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THE FISHERY INDUSTRY IN SLOVAKIA

EASTFISH Fishery Industry Profile

Volume 18

Written by

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The Fishery Industry in Slovakia

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Summary:

The importance of the fishery industry sector to the economy of Slovakia is reviewed. This report provides an overview of the country's fisheries and its administration. The production and distribution structure is discussed and supply and demand characteristics of the market and trends in foreign trade are described.

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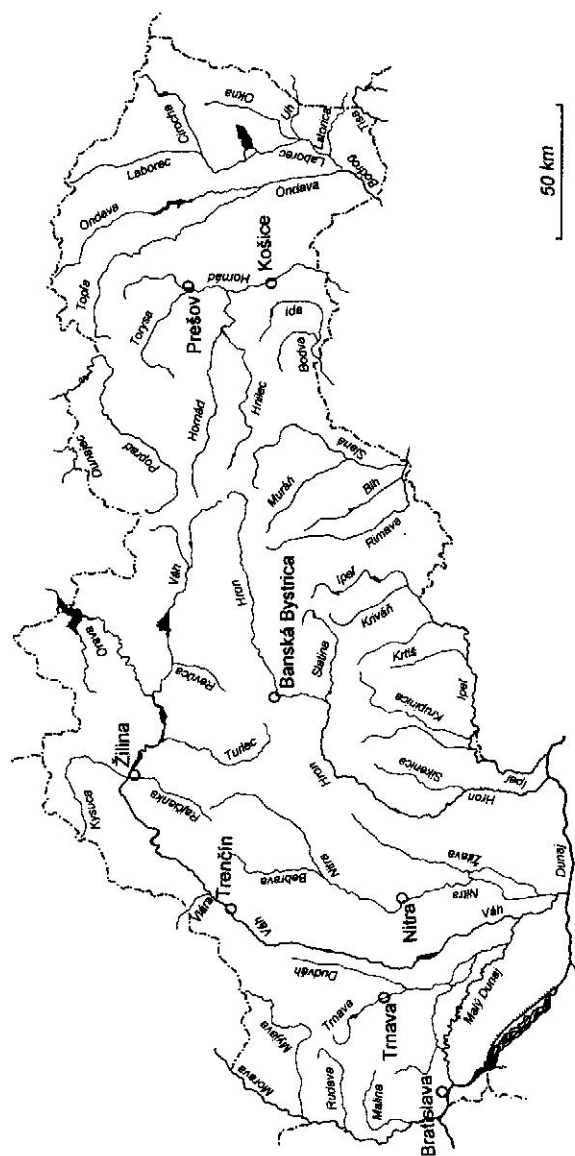


Figure 1 Principal rivers of Slovakia

1. INTRODUCTION

Fisheries may be considered one of the oldest economic activities in Slovakia. However, because it is a mostly mountainous country, fishery activity occurred mainly in free flowing waters.

As borne out by documents still existing, fish farming in Slovakia in the 11th century was already extremely widespread with its own established traditions and practices. From that century on, landlords tended to develop more abundant fishing grounds for their own needs. A law on fishing by King Koloman (1085-1116) has been preserved from the early 12th century. It was not a founding law, but rather one that put some order into ancient confused fishing regulations.

Construction of ponds and fish farming may be traced back to the 12th century and some of them still exist. However, further development of fish farming was hampered by the expansion of the Ottoman Empire and subsequent occupation of the most productive land in southern Slovakia. After the occupation, the hunger for land prevented the further development of fish farming.

The decline was also aided in some measure by the Reformation which relaxed the austere rigour of Lenten fasting practices from preceding epochs, when fish was permitted as a meat dish on about 100 days in the year.

Until 1992 a commercial fishery existed in Slovakia in some reservoirs and in the Danube River. However, since that time fisheries in natural water bodies have become exclusively recreational. Prior to 1989 the commercial production of fish had been assigned to the State Fishery Enterprise. After the disbanding of the State Fishery, fish farming was transferred to private firms.

Because domestic fish production cannot meet the demand, large quantities of marine and freshwater fish are imported annually. The consumption of fish is rather low in comparison with other countries – it amounted to 4.5 kg *per capita* in 1997, compared with the recommended annual consumption of 6.0 kg *per capita*.

2 GENERAL DATA

The basic statistical data on Slovakia is as follows:

Area: 49 035 km²

Population: 5 387 650 persons (1997)

Population density: 109.9 inhabitants per km² (1997)

Gross domestic product (in current prices): 19 425 mill. US\$ (1997)

Gross domestic product per capita (in current prices): 3 613 US\$ (1997)

Rate of exchange SKK/US\$: 33.616 (1997)

2.1 Physical geography

Slovakia is situated between latitudes 47°43'54" and 49°36'52" N and longitudes 16°50'05" and 22°34'04" E within central Europe. Its extreme length is 429 km (connecting line of the westernmost and easternmost points); its greatest breadth is 195 km (N-S), however, with the extreme eastern part only 76 km in width (N-S). Maximum distance in the direction of the meridian is 197 km, in the direction of the parallel it is 395 km. The highest point is 2 655 m (Gerlachovský štít [Gerlach peak] in the High Tatra Mountains), the lowest 94 m (mouth of the Bodrog river).

