CENTRO DE RELAÇÕES LABORAIS

EMPLOYMENT AND TRAINING
2017 ANNUAL REPORT

EXECUTIVE SUMMARY

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MINISTÉRIO DO TRABALHO, SOLIDARIEDADE E SEGURANÇA SOCIAL
CENTRO DE RELAÇÕES LABORAIS
Praça de Londres, nº 2 - Piso 9
1049-056 – Lisboa, Portugal
Email: geral@crl.mtsss.pt
www.crlaborais.pt

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1. *Macroeconomic Background – Portugal in the European Context*

Following a deep recession, the Portuguese economy began to experience a recovery in 2013. In an initial phase, a major contraction in domestic demand was accompanied by substantial growth in exports and a fall in imports, which together enabled the country to balance its current account. After 2014, this equilibrium in the balance of payments continued, while the combination of a recovery in both private consumption and investment and a significant further rise in exports permitted some positive variations in GDP, albeit not yet enough to make up for the real fall that had occurred in 2009-2013. Portugal's divergence from the EU average in this respect grew still further until 2016.

The labour market outperformed this variation in GDP, although the reduction in unemployment in 2013-2017 (-373 thousand) exceeded the increase in employment in the same period (+305 thousand). This difference was due to a combination of the modest growth in GDP and the large number of people who emigrated in 2011-2015, which was itself reflected in a decrease of 231 thousand in the active population across that period. 438 thousand active persons were unemployed in Mainland Portugal in 2017, representing 8.8% of the active population and a 7 pp fall in the rate since 2013.

From 2013 onwards, employment growth, which was more dynamic in more labour-intensive sectors, was reflected in both a stagnation in average productivity and a rise in the differential between the Portuguese and EU averages. This stagnation is rooted not only in the fact that the growth in employment has been stronger in labour-intensive sectors, but also in the slow recovery in investment, which in 2017 remained at 74% of its 2008 level.

A recovery in public and private investment is crucial, not only to ensuring that the export dynamic is sustainable in the medium term, but also for the recovery in domestic demand to be able to take place without inflationary stresses that might compromise the competitiveness of the Portuguese economy.

2. The Labour Market in Portugal and the European Union

2.1 Active and inactive population and activity rate

In 2016-2017, the active population in Mainland Portugal rose by 0.8% – the first recorded increase since 2008. This growth was more significant among the active female population and in the 55-64-year age bracket (+6.2%). The Portuguese activity rate remains above the EU average. Having said this, in the younger age ranges the activity rate in Portugal fell systematically from 2008 (40.9%) to 2017 (34%), whereas in the EU it has stabilised at about 42% in recent years.

The inactive population moved in the other direction in 2017, with 44 thousand fewer people than in 2016. This was the first overall reduction in a decade and essentially reflected a drop in every category aged 15 years or over, except retirees.

It is worth noting that there were 195 thousand "available persons not seeking employment", in Mainland Portugal – 5.6% of all inactive persons (a reduction of 9.6% in this proportion from 2016 to 2017). We should also highlight the decrease in the percentage of NEETs between the ages of 15 and 29 years, which is now 2.8 pp below the EU average (10.6% vs 13.4% respectively).

The increase in the active population did not make up for the reduction in the inactive population. The existing trend towards a fall in the total population residing in Mainland Portugal was maintained in 2017 (-0.2% compared to 2016), when it was partly explained by a negative net migratory balance of -8.3 thousand individuals.

2.2 Employment

In 2017, total employment numbers reached their highest value for the last seven years, exceeding that recorded in 2011 (+10.7 thousand persons). Employment grew three times as much as in 2016 (+143 thousand in 2017 vs +54 thousand in 2016), with the rise benefitting both sexes to a similar extent. The male employment rate was 59%, which is to say 10 pp higher than the female rate. The overall employment rate in Portugal exceeded the EU equivalent for the first time since 2010.

This rise in employment did not affect all age brackets equally. However, we should note the positive variation in the younger ranges – the rate in the 15-34 year-old group increased for the first time in a decade – and also in the 55-64 year-old bracket. The latter contributed 43% to the variation in total employment.

