

Explanatory Notes on Main Statistical Indicators

Personnel Engaged in Science and Technology Activities

refer to persons directly engaged in science and technology activities as well as persons engaged in science and technology management and persons offering direct services to science and technology activities in the surveyed entities in the reporting year. Persons directly engaged in science and technology activities include: persons engaged in science and technology activities in such institutions as research labs of entities, laboratories, technical development centers and middle-stage test workshops (bases); persons not working in the above-mentioned institutions but included in the science and technology activity project (task) team, etc. Persons engaged in science and technology management and persons offering direct services for science and technology activities include administrative staff related to science and technology activities, as well as persons directly providing information and literature, supply of materials, equipment maintenance and other services.

R&D refers to systematic and creative activities in the field of science and technology to increase the total knowledge, and apply such knowledge to create new applications, including three kinds of activities, i.e. basic research, applied research, and experimental development.

R&D Personnel refer to persons in the surveyed entities who are engaged in three kinds of activities, i.e. basic research, applied research and experimental development. They include those who participate in the above-mentioned three kinds of activities directly, research management personnel and persons directly serving these activities. Persons providing direct services include those who provide information and literature, supply of materials, equipment maintenance and other services.

Full-Time Equivalent of R&D Personnel is an indicator globally used to compare input of scientific talents. It refers to

the sum of workload of full-time R&D personnel (the personnel whose accumulative annual working time involved in R&D activities takes 90% and above of the whole working time) plus the workload of non-full time personnel that is equivalent of the actual working time.

Internal R&D Expenditure means the actual disbursement of investigated entities on internal R&D activities (basic research, applied research, and experimental development) in the reporting year, including direct spending on R&D project (task) activities, and management expenses and service fees indirectly spent on R&D activities, R&D related basic construction expense and external assisting processing charges, etc., excluding production-based activity expense, loan repayment expense and fund transferred to external institution cooperated or entrusted to conduct R&D activities.

Patent is the abbreviation of patent right, referring to the exclusive right granted by patent authorities upon examination and approval of inventions and creations to the inventors and designers with regard to the invention, including inventions, utility models and industrial designs.

Invention Patents means the invention mentioned in the Patent Law and its detailed rules for implementation, i.e. the new technological solutions presented for the product, methodology, or improvement.

Utility Model means the utility model mentioned in the Patent Law and its detailed rules for implementation, i.e. the new practical technological solutions presented for the product shape, structure, color or combination.

Industrial Design means the industrial design mentioned in the Patent Law and its detailed rules for implementation, i.e. new designs of product shape, pattern, color or combination which are aesthetic and suitable for industrial applications.