It is bound on the north by Poland for 547.1 km (32.7%), on the east by Ukraine for 98.5 km (5.9%), on the south by Hungary for 668.6 km (40%), on the west by Austria for 106 km (6.3%) and on the northwest by the Czech Republic for 251.8 km (15.1%).

Slovakia is essentially mountainous, lowlands cover only 28.4%, intra-mountain basins 16.5%, and mountains 55.1% of the total area.

2.2 Climate

The climate of Slovakia is temperate and intermediate between the maritime type of Western Europe and the dry continental type of Eastern Europe.

There are three climatic regions in Slovakia:

Warm region - with more than 50 summer days in the year (daily maximum over 25 °C) and mild to cold winter (average temperatures in January not below -5 °C);

Mild region - with less than 50 summer days in the year, with the lowest average temperatures of 16 °C in June;

Cold region - with average temperatures below 16 °C in June.

The mean annual temperature varies from -3.7 °C in the High Tatras to 10.4 °C in the Danubian Lowland.

The average annual precipitation varies from about 500 mm (in the Danubian Lowland and the southern part of East Slovakian lowlands) to 2 100 mm (in the Tatra Mountains). The highest incidence of rainfall is in the summer.

Snow cover lasts in the lowlands less than 40 days, in the mountains more than 120 days (from November to early April). Snow persists all year in some high places in the Tatras.

2.3 Hydrography and limnology

Slovakia's total water catchment area is made up of 49 775 km of natural water courses, 8 164 km artificial water courses (drainage, irrigation, supply and

navigation canals), 118 lakes, 300 small water reservoirs and ponds, and 60 large water reservoirs.

The total area of Slovakia's inland waters is about 93 886 ha or some 1.9% of the total area of the country.

Table 1 Pattern of land and water use in Slovakia, 1998

	Area ('000 ha)	Percent
Arable land	1 472	30.0
Permanent pastures	846	17.3
Gardens, orchards, vineyards	127	2.6
Forests and woodland	1 996	40.7
Other land	369	7.5
Inland water	93	1.9
Total area of land	4 903	100.0

In an average year, the annual precipitation in Slovakia amounts to 36 370 mill. m³ (layer 743 mm), of which 12 592 mill. m³ (layer 257 mm) is run off and the difference 23 778 mill. m³ (486 mm) evaporates. The long-term balance differs considerably within the various regions of Slovakia. For instance, in the Danubian lowlands up to 90% of the precipitation evaporates, while the ratio in high-mountain areas is about 10%. During the driest year, rainfall amounts to no more than 26 856 mill. m³ (548 mm) and 7 547 mill. m³ (154 mm) run off, the figures for the wettest year are 49 204 mill. m³ (1 004 mm) of precipitation and 17 251 mill. m³ (352 mm) of run off.

Slovakia's water fund is also enriched with water courses coming in from neighbouring territories. According to the long-term mean 3 328 m³·s⁻¹ of water runs through Slovak streams, 2 930 m³·s⁻¹ come as tributaries from neighbouring countries and only 398 m³·s⁻¹ of water originates in Slovakia.

2.3.1 Rivers

The density of water courses in Slovakia fluctuates between the lower values of 0.25 km·km⁻² (in some parts of the Danubian Lowland) up to values of 1.8 km·km⁻² (in mountainous areas). The mean density of Slovakia's river network amounts to 0.88 km·km⁻².

Up to 96% of the Slovak territory is drained by the riverine system of the Danube, the rest is drained by the Dunajec with its largest tributaries in Slovakia – the Poprad and Biela Voda. Their watershed divides Slovakia into areas feeding the Black and the Baltic seas.

The watershed separates the Danubian system from its largest tributary – the Tisa, running in a north-south direction. From this watershed, Slovakia's principal water courses flow to the south-east and south-west. Mountain ranges in the west separate the basins of the Váh, Nitra, Hron and Ipel' one from another and in the east, the Bodrog basin from that of the Slaná and Hornád rivers.

The west Slovak water course (with the exception of the Morava river) runs along relatively narrow depressions, locked in by mountain ridges and creates feather-like river systems with a prolonged pattern to the basin. Totally

different systems are created by the East Slovakian basin of the Tisa river flowing in from the mountainous fountainheads into the broad East Slovakian lowlands, forming fan-shaped river systems.

Table 2 Principal rivers of Slovakia

River	Length on the territory of Slovakia	River-basin area (km ²)	Average annual flow (m ³ ·s ⁻¹)
Dunaj *	172.0	1 138	2 018
Morava	107.2	2 282	136
Váh	367.2	14 268	152
Nitra	168.4	4 501	23
Hron	278.3	5 465	48
Ipel'	197.9	3 649	16
Slaná	92.5	3 217	14
Bodva	48.8	858	2.4
Hornád	178.5	4 414	32
Bodrog	158.3	7 265	82
Tisa	5.2	7	82
Dunajec	17.0	356	
Poprad	143.0	1 594	17

* without affluents

The largest Central-European river, the Danube (Dunaj), flows in the Slovak territory over a length of 172 km, forming 7.5 km of frontier with Austria, and 142 km with Hungary. The Morava river forms our frontier with Austria and the Czech Republic over a length of 107.2 km. Rivers forming frontiers with Hungary are the Hornád (over a length of 10.4 km), the Ipel' (108.7 km) and the Tisa (5.2 km), and with Poland, the Dunajec (16.8 km) and the Poprad rivers (31.6 km.).