On average, the employed population's qualifications increased. There was a 6.4% increase in employed persons with secondary education, a 3% increase in those with tertiary education, and a 1.7% increase in those with basic education.

In terms of the variation in the employed population by occupational situation in 2016-2017, the number of employees (TCOs) as a proportion of total employment rose, not just in its own right (+4.3% in the number of TCOs), but also because the number of self-employed workers (TCP) fell by 0.7% (a trend that had been occurring since 2009).

In 2017, 88.8% of the employed population worked full-time, with an overall rise of 4.1% in the total number of employees compared to 2016. The part-time employed population fell by 2.7%.

In Portugal, the proportion of fixed-term contracts continues to differ significantly from the average value for the EU countries as a whole. Since 2008, the EU average has not strayed far from 14% – on average, c. 8 pp below the Portuguese value. However, the number of employees with open-ended contracts grew by 4.7% in 2016-2017 – a rate which substantially exceeded the growth in fixed-term employees (+3.3%). As such, 78% of the 3,756.4 thousand employees in Mainland Portugal in 2017 were parties to open-ended employment contracts, while 18.4% had fixed-term contracts.

In sectoral terms, in Mainland Portugal, the population employed in *Industry, construction, energy and water* (25.3% of the total) grew more (+4.2%) than that employed in *Services* (68.5% of the total, with growth of +3.8%), whereas employment in *Agriculture, farming of animals, hunting, forestry and fishing,* which represented 6.2% of all employment, fell by 5.4% in relation to 2016.

The *Manufacturing* subsectors that displayed the most significant growth in 2017 were: *Manufacture of computer equipment, communication equipment and electronic and optical products*; *Manufacture of electrical equipment*; *Manufacture of machinery and equipment n.e.c.* (+10 thousand persons in the 3 subsectors); *Manufacture of base metals* (+7.7 thousand); and *Manufacture of textiles and manufacture of wearing apparel* (+7.3 thousand). In the case of *Services*, it was *Accommodation and food service activities* (+39.6 thousand); *Administrative and support service activities* (+10.2 thousand); and *Transportation and storage* (+13.9 thousand). We should also highlight the increase in employment in *Human health and* *social work activities,* which has in fact been continuous over the last decade, rising by around 120 thousand across 2008-2017.

The relative weight of the different occupational groups has undergone profound changes since 2008. The number of *Professionals* has systematically grown and their proportion of the employed population has risen by 4.1 pp since 2011. The same is true of the *Technicians and associate professionals* group (+2.8 pp)

Where employment in the *Public Administrations* was concerned, in December 2017 there were 618.9 thousand occupied jobs in Mainland Portugal – a YoY increase of c. 5.5 thousand. Of the total, 81.5% worked in the *Central Administration*, while the remainder were in the *Regional and Local Administration* (17.2%) and the *Social Security Funds* (1.3%).

2.3 Unemployment

In 2017, 8.8% of the active population in Mainland Portugal were unemployed – 2.2 pp less than in 2016. This decrease brought the unemployment rate closer to the European average, continuing a tendency that has been ongoing since 2013, albeit the Portuguese rate was still 1.4 pp above the EU equivalent. The youth unemployment rate behaved similarly, attaining 23.8% in 2017, which is to say 7 pp above the EU average.

438 thousand persons were unemployed in Mainland Portugal in 2017 – a 19.3% (-104.7 thousand) fall compared to the year before. Unlike in 2016, the majority were women.

The younger the age bracket, the higher the unemployment rate. In terms of educational levels, the 2017 unemployment rate among the active population with basic education or less was 9.5% – practically the same as the rate among the active population with secondary education (9.9%). The rate among active persons with tertiary education was substantially lower, at 6.5%.

In Mainland Portugal in 2017, 12% of the unemployed population (c. 52.4 thousand persons) were looking for their first job, while 88% (385.6 thousand) were seeking a new one. Since 2013, the percentage of unemployed persons looking for a new job has been falling faster than that of those seeking a first position. The majority of the latter were young persons between the ages of 15 and 24 years (76.5% of the total).

