

Annex 8 – Knowledge Intensive Activities by NACE Rev. 2**Aggregation of Knowledge Intensive Activities based on NACE Rev.2****Presentation of the EU data**

An activity is classified as **knowledge intensive** if tertiary educated persons employed (according to ISCED97, levels 5+6 or ISCED11, levels 5 to 8) represent more than 33% of the total employment in that activity. The definition is built based on the average number of employed persons aged 15-64 at aggregated EU-27 level in 2008 and 2009 according to the NACE Rev. 2 at 2-digit, using the EU Labour Force Survey data.

Based on this classification, there are two aggregates in use: **total Knowledge Intensive Activities (KIA)** and **Knowledge Intensive Activities – Business Industries (KIABI)**.

The lists of activities included in each aggregate, according to the NACE Rev.2 – 2 digit levels are presented in the tables below:

Table 1 – Total Knowledge Intensive Activities (KIA)

NACE Rev. 2 codes	Description
09	Mining support service activities
19	Manufacture of coke and refined petroleum products
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations
26	Manufacture of computer, electronic and optical products
51	Air transport
58	Publishing activities
59	Motion picture, video and television programme production and pharmaceutical preparations
60	Programming and broadcasting activities
61	Telecommunications
62	Computer programming, consultancy and related activities
63	Information service activities
64	Financial service activities, except insurance and pension funding
65	Insurance, reinsurance and pension funding, except compulsory social security
66	Activities auxiliary to financial services and insurance activities
69	Legal and accounting activities
70	Activities of head offices; management consultancy activities
71	Architectural and engineering activities; technical testing and analysis
72	Scientific research and development
73	Advertising and market research
74	Other professional, scientific and technical activities
75	Veterinary activities
78	Employment activities
79	Travel agency, tour operator reservation service and related activities
84	Public administration and defence; compulsory social security
85	Education
86	Human health activities
90	Creative, arts and entertainment activities
91	Libraries, archives, museums and other cultural activities
94	Activities of membership organisations
99	Activities of extraterritorial organisations and bodies

Annex 8 – Knowledge Intensive Activities by NACE Rev. 2

Table 2 – Total Knowledge Intensive Activities – Business Industries (KIABI)

NACE Rev. 2 codes	Description
09	Mining support service activities
19	Manufacture of coke and refined petroleum products
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations
26	Manufacture of computer, electronic and optical products
51	Air transport
58	Publishing activities
59	Motion picture, video and television programme production and pharmaceutical preparations
60	Programming and broadcasting activities
61	Telecommunications
62	Computer programming, consultancy and related activities
63	Information service activities
64	Financial service activities, except insurance and pension funding
65	Insurance, reinsurance and pension funding, except compulsory social security
66	Activities auxiliary to financial services and insurance activities
69	Legal and accounting activities
70	Activities of head offices; management consultancy activities
71	Architectural and engineering activities; technical testing and analysis
72	Scientific research and development
73	Advertising and market research
74	Other professional, scientific and technical activities
75	Veterinary activities
78	Employment activities
79	Travel agency, tour operator reservation service and related activities
90	Creative, arts and entertainment activities

The data come from the European Labour Force Survey (EU-LFS).

Presentation of the USA and Japan data

As the data for Japan and the United States are not available on Eurostat production unit in charge with LFS statistics, they are extracted from the available public data:

- USA: Current Population Survey (CPS) with the North American Industry Classification System (NAICS);
- JP: Labour Force Survey with the Japan Standard Industrial Classification (JSIC).

The main challenge is to find the correspondence between NACE and NAICS and JSIC. The Classification Unit in Eurostat produced the reference tables for KIA: NACE - NAICS and NACE - JSIC at 2- digit level. On this basis, the correspondence tables have been created, using the headings. In total 4 correspondence tables ([NACE Rev.1.1 - NAICS 2002](#), [NACE Rev.2 - NAICS 2007](#), [NACE Rev.1.1 - JSIC 11](#) and [NACE Rev.2 - JSIC 12](#)) are available.

Eurostat indicators on High-tech industry and Knowledge – intensive services

Annex 8 – Knowledge Intensive Activities by NACE Rev. 2

Table 3 – Total KIA and KIABI categories for the USA data

KIA	KIABI
Support activities for mining	Support activities for mining
Computers and electronic products manufacturing	Computers and electronic products manufacturing
Petroleum and coal products manufacturing	Petroleum and coal products manufacturing
Pharmaceutical and medicine manufacturing	Pharmaceutical and medicine manufacturing
Air transportation	Air transportation
Information	Information (without Libraries and archives)
Finance and Insurance	Finance and Insurance
Legal services	Legal services
Accounting, tax preparation, bookkeeping, and payroll services	Accounting, tax preparation, bookkeeping, and payroll services
Architectural, engineering, and related services	Architectural, engineering, and related services
Computer systems design and related services	Computer systems design and related services
Management, scientific, and technical consulting services	Management, scientific, and technical consulting services
Scientific research and development services	Scientific research and development services
Advertising, public relations, and related services	Advertising, public relations, and related services
Veterinary services	Veterinary services
Other professional, scientific, and technical services	Other professional, scientific, and technical services
Employment services	Employment services
Travel arrangements and reservation services	Travel arrangements and reservation services
Independent artists, performing arts, spectator sports, and related industries	Independent artists, performing arts, spectator sports, and related industries
Hospitals	
Offices of physicians	
Offices of dentists	
Offices of chiropractors	
Offices of optometrists	
Offices of other health practitioners	
Educational services	
Museums, art galleries, historical sites, and similar institutions	
Membership associations and organizations	
Public administration	

Eurostat indicators on High-tech industry and Knowledge – intensive services

Annex 8 – Knowledge Intensive Activities by NACE Rev. 2

Table 4 – Total KIA and KIABI categories for the JP data

KIA	KIABI
Mining and quarrying of stone and gravel	Mining and quarrying of stone and gravel
Manufacture of chemical and allied products	Manufacture of chemical and allied products
Manufacture of petroleum and coal products	Manufacture of petroleum and coal products
Manufacture of business oriented machinery	Manufacture of business oriented machinery
Electronic parts, devices and electronic circuits	Electronic parts, devices and electronic circuits
Manufacture of electrical machinery, equipment and supplies	Manufacture of electrical machinery, equipment and supplies
Manufacture of information and communication electronics equipment	Manufacture of information and communication electronics equipment
Communications	Communications
Broadcasting	Broadcasting
Information services	Information services
Internet based services	Internet based services
Video picture, sound information, character information production and distribution	Video picture, sound information, character information production and distribution
Air transport	Air transport
Finance and insurance	Finance and insurance
Scientific and development research institutes	Scientific and development research institutes
Professional services, n.e.c	Professional services, n.e.c
Advertising	Advertising
Technical services, n.e.c	Technical services, n.e.c
Miscellaneous living-related and personal services	Miscellaneous living-related and personal services
Services for amusement and hobbies	Services for amusement and hobbies
School education	Employment and worker dispatching services
Miscellaneous education, learning support	
Medical and other health services	
Social insurance and social welfare	
Employment and worker dispatching services	
Political, business and cultural organizations	
Religion	
Foreign governments and international agencies in Japan	
National Government services	
Local Government services	