2.3.2 Lakes

The great majority of lakes in Slovakia are of glacial origin. There are 107 such glacier lakes (termed "pleso" tarns) in Slovakia, 85 of which are in the High Tatras, 20 in the Western Tatras and 2 in the Low Tatras.

The highest tarn in Slovakia is the glacial moraine lake Modré pleso (0.40 ha in area, max. depth of water 1 m, max. length 73 m and max. width 73 m). It lies on the southern side of the High Tatras at an elevation of 2 190 m above sea level and often remains covered with snow several meters thick throughout the summer. It has no surface feed, only outflow.

The largest and deepest glacial rock basin lake is Vel'ké Hincovo pleso (area 20.08 ha, volume 1 786 000 m³, max. depth 53 m, max. length 740 m, max. width 370 m, max. surface temperature about 7 °C, mean number of days with ice cover in year 270). It lies in the High Tatras at an elevation of 1 946 m above sea level. It has no surface affluent, and its outflow gives rise to one of the tributaries of the Poprad river (Hincov potok - Hincov stream). The lake is without fish.

In the forest belt on the southern slopes of the High Tatras, at an elevation of 1494 m above sea level lies the glacial moraine lake Popradské pleso (area 6.88 ha, volume 451 000 m³ max. depth 18 m, max. length 380 m, max. width 248 m, max. surface temperature about 15 °C, ice-bound for a mean of 190 days in the year). Flowing in from the higher-situated lake L'adové pleso is the stream L'adový potok, while the Poprad river runs out of it. Trout (*Salmo trutta* m. *fario*) live in it as an autochthonous species.

The most typical glacial moraine lake in the High Tatras is Štrbské pleso (19.76 ha, 1 284 000 m³, max. depth 20 m, max. length 640 m., max. width 600 m., max. surface temperature about 19 °C. mean annual temperature 6 °C, mean period of ice cover 155 days). It lies at an elevation of 1 346 m above sea level and has no natural feeder, nor outflow. Fish found in it are brown trout (*Salmo trutta* m. *fario*), brook trout (*Salvelinus fontinalis*), powan (*Coregonus lavaretus*) pike (*Esox lucius*), roach (*Rutilus rutilus*) and ide (*Leuciscus idus*).

Several lakes are to be found in Eastern Slovakia, in mountain ranges of volcanic origin, the largest being that of Morské oko in the Vihorlat Mountain (area 13 ha, depth 36 m). It is the home of the brown trout (*Salmo trutta* m. *fario*), European minnow (*Phoxinus phoxinus*) and stone loach (*Barbatula barbatula*). Small-sized, shallow land slide formed lakes occur in the flysch ranges of Slovakia (the best known are in Spišská Magura Mountains). Likewise several small shallow karst lakes may be seen in areas of the Slovak Karst.

2.3.3 Reservoirs

Construction of fish ponds in Slovakia is attested to by documents from the 12th, 13th and 16th centuries. The largest ponds existed in the region of Michalovce (in eastern Slovakia), Gbelce (in the southern part of middle Slovakia) and at Záhorie region (in the south-west of the country). Only a minor part of them has been preserved to this day.

Further development of fish farming was hampered by the expansion of the Ottoman Empire and subsequent occupation of the most productive landscape in southern Slovakia which lasted almost two hundred years. After the occupation ceased, the following desire for land prevented further development of fish farming. Further construction of fish ponds was initiated after World War II. The largest are in Hrhov (251.2 ha), Inacovce (211.3 ha), Levice (92 ha) Hrobonovo (75 ha) and Vel'ký Blahov (70 ha). In 1988, a total of 2 158 fish ponds were recorded in Slovakia, which in 1980 yielded a catch of over 898 tonnes of fish, i. e. 416 kg per hectare.

As far back as the 16th-18th centuries a system of water reservoirs (so-called tajchs) was built in the region of Banská Štiavnica which besides fish, also provided drinking water to the inhabitants and, as of the 17th century, also ensured water for the technical requirements of the local mining industry. The volume of most of them ranged from 20 thousand to 1 million m³ and their depth from 2 to 28 m. At present, 15 of them are in operation with a total volume of 5 mil. m³ of water. Some supply water for household needs, others for industry and some are much sought-after as recreation spots. The largest one, Pocúvadlo, has an area of 11.73 ha, with a volume of 922.3 thousand m³.

The most significant, however, are water reservoirs constructed during the past few decades, most of them in the Váh valley – over 20. In 1996 Slovakia recorded a total of 300 small and 60 large water reservoirs with an aggregate volume of 2 700 million m³ and an area of 332 km².