In 2017, the unemployed persons looking for a new job who came from the *Services* sector represented 64% of the total in this category, those from *Industry, construction, energy and* *water* represented 24.3%, and those from *Agriculture, farming of animals, hunting, forestry and fishing*, 3%.

In 2017, the occupational groups that presented the largest number of unemployed seeking a new job were *Services and Sales workers* and *Craft and related trade workers* Compared to 2016, unemployment fell in every occupational group except *Skilled agricultural, forestry and fishery workers*.

The number of long-term unemployed (LTUs) fell by 25.3% in relation to 2016, to a total of 250.2 thousand in 2017, albeit the reduction among persons who had been unemployed for up to 12 months was less than half that much (-9.5%). It is especially worth noting that the number of persons unemployed for more than 2 years (nearly 70% of all LTUs) decreased by 29.3%.

According to information supplied by the Ministry of Labour, Solidarity and Social Security's IT Institute (MTSSS-II), there were around 171.3 thousand beneficiaries currently receiving unemployment benefits in 2017. Of these, 316 individuals received an allowance for termination of an activity – i.e. they had been independent workers. The number of beneficiaries receiving benefits fell in YoY terms (-23%), for an absolute decrease of -51.1 thousand beneficiaries.

2.4 Labour flows between employment, unemployment and inactivity

In 2017, the employed population presented a positive YoY variation of c. 161.3 thousand persons, resulting primarily from the entry of individuals whose status had previously been unemployed. The unemployed population, on the other hand, fell by around 121.3 thousand, due above all to the number of persons who transited from unemployment to employment. The decrease in the number of inactive persons was largely due to their acquisition of unemployed status.

New recruits to the Public Administrations numbered 54.5 thousand persons, while definitive departures attained 53.6 thousand. If we add this difference (+909) to the balance of mobility-induced entries and exits (+4.5 thousand), we find that the number of PA workers rose by 5.4 thousand in 2017.

According to data from MTSSS-II, 161 employers experienced a lay-off situation in 2017. This figure represented a continuation of the downward trend that had already existed since 2014, following a peak for the decade in 2012 and 2013, when 550 and 547 enterprises laid off workers respectively.

2017 saw the notification of 396 collective redundancy processes encompassing a total of around 3.5 thousand workers. In YoY terms, this 2017 value represented a reduction of c. 6%, with 25 fewer such processes notified.

3. Business Structure and Workers in Enterprises

In 2016, 276.3 thousand enterprises in Mainland Portugal responded to the Personnel Survey (*Quadros de Pessoal*, QP) – a YoY increase of 1.2%. In the same year, the Integrated Corporate Accounts System (*Sistema de Contas Integradas das Empresas*, SCIE) recorded the accounts of 1,444.6 thousand enterprises, of which c. 68% were sole proprietorships (enterprises with a single individual owner) and the rest were companies (enterprises with more than one owner). According to the same source, in 2015-2016 the number of sole proprietorships grew by 3.1%, while that of companies rose by 2.4%.

According to the QP, the number of enterprises fell in every year from 2008 to 2013. Since then, it has risen again, but more slowly, with the result that the total number of enterprises was substantially lower in 2016 than it had been in 2008. The SCIE presents a similar variation. It shows that the type of enterprise which experienced the largest decrease during the earlier phase was sole proprietorships, but that this was also the category which then increased the most. In 2016, the number of companies already exceeded that at the beginning of the series, whereas the number of sole proprietorships was still quite a lot lower than it had been.

According to the QP, 2,820 thousand workers were employed by enterprises in 2016. Using different criteria, the SCIE puts this number at 3,576.8 thousand, 76% of whom (2.719 thousand) worked for companies. Employment rose from 2015 to 2016, growing by 2.6% in sole proprietorships and 3.8% in companies.

