangement. Ontology is a mathematical description of knowledge and its use for storage, processing, analysis and integration of information.

Obeya — in Japanese means “Big room or big conference hall” where work is coordinated and decisions are taken. Obeya room is a humanistic approach to new products development.

Proprietary software (PS) — software which is private property of the software developers or copyright holders that does not meet the criteria of free software (the availability of an open source code is not sufficient) The copyright holder of proprietary software retains the exclusive privilege for use, fully or in significant aspects. Normally, proprietary software means any non-free software, including semi-free software.

Sustainable development — international agenda of business participation in harmonious development of economic, environmental and social aspects of social life which is classified as such development that meets the needs of the present without compromising the ability to meet the needs of future generations.

UN sustainable development goals — a collection of goals for international cooperation set by the United Nations General Assembly in 2015, containing 17 sustainable development goals and 169 relevant targets.

NPP Power Unit (power unit) — part of a nuclear power plant comprising main and auxiliary equipment, combined in a unified process system designed to generate electricity by using one or two turbines without heat generation or with heat generation by converting the nuclear fuel energy.

AA 1000 — a series of international standards aimed at improving the quality of reporting, transparency and sustainability of business due to maximal engagement of stakeholders and consideration of their opinion during the analysis of the company activity.

EPC Companies — companies implementing “turn-key” projects. The functions of an EPC companies include designing, procurement and construction.

EPCM Companies — companies using methods and means of portfolio management of “turn-key” projects. The functions of an EPCM company include designing, procurement, construction and project management.

GRI (Global Reporting Initiative) — initiative for reporting in the field of sustainable development.

INES (International Nuclear Event Scale) — international scale of nuclear incidents, a tool for defining the level of violations of nuclear and radiation safety.

International Project Management Association (IPMA Delta) Model — enhancing of effectiveness of the company design activities implemented in accordance with the best international practice in the field of project management. Confirmation of the company competence in the field of project management on the international level.

ISO — a series of international standards for company management system aimed at ensuring a predictable and stable level of quality.

ISO 9001 — international standard defining requirements to quality management system of products and services.

ISO 14001 — international standard of environmental management. It describes the main rules that a company may follow for establishment of an effective environmental management system.

LCOE (Levelized Cost of Electricity) — Levelized Cost of Electricity [KW·h] during the whole life cycles for generation of 1 KW·h, expressed in monetary unit. LCOE is determined as the unit cost of electricity, the sum of all the expenses (capital, operational, including the cost of fuel, treatment of spent nuclear fuel and radioactive waste, personnel expenses, NPP decommissioning and other costs) during the whole life of an NPP (considering the time value of money) in relation to the NPP capacity (design or actual capacity).

LTIFR (Lost Time Injury Frequency Rate) — occupational injuries frequency rate.

Multi-D — comprehensive industrial process Multi-D platform ensuring capital construction project management.

Rapid Foresight — technology which allows the people who participate in the foresight, to agree upon the future concept, their activities in relation to such future and their desired future. The method consists in joint work of the participants in a time map; work with images and diagrams instead of texts.

Worldskills — international non-commercial movement aimed at improving the profile and recognition of skilled people, development of professional education by harmonization of the best practices and professional standards all over the world by arrangement and conduct of professional skills contests.