Table 3 The largest water reservoirs in Slovakia

Name	Situated in	Total volume (10 ⁶ ·m ³)	Max. area flooded (km ²)	Put in operation
Liptovská Mara	Váh river	360.0	21.6	1975
Orava	Orava river	345.9	35.0	1953
Zemplínska Šírava	Laborec river	334.0	32.9	1965
Gabcíkovo *	Danube river	243.0	60.1	1992
Vel'ká Domaša	Ondava river	185.0	15.1	1966
Starina	Cirocha river	59.1	3.1	1988
Ruzín I	Hornád river	59.0	3.9	1968
Kráľ'ová	Váh river	51.8	11.7	1986
Nosice	Váh river	36.0	5.7	1958
Nová Bystrica	Bystrica creek	35.0	1.9	1989
Málinec	Ipel' river	26.6	1.5	1994
Bukovec II	Ida river	23.4	1.1	1976
Ruziná	Budín brook	15.6	1.8	1973
Drahovce	Váh river	12.2	4.3	1959
Palcmanská Maša	Hnilec river	11.1	0.9	1956

* including the canal

2.3.4 Canals

In 1996, Slovakia possessed a total of 8 164 km of artificial waterways – of these, 7 047 km were drainage channels, 317.3 km irrigation convey canals, 921 km supply canals and intakes and 25 km navigation channels. The largest drainage systems are in Zitný ostrov (in the Danubian lowlands) and in the East Slovakian lowlands. Fish biomass in drainage and irrigation canals is estimated at 60 kg·ha⁻¹.

3. FISH AND FISHERIES

There are 73 species of fish inhabiting Slovakia's inland waters, 19 of which relate to exotic species (list given in Appendix 1). Until the end of the 1870s the fish fauna of Slovakia could be regarded as pristine and relatively intact, since only the intensive fishing for sturgeons in the Danube and Tisa rivers had a visible effect, as demonstrated by a substantial drop in catch. The subsequent period, lasting until the end of the 1960s is characterized by a more notable human impact. Increased industrial development accompanied by negative factors, especially pollution and river regulation started to have more obvious effects on the aquatic biota. The first group of fish that was severely affected were sturgeons. In addition to overfishing, the main reason for their destruction was modifications of rivers. From this group only two species have survived, i.e. the sterlet (*Acipenser ruthenus*) and the resident form of the Russian sturgeon (*Acipenser gueldenstaedti*). Salmonids are the second group affected by the negative impact of anthropogenous factors. Since the late 1940s Atlantic salmon (*Salmo salar*) and sea trout (*Salmo trutta* m. *trutta*) disappeared from the fish fauna of Slovakia. Of the native species of Slovak fish, 27 are under some degree of threat.

The period since the beginning of the 1970s is characterized by extensive destruction of fish habitats and aquatic ecosystems. Destructive factors include the construction of dams, canalization of rivers, release of industrial waste waters and municipal sewage, deforestation, expansion of arable land, and extraction of water for irrigation. In spite of this, the trophy game fish, the Danubian huchen (*Hucho hucho*) still occurs in some Slovak rivers. The catch of this species during the last five years (1990-1994) varied from 31-64 specimens and 211-470 kg. Of course, the population of the huchen as well as the brown-trout (*Salmo trutta* m. *fario*), the grayling (*Thymallus thymallus*), the pike-perch (*Stizostedion lucioperca*), the pike (*Esox lucius*), the wels (*Silurus glanis*), and the nase (*Chondrostoma nasus*) is supported by annual stocking.

3.1 Capture fisheries

Under the Constitution of the Slovak Republic (Chapt. 12, Sect. 12, Art. 4) "mineral resources, underground waters, natural curative springs and watercourses are the property of the Slovak Republic". Under the Fisheries Act No 102/63 Zb. (Sect. 2, Paragraph 8, Item 1), the Ministry of Agriculture has leased the fishing rights primarily to the Slovak Fisheries' Union, although some rights have been assigned to national associations of the State Forest Enterprise and, in regions managed by the military, to organizations under the jurisdiction of the Ministry of Defence.

3.1.1 Commercial fishing

Until 1992 commercial fishery existed in Slovakia in some reservoirs and in the Danube River. However, since that time fisheries in natural water bodies are exclusively recreational. Before 1989 the commercial production of fish was assigned to the State Fishery Enterprise.

3.1.2 Recreational fishing

Recreational fishing in Slovakia is pursued exclusively within the framework of the Slovak Fisheries' Union. The Slovak Fisheries' Union remains the principal fishing authority with jurisdiction over most of the country's waters. Watercourses under its management have been declared fishing grounds by the Ministry of Agriculture and, as such, serve for recreational fisheries. Each fishing authority of each fishing ground is bound to appoint a manager and his deputy, both of whom are then approved by the relevant office of State administration.

Of the 818 fishing areas registered in Slovakia, 254 are designated as trout waters, 506 trout-free waters and 67 mixed grounds. The principle water course of this last category, which is usually a submontane river, is as a rule, trout free, while its submontane stream tributaries are trout waters. Trout-free grounds include sub-montane rivers, lowland rivers, drainage, irrigation and derivation channels, reservoirs, and other types of standing water, including gravel pits, flooded quarries and small dams.

Managers have the following terms of reference:

- to conserve fish and other aquatic animals
- to promote fishing in the area
- to participate in discussions as to the allocation of the aquatic resource and on possible impacts of hydraulic works on the recreational fishery
- to monitor adverse impacts of human activities on aquatic ecosystems and to propose measures to mitigate such impacts
- to monitor the use and the quality of water and trace sources of pollution affecting the fishery
- in case of adverse impact through pollution or illegal utilization of water, to advise the authorities to initiate legal proceedings against the offenders
- to issue and sell fishing licenses, to issue and collect forms for fishing records and to analyze the records for statistical purposes
- to prepare and issue fishing regulations.