With the sole exception of the Construction sector, neither the country's business structure nor the structure of employment within enterprises experienced significant change between 2008 and 2016. The sectors in which both the number of enterprises and the number of employed workers fell most were *Wholesale and retail trade, repair of motor vehicles and motorcycles*; *Manufacturing*; and *Construction*. However, in the *Human health and social work activities* sector, both the number of enterprises and the number of workers increased in every year.

According to the QP, since 2013 the largest recorded increase in the number of enterprises has been in *Accommodation and food service activities*, while the SCIE also reveals considerable increases in the *Administrative and support service activities* and *Agriculture* sectors. Where the number of people employed by enterprises is concerned, in addition to these sectors there were also significant increases in the *Wholesale and retail trade, repair of motor vehicles and motorcycles* and *Manufacturing* sectors.

If we analyse the enterprises and the employment in **technology/knowledge-intensive sectors**,[1] we can see that in 2016 the **high and medium-high technology areas** accounted for 1.8% of all enterprises and 5.6% of all workers. The equivalent values for **ICT enterprises** were 1.2% and 2.6% respectively. In both cases, the relative weight of both enterprises and employment either remained stable or increased over the course of the series.

High and medium-high technology enterprises comprised 7.9% of all Manufacturing enterprises and employed 16.7% of the sector's workers. Enterprises enjoying advanced competitive factors represented 42.2% of the total for the sector and employed 45% of its workers. The largest percentage was, however, recorded by **low-technology enterprises** (61.2% of all Manufacturing enterprises and 57% of Manufacturing workers). The percentage of workers in all these categories either remained constant or rose between 2008 and 2016, but the proportion of **high and medium-high technology enterprises** fell between 2013 and 2015. The variation in the other two categories was the inverse: the proportion of enterprises with **advanced competitive factors** increased until 2012, then fell considerably between 2013 and 2015, before rising slightly between 2015 and 2016. The variation in the **low-technology industries** was precisely the reverse.

[1] In accordance with the EUROSTAT aggregations "High technology" and "Knowledge-based services" (see Table in Annexe).

4. Pay and Earnings

According to the *Personnel Survey* (QP) data, in October 2016 the average monthly earnings of employees (TCOs) who worked full-time in Mainland Portugal were 1,107.86 € (+1% YoY). Average female monthly earnings were c. 80.7% of the male equivalent. Median earnings in 2016 were 800 €/month.

The monthly base pay of full-time TCOs was 924.94 €, which also constituted a YoY rise (+1.2%). The median base pay was 650 €/month.

According to data from the Survey of earnings and working hours (*Inquérito aos ganhos e à duração do trabalho*), in October 2016, 23.3% of full-time TCOs earned the Guaranteed Minimum Monthly Wage (RMMG). The percentage of female TCOs with that level of pay was around 10 pp higher than the male equivalent. The percentage of all TCOs who earned the RMMG rose by 2.2 pp in relation to 2015.

Analysis of the pay structure of full-time employees in 2016 in terms of base monthly wage plus regular supplementary amounts received reveals that the pay bracket with the highest percentage of workers continued to be "600.00-999.99 €/month" (52.5% of this universe). The second most representative bracket was "1,000.00-2.499.99 €" (27.2%). Compared to 2015, there was a 6.7 pp reduction in the bracket "National Minimum Wage (SMN) to 599.99 €/month" (8.8% of these TCOs in 2016), with the corresponding rise primarily situated in the "600.00-999.99 €/month" bracket, which grew by 5.8 pp, albeit the percentage of SMN recipients also increased by 0.8 pp.

According to Statistics Portugal (INE) data for the country in 2017, the Labour Cost Index (average hourly cost) rose by 3.1% YoY. The following sectors were the largest contributors to this increase: *Professional, Scientific and Technical Activities* (+6.5%), and *Public Administration and Defence and Compulsory Social Security (*+6.3%), closely followed by *Education* (+5.3%).

According to data from the Directorate-General of Administration and Public Employment (DGAEP) for 2017, in Mainland Portugal the average monthly earnings of full-time Public Administration workers were 1,695.40 €, while average monthly base pay was 1,466.30 €.

In the case of state-owned companies and other public-sector entities, average monthly earnings in Mainland Portugal in 2017 were 2,100.29 € in Central Administration entities and 1,050.86 € in Local Administration entities, while the respective average monthly base pay was 1,405.27 € and 856.03 €.

5. Vocational Training and Active Employment Measures

According to data from the Integrated Educational and Training Offer Information and Management System (*Sistema Integrado de Informação e Gestão da Oferta Educativa e Formativa*, SIGO), around 197.8 thousand individuals enrolled on education and training courses in 2017. Of these, 154.5 thousand attended courses intended for young persons up to the age of 24 years, while the remaining 43.4 thousand took adult education and training courses. 82.1% of young trainees (126.8 thousand) took vocational courses.

In addition, SIGO also tells us that, in 2017, 286 thousand persons attended modular training actions under the aegis of the *National Qualifications Catalogue* (*Catálogo Nacional de Qualificações*, CNQ), while there were 518.2 thousand enrolments on continuous training actions that were not part of the CNQ system.

62.8% of the latter enrolments were by active members of the population; 5% were by unemployed persons.

According to data from the National Agency for Qualification and Vocational Education (ANQEP), 125.9 thousand persons registered with the Qualify Programme (*Programa Qualifica*, PQ)[2] in 2017. 10.2 thousand of these obtained certification of their academic and/or vocational competencies. Besides this, 97.1 thousand were forwarded to education, vocational training or dual certification offers.

Training actions promoted by the Institute for Employment and Vocational Training (IEFP) covered 294.4 thousand persons, 246.8 thousand of whom attended Adult Qualification (QA) actions. 90% of the 31.8 thousand young persons encompassed by Youth Qualification (QJ)

[2] The 'Qualify Programme' (*Programa Qualifica*) is designed to promote the qualification of adults by means of competency recognition, validation and certification (RVCC) processes complemented by participation in certified training actions selected in accordance with each trainee's individual profile and needs. It is targeted at persons aged 18 years or more who are seeking a qualification.

actions took Apprenticeship Courses (*Cursos de Aprendizagem*),[3] while the remainder (c. 3,300 persons) took Technological Specialisation Courses (*Cursos de Especialização Tecnológica*).[4]

In terms of Adult Qualification, the Active Life (*Vida Activa*) measure[5] covered 117.1 thousand persons (47.4% of the total). It was followed by Modular Training (*Formação Modular*)[6] (62.8 thousand persons), and Adult Education and Training Courses (*Cursos de Educação e Formação de Adultos*) (46.3 thousand).

In 2017, 92.5% of the trainees on Youth Qualification actions were unemployed when they began their training. 73% of the participants in Adult Qualification actions were unemployed, while 22.1% were employed active persons.

In 2017, the employment support measures promoted by IEFP covered 12.3 thousand persons, 42.7 thousand of whom had entered into Employment-Insertion Contracts (*Contratos Emprego-Inserção*),[7] 39.9 thousand were on Occupational Insertion (*Inserção Profissional*) internships,[8] and 36.1 thousand had received Hiring Support (*Apoios à Contratação*). The number of people covered by employment support measures fell in relation to 2016 for every measure except Hiring Support.

In the case of the Occupational Insertion measures, 52.9% of individuals who concluded their internship in 2017 were employed. The overwhelming majority were placed with the entity at

[3] Apprenticeship courses are initial alternating vocational training courses aimed at young people, prioritising their labour-market insertion while simultaneously enabling them to pursue their studies. They award both a level-4 under the QNQ (National Qualifications Framework, *Quadro Nacional de Qualificações*, QNQ) and completion of school year 12. They last for a total of 3,700 hours and are reserved for young persons below the age of 25 years who have already completed at least school year 9, but not year 12.

[4] Technological specialisation courses are post-secondary, training courses designed to provide a level-5 under the QNQ. They combine general or vocational secondary education and/or training with post-secondary technical training.
They last between 1200 and 1560 hours, and are primarily targeted at young persons and adults who have either completed secondary education or have at least concluded school years 10 and 11 and are enrolled in year 12, or already possess level 3 or 4 under the QNQ.