The Union is also responsible for the training and education of fishermen and administrators by:

- preparing and carrying out examinations of its members as to their knowledge of fishing regulations and fishing practices
- organizing training courses and excursions, fishing contests and competitions, exhibitions and other appropriate activities
- supporting the publication of the professional journal "Pol'ovnictvo a rybárstvo" (Hunting and Fishing), as well as manuals, guides and other literature on recreational fishing
- providing assistance to local fishermen's organizations;
- increasing awareness of the relationship between recreational fisheries and the environment encouraging a positive attitude to conservation

It also co-operates with public authorities, local governments, fisheries research institutes and professional schools with regard to:

- preparing and processing basic legal texts and regulations
- protecting the environment and the quality of water
- the education of the young in fishing.

The Union collaborates with fishing organizations abroad and is a member of international fishing organizations such as EAA, CIPS and FIPS.

The Slovak Fisheries' Union has its headquarters in Zilina with four regional Divisions in Bratislava, Komárno, Banská Bystrica and Košice. Its central authority is the Council which directs the local or urban associations, currently numbering 121 units. The Union has property worth SKK 230 million. It operates 13 production units, primarily for rearing brown trout, rainbow trout, brook trout, grayling, huchen, wild and domesticated common carp, nase wels, Northern pike and pike-perch for stocking. It also produces some rainbow trout for sale – fresh, smoked or frozen.

Any citizen of the Slovak Republic who has attained 18 years of age, who agrees to the Union statutes, has successfully passed the required examinations and has no criminal record for the past three years is eligible for membership of the Union. A new member pays an enrolment fee of SKK 100 and an annual membership fee of SKK 100 to 300 to the local organization. In addition, an official fishing ticket issued by the local authority at a cost of SKK 30/y is required. Every member (with the exception of pensioners and the young) is expected to put in 10 hours of voluntary work repairing river banks, cleaning up areas around the fishing grounds and keeping vegetation under control. Holders of trout fishing permits are expected to donate a further 5 - 10 hours cleaning up waterfalls and riffles. In the past, membership in the Union was subjected to limitations, but there is now a tendency to apply stricter criteria.

The Union has a membership of 69 018 with a further 8 618 members organized in Young Fishers' Clubs for adolescents of 16-18 years of age and 12 698 members of Young Fishers' Circles for children of 10-15 years of age. There are several types of angling permits, differing in the range of validity and price. Fishing permits are issued by the local fishing association or by the Union's Council. A basic fishing permit for association may cost SKK 300 for trout waters and between SKK 300 and 500 for trout-free waters. A permit to fish selected trout-free waters for the whole of Slovakia costs SKK 650. A visitor's permit for one area costs SKK 50 per person per day, SKK 150 per person per week. A permit for huchen (*Hucho hucho*) costs SKK 400 but covers only three trips during the open season and allows the holder to catch only one specimen. Children, soldiers on active service, women and invalids may have permits at reduced rates. A beginner needs about SKK 5 000 for the purchase of basic fishing gear. Renewal and additional gear will cost the angler about SKK 800 to 1 200 per year.

3.1.2.1 Regulations

Recreational fishermen are bound by the long term rules of the Union as well as by any fishing regulations which are in force during the current year (see Appendix 11). The Union rules regulate:

Fishing trips and daily fishing time

Salmonids in trout waters may be fished up to 3 days/week. No such restrictions apply to trout-free waters. Fishing may take place, depending on the season of the year, between the following hours:

Trout waters 5.00 - 8.00 h in the morning to 16.00 - 22.00 h in the evening
Non-trout waters 4.00 - 7.00 h in the morning to 17.00 - 24.00 h in the evening
Every angler must carry his official fishing license and a form to record his arrival time and his catch. Before starting to fish, the angler must record the date and his time of arrival. Before leaving the site he must record the number and weight of catch by species. At the end of the year these records are submitted to the manager of the fishing ground which issued the fishing permit.

General fishing prohibition:

A general prohibition is in force for trout waters from 1 September to 15 April. The Ministry of Agriculture may make an exception for waters where grayling are present up to 31 December, for grayling and rainbow trout when fished with artificial fly. The closed season for trout waters is therefore in force from 16 March until 31 May (see Appendix 12).

Bag limits:

The maximum allowable catch that may be kept from any trout-free water is 7 kg of fish. The catch may have at most 2 specimens of common carp, northern pike, pike-perch and grass carp, as well as 4 salmonid fishes. A daily limit of 4 salmonids is also imposed for salmonid waters. In any event the catch should not exceed 7 kg of non salmonid species and should not contain more than 2 carps. A recreational angler may neither sell nor exchange his catch.

Fishing practice:

The type of fishing gear, manner of fishing, baits, treatment of fish after capture and behaviour whilst fishing are also specified.

3.1.2.2 Resources

The Slovak Fisheries' Union controls 38 900 km of watercourses in an area of 15 500 ha. 32 000 km are classified as trout waters although these only cover 2300 ha. In addition, dams and reservoirs cover 31 100 ha, 2 550 being trout waters and 28 550 non-trout waters.