[5] The Active Life measure is aimed at unemployed persons who have not completed school year 9 or do not possess a qualification that is suited to the labour market. It seeks to help (re)integrate them into the labour market by providing them with short-duration training units. These training paths last between 25 and 300 hours.

[6] Certified Modular Training (FM) is an adult training format in which the training plan is made up of one or more Short-Duration Training Units (UFCDs), in accordance with the National Qualifications Catalogue (*Catálogo Nacional de Qualificações*, CNQ). As a rule, UFCDs can be taken from either the CNQ's basic training section or its technological training section.

[7] This measure is aimed at unemployed persons receiving the unemployment benefit or the social unemployment and social integration income allowance with a view to doing socially useful work at public entities or private not-for-profit entities for up to 12 months.

[8] The Occupational Insertion measures include different types of vocational internships with a variety of names.

which they had been an intern. However, only 17.4% (4.8 thousand persons) of individuals who had completed "Employment-Insertion Contracts" were employed, and 3.4 thousand of them had created their own job.

According to data from IEFP, the number of job offers received by Job Centres continued to fall over the course of 2017 (-2.1%), in a continuation of downward trend that has become progressively visible since late 2015. A total of 143.6 thousand such offers were recorded in 2017. The number of placements by Job Centres also fell (-16.3%) in 2017, for a reduction of 16.7 thousand placements in relation to December 2016. In 2017, 60% of offers were filled by means of placements made by Job Centres.

Industry by Technological Intensity

	NACE rev. 2	Technological intensity	Enterprises enjoying Advanced competitive factors	ICT enterprises
21	**Manufacture of basic pharmaceutical products and pharmaceutical preparations**	**High-tecnology**	X	
26	**Manufacture of computer,electronic and optical products**	**High-tecnology**	X	
261	manufacture of electronil components and boards	High-tecnology		X
262	manufacture of computers and peripheral equipment	High-tecnology		X
263	manufacture of communication equipment	High-tecnology		X
264	manufacture of consumer electronics	High-tecnology		X
268	manufacture of magnetic and optival media	High-tecnology		X
30	**Manufacture of other transport equipment**		X	
303	manufacture of air and space craft and related machinery	High-tecnology		
20	**Manufactute of chemicals and chemical products**	**Medium-high technology**	X	
254	Manufacture of weapons and ammunition	Medium-high technology	X	
27	**Manufacture of electric equipment**	Medium-high technology	X	
28	Manufacture of machinery and equipment n.e.c.	Medium-high technology	X	
29	Manufacture of motor vehicles,trailers and semi-trailers	Medium-high technology	X	
302	Manufacture of railway locomotives and rolling stock	Medium-high technology	X	
304	Manufacture of military fighting vehicles	Medium-high technology	X	
309	Manufacture of transport equipment n.e.c.	Medium-high technology	X	
325	Manufacture of medical and dental instruments and supplies	Medium-high technology	X	
18	**Printing and reprduction of recorded media**		X	
182	Reproduction os recorded media	Medium-low technology	X	
19	**Manufacture of coke and refined petroleum products**	**Medium-low technology**		
22	**Manufacture of rubber and plastic products**	**Medium-low technology**	X	
23	**Manufacture of other non-metallic mineral products**	**Medium-low technology**	X	
24	**Manufacture of basic metals**	**Medium-low technology**	X	
25	**Manufacture of fabricated metal products, except machiney and equipment**		X	
251	manufacture os structural metal products	Medium-low technology	X	
252	manufacture os tanks,reservoirs and containers of metal	Medium-low technology	X	
253	manufacture os steam generators, except central heating hot water boilers	Medium-low technology	X	
255	Forging, pressing,stampingand roll-forming of metal;powder metallurgy	Medium-low technology	X	
256	treatment and coating of metals;machining	Medium-low technology	X	
257	manufacture of cutlery, tools and general hardware	Medium-low technology	X	
259	manufacture of other fabricated metal products	Medium-low technology	X	
301	Building of ships and boats	Medium-low technology	X	
33	**Repair and installation of machinery and equipment**	**Medium-low technology**	X	
10	**Manufacture of food products**	**Low-techonology**		
11	**Manufacture of beverages**	**Low-techonology**		
12	**Manufacture of tobacco products**	**Low-techonology**		
13	**manufacture of textiles**	**Low-techonology**		
14	**Manufacture of wearing apparel**	**Low-techonology**		
15	**Manufacture of leather and related products**	**Low-techonology**		
16	**Manufacture of wood and of products of wood and cork, except furniture;manufacture of articles of straw and plaiting materials**	**Low-techonology**		
17	**Manufacture of paper and paper products**	**Low-techonology**		
181	Printing and service activities related to printing	Low-techonology	X	
31	**Manufacture of furniture**	**Low-techonology**		
321	manufacture of jewellery, bijouterie and related activities	Low-techonology		
322	manufacture of musical instruments	Low-techonology		
323	manufacture of sports goods	Low-techonology		
324	manufacture of games and toys	Low-techonology		
329	manufacturing n.e.c.	Low-techonology		

Services by Knowledge-intensity

	NACE rev. 2	Knowledge-intensive services	ICT enterprises
59	Motion picture,video and television programme production, sound recording and music publish activities	High-tech knowledge-intensive services	
60	Programming and broadcasting activities	High-tech knowledge-intensive services	
61	Telecommunications	High-tech knowledge-intensive services	X
62	Computer programming, consultancy and related activities	High-tech knowledge-intensive services	X
63	Information service activities	High-tech knowledge-intensive services	
631	data processing,hosting and related activities,web portals		X
72	Scientific research and development	High-tech knowledge-intensive services	
50	Water transport	Knowledge-intensive market services	
51	Air transport	Knowledge-intensive market services	
69	Legal and accounting activities	Knowledge-intensive market services	
70	Activities of head offices, management consultancy activities	Knowledge-intensive market services	
71	Architectural and enginering activities;technical testing and analysis	Knowledge-intensive market services	
73	Advertising and market research	Knowledge-intensive market services	
74	Other professional, scientific and technical activities	Knowledge-intensive market services	
78	Employment activities	Knowledge-intensive market services	
80	Security and investigation activities	Knowledge-intensive market services	
k	Financial and insurance activities	Knowledge-intensive financial services	
58	Publishing activities	Other knowledge-intensive services	
582	software publishing		X
75	Veterenary activities	Other knowledge-intensive services	
O	Public administration and defence, compulsory social security	Other knowledge-intensive services	
P	Education	Other knowledge-intensive services	
Q	Human health and social work activities	Other knowledge-intensive services	
R	Arts, entertainment and recreation	Other knowledge-intensive services	
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	Less knowledge-intensive market services	
46	Wholesale trade, except of motor vehicles and motorcycles	Less knowledge-intensive market services	
465	wholesale of information and communication equipment		X
47	Real trade except of motor vehicles and motorcycles	Less knowledge-intensive market services	
49	Land transport and transport via pipeline	Less knowledge-intensive market services	
52	Warehousing and support activities for transportation	Less knowledge-intensive market services	
I	Accommodation and food services	Less knowledge-intensive market services	
L	Real estate activities	Less knowledge-intensive market services	
77	Rental and leasing activities	Less knowledge-intensive market services	
79	Travel agency, tour operator reservation service and related activities	Less knowledge-intensive market services	
81	Services to buildings and landscape activities	Less knowledge-intensive market services	
82	Other administrative, office support and other business support activities	Less knowledge-intensive market services	
95	Repair of computers and personal and household goods	Less knowledge-intensive market services	
951	repair of computers and communication equipment		X
53	Postal and courier activities	Other less knowledge-intensive services	
94	Activities of membership organisation	Other less knowledge-intensive services	
96	Other personal service activities	Other less knowledge-intensive services	
T	Activities of private households as employers and undifferentiated production activities of private households	Other less knowledge-intensive services	
U	extraterritorial organisations and bodies	Other less knowledge-intensive services	