3.1.2.3 Catch

Catches by the recreational sector have been followed for over 30 years. They rose from 250 tonnes in 1960 to a maximum of 2 299 tonnes/y in 1981-1983. This maximum also corresponds to the maximum pressure as reflected by membership in the Union. The original membership in 1960 was 12 000 and rose to 69 018 in 1994. It also corresponds to the nationwide validity of permits in 1981-83. Stocking was also at a maximum in 1980-1984 particularly with salmonid fry. Subsequently the nationwide licence was withdrawn, fishing pressure has slackened and the price of stocking material has risen. Because of lower stocking rates the problem of excessive fishing pressure continues to exist.

In the last years, the annual catch of recreational anglers varied between 1 185 - 1 948 tonnes of fish (equivalent to approx. 50 kg/ha). The mean annual catch per angler is 24 kg/y. Species composition of catches in tonnes was as given in Appendix 2.

3.1.2.4 Stocking

The Slovak Fisheries' Union has an intensive stocking programme. Stocking of the various fishing areas is carried out according to classification by value. Over the last ten years 20 species have been stocked as follows:

Trout waters

<i>Salmo trutta m. fario</i>	fry, 3 months, 6 months and 1-, and 2-years old
<i>Oncorhynchus mykiss</i>	fry, 3 months, 6 months and 1-, and 2-years old
<i>Salvelinus fontinalis</i>	fry, 1-, and 2-years old
<i>Thymallus thymallus</i>	fry, 1-, and 2-years old

Trout-free waters

<i>Cyprinus carpio</i>	fry, forced fry, 1-, 2- and 3-years old
<i>Esox lucius</i>	fry, forced fry and 1-year old
<i>Stizostedion lucioperca</i>	fertilized eggs and fry
<i>Tinca tinca</i>	1-year old
<i>Silurus glanis</i>	fry and 1-year old
<i>Chondrostoma nasus</i>	fry and 1-year old
<i>Ctenopharyngodon idella</i>	2-years old
<i>Hypophthalmichthys molitrix</i> & <i>H. nobilis</i>	2-years old
<i>Hucho hucho</i>	1- and 2-years old
<i>Aspius aspius</i>	1-year old
<i>Acipenser ruthenus</i>	1-year old

Eel (*Anguilla anguilla*), common bream (*Abramis brama*) and whitefish (*Coregonus lavaretus* & *C. peled*) are also stocked.

3.2 Fish Farming

Until 1989, fish farming was the exclusive domain of the State Fishery enterprises. This involved intensive farming of marketable fish, particularly in fish ponds and water reservoirs, a part of the fish being used to restock fishing grounds. The Slovak Fisheries' Union produced mainly fish in its facilities for restocking fishing grounds. Fish farming was also pursued by certain enterprises of the State Forest Administration, Military Forest Administration and Tatra National Park (TANAP) and this mainly for producing fish stock.

After 1989 the State Fishery collapsed and gave rise to three State concerns - Rybochov in Stupava, The Turiec Fishery in Kláštor pod Znievom and the East Slovakian Fishery in Michalovce. Subsequently, a part of these concerns were privatized, another part was transformed into the self-standing joint-stock holding company SLOVRYB whose principal object is production of fish stock for restocking fishing grounds.

Since, after 1989, it became possible to obtain the use of water bodies for the process of privatization, restitution, leasing from the state or construction of

new fish ponds, the number of subjects active in aquaculture has increased manifold. It is a rather problematic task to keep statistical records of subjects carrying on the activities of an independent farmer, as this involves a business whose record-keeping and authorization fall under the competence of communal authorities. It is estimated that today some 300 people are employed in the fish farming and processing industry. The situation is confused particularly in the rearing of the rainbow trout which is often reared from purchased fry under makeshift conditions in the vicinity of flowing waters, without meeting the prescribed legal norms. As fish farming is not a profession, it is not subject to registration for a business license. On the contrary, farmers entered in the trade register for fish farming need the approbation of the Ministry of Agriculture of the Slovak Republic. In keeping with para 20 of the Act No. 102/63 on Fisheries, this Ministry has issued certificates for rearing brood, stock or marketable fish to 34 applicants. This involves farming on a marketing basis and farming set up by local organizations of the Slovak Fisheries' Union for the purpose of rearing their own fry restocking fishing grounds.

Of the registered applications for certificates, rearing of brood fishes is ensured by 24 farms (the carp in 15, wels, pike and pikeperch in 10, rainbow trout in 7, tench in 4, brook trout, grayling and grass carp in 3, huchen and brown trout in 2 farms, and bighead carp in one farm). Stock fishes are reared in 30 farms – of these the carp in 17, pike in 15, pike-perch in 14, rainbow trout and wels in 11, brown trout and tench in 9, grayling in 7, bighead carp in 6, grass carp and brook trout in 5, huchen in 4, nase in 3 and eel (from imported elvers) in one farm. Production of marketable fish is ensured by 30 farms, of these, the carp in 15, rainbow trout in 13, pike in 8, wels in 7, brook trout and pike-perch in 6, bighead carp in 5, grass carp and tench in 4 and eel (from imported elvers) in one farm. The majority of the farms pursue rearing of brood, stock and marketable fish. Six of them rear exclusively stock and marketable species, only three brood and marketable fish. Exclusive production of marketable fish is pursued by only three farms, and one single farm devotes itself exclusively to rearing stock fish. The greatest producers of lowland fish species are the Slovak Fisheries' Union in which 7 (out of 11) farms are engaged and Rybochov, Ltd., (4 farms out of 6) which has a approx. 80% share in the home carp production. The greatest producer of salmonoids is the joint-stock company SLOVRYB whose majority partner is the Council of the Slovak Fisheries' Union. All of their 7 farms concentrate precisely on salmonoids. This company produces about 70% of the annual home yield of salmonoids. The only producer of the eel is JANEX, Ltd. Roughly 30% of registered fish farms own hatcheries, predominantly oriented towards to the breeding of salmonoid species.

4 FISH PROCESSING INDUSTRY

As far back as the Middle Ages, considerable quantities of marine fish used to be imported, particularly from Poland. But low consumption, problems with transportation, technology of processing and conservation of fish flesh did not create favourable conditions for a fish processing industry in Slovakia. In the 20th century, several operation plants were set up which were mainly in the hands of small enterprisers. Among the largest were the firms Cils in Nitra, Eletko in Zilina, Seimbel in Kezmarok, Malmed in Bratislava, Trnava and Košice and also Ryba in Bratislava. After the constitution of the Czechoslovak Republic in 1918, several Czech firms began operating in Slovakia, e. g. Varmuza of Hodonín, Preisler of Decín, Komrska, Schmiedeberg and König of Olomouc and others. These were for the most part concerns based on manual work, with operations of a seasonal character (in summer they pursued alternate substitute production). The more important among them employed some 50 workers. In 1949 all the concerns were nationalized and incorporated into the national enterprise Ryba. However, in 1963 the latter was abolished and its plants allocated to the all-state concern Rybena Prague, later, in 1965, into that of the Slovak Freezing Industry (in 1976 renamed Mraziarne). The smaller and obsolete plants were abolished, production was concentrated in plants in Bratislava, Zilina and Košice, to which the concern in Záhorská Ves was added in 1972. In 1953, distribution of products was incorporated into the network of home trade, importation of fish and canned products was taken over by the exclusive firm Koospol Prague. In 1961, rearing and distribution of live fish was limited to the national enterprise State Fishery in Stupava, so that the fish processing industry became exclusively oriented to sea fish processing. However, the technology used was completely outdated. Its renewal dates from after 1989 and this covers both machine equipment as well as facilities for preserving the quality of raw material and finished products in the entire system of storage and sale.

Fish raw material is now being imported frozen in refrigerating delivery vans and kept in air-conditioned store-rooms of the various companies that are approved by the State Veterinary Administration of the Slovak Republic as quarantine warehouses. The basic structure of fish products in Slovakia made up of imported sea fish is as follows:

- various fish salads from herring, mackerel and gadiform fish
(made up of approx. 35-50% fish, 20-30% vegetables, 25-35% mayonnaise)
- marinade (primarily of herring)
- smoked fish products (mackerel, herring, sprat)
- canned fish (mackerel, herring)

The total annual volume of fish processed in Slovakia amounts to about 15 000 tonnes of fish products and the direct sale of frozen sea fish and products from them to about 10 000 tonnes. The annual growth in consumption is estimated at about 5 – 8%, depending on price relations of basic fish species in world markets, as also on the price of substitute materials, primarily poultry. The greatest growth has been noted in the production of fish salads. This fact is conditioned by a slower price increase of these products, as they contain a

notable share of domestically produced raw materials (vegetables, mayonnaise) and at the same time give more room for innovated products. A certain stagnation due to the negative development in the price of raw materials (mackerel) is to be noticed in the processing of smoked fish. As a result of the negative impact of prices on world markets for cod, we also expect in the coming years a drop in the consumption of frozen fish (Alaska pollack, hake, pollack) and products made from them. Stagnation is also foreseen in the processing of canned fish, because of the high import of this line from the whole world.

Besides major processing companies (given in Appendix 7) there exist some ten firms pursuing packing and finalization of gadiform fish (e. g. sawing of blocks to smaller fillets and rewrapping into consumer packaging). There is no national strategy for fish processing, because of the absence of a co-ordinating link that would provide such a strategy and thus, strategy is being created from the bottom by the various processing firms.

5 FISH MARKET

5.1 Domestic market

The distribution of freshwater fish is carried out through producers' direct contact with retail organizations. At the present time, it is inadequately organized and is being realized solely through retail shops located in the close vicinity of producers' premises. Distribution of fresh sea fish is practically nonexistent here and there is no firm in Slovakia that would be suitably equipped for this purpose whether in terms of distribution centres or the corresponding distribution vans.

The whole distribution system in Slovakia is now adapted to the delivery of frozen and refrigerated sea fish and fish products. It is taken care of by a number of firms equipped with deep-freeze or refrigeration store-houses and a fleet of distribution vans. Distribution of frozen and refrigerated fish products in Slovakia is of a fairly good standard and deliveries are made to the whole retail system, as well as facilities of public catering. Canned fish is delivered directly to retail shops, or wholesale stores.

The consumption of fish in Slovakia *per capita* has increased from less than 1 kg in 1946 to 1.2 kg (1950), 3.1 kg (1961), 4.1 kg (1975), up to 4.5 kg (1997). At the present time it amounts to 4.2 kg *per capita*. The yearly deficit in fish consumption in Slovakia against the minimum recommended of 6 kg *per capita*, amounts to over 10 000 tonnes of fish and fish products.

The results of a survey carried out on a sample of 795 subjects aged over 18 years, living in various regions of Slovakia, has revealed that practically one-third (29.2%) of the respondents consume fish less than once a month, one-third (33.4%) just once a month, 18.9% twice to three times a month and 18.3% have fish on the menu once a week, or more often (5.9% more than twice a week). The same pattern also holds for the consumption of fish products – 33.7% consume these less than once a month, 28.2% once a month, 17.2% twice to three times a month, 15.9% once a week and 5.0% more than once a week. Even more alarming is the situation prevailing among children and adolescents. The frequency of fish consumption followed up over the past five year period in 8 Slovak regions on a sample population of 3 142 children aged 11 – 14 and 3 686 adolescents aged 15 – 18 years has shown that practically one-fourth of our young generation (21.5% of children and 23.9% of adolescents) do not eat fish at all, one-fifth (21% of children and 18% of adolescents) take it once a month only, one-third (33.1% of children and 32.6% of adolescents) consume fish twice to three times a month and only one-quarter (24.4% of children and 25.5% of adolescents) have it more than three times a month. Similarly, canned fish is not consumed at all by a whole quarter of our young population and 20% of these take it but once a month.

5.2 Import

Over the past three years, a total of some 23 000 tonnes of fish and fish products have been imported to Slovakia annually (review given in Appendix 4 and 5). Predominant in the commodities are fish fillets and fish meat (approx. 11 684 tonnes annually, i. e. 50.7% of the total import), followed by various

products of fish meat in a mean quantity of 4 062 tonnes yearly (21.5%), whole frozen fish (4 575 tonnes or 19.8%), live fish (1 595 tonnes or 6.9%) and smoked dried or salted fish (164 tonnes or 0.7%) and finally also fresh or refrigerated fish (89 tonnes or 0.4%).

Among live fish, the carp easily dominates (1 512 tonnes annually, i.e. 95% of imports). Imported in a frozen state are primarily mackerels (39%) and clupeiform fish (37%). In the group of dry, salted or smoked fish, pride of place goes to smoked mackerel (54%) and then the clupeiform fish (30%). Fillets and meat most imported are those of hakes (22%) and clupeiforms (16%). Among meat products, those most imported are canned sardines (28%), tunas & bonitos (12%), herring (7%) and mackerel (5%). All in all, the total fish import comprises a minimum of 20% of clupeiform fish, 20% of hakes, 14% of mackerels and 8% of gadid fishes.

The import of invertebrates averages 64 tonnes per year, with a predominance of products of crustaceans (25 318 tonnes) and molluscs (18 200 tonnes). Shrimps and prawns clearly predominated among the former (63%), while first place among the latter went to lobsters and cuttlefish (27%), octopuses (24%) and mussels (23%).

The greatest quantity of live fish is imported from the Czech Republic, consisting almost exclusively of carp for Christmas, amounting to 88.6% of the total yearly import of live fish. Fresh and refrigerated fish is mostly imported from Croatia (a mean of 52% yearly of this commodity), frozen fish from the Netherlands (36.9%) and Germany (21.6%), fish fillet from Germany (38.3%), Norway (17.5%) and Peru (12.2%), dry, salted and smoked fish from the Czech Republic (56.1%), Great Britain (19.6%) and Ireland (14.8%), crustaceans from Norway (38.3%), Germany (16.5%) and Italy (13.2%), and finally molluscs from Ukraine (37.2%), Germany (18.6%), Norway (12.6%) and Denmark (11.6%).

Customs duties are levied on imported goods according to rates set down in the Combined Nomenclature Publication of the Customs Directorate of the Slovak Republic. Conventional rates of duty are used in the case of imported commodities originating in countries that are contractual parties to GATT, or those with which the Slovak Republic has concluded agreements comprising provisions on reciprocal implementation of the "Most Favoured" clause. For rates of duty, see Appendix 6.

The total import of fish and aquatic invertebrates to Slovakia represents a mean value of 763 million SKK annually.

5.3 Export

Export of fish and fish products from Slovakia over the past three years averaged 728 tonnes per year. The commodities include mostly live fish (average 258 tonnes annually, i.e. 35.4% of the total export of fish and fish products), followed by fish fillet averaging 142.6 tonnes annually (19.6%), frozen fish (an average of 87.5 tonnes, i.e. 12%), smoked fish (average 52.4 tonnes, i.e. 7.2%) and lastly fresh or chilled fish (annual average of 12.7 tonnes, i.e. 1.7%). The annual export of invertebrates averaged 21.5 tonnes which comprised 20.6 tonnes of molluscs (95.6%) and 0.8 tonnes of crustaceans.

The export of fish commodities is dominated by trout. This species constitutes 85% of frozen, 68% of fresh and 42% of live fish exports. The latter also comprise carp (21%), and other freshwater fish (20%), eels (9%) and ornamental freshwater fishes (8%). Dominant in the export of fillet fish is hake (66%), but also, though in a smaller measure, gadid fish (29%). Of smoked fish, the most exported is mackerel (52%) and trout (38%), while land snails form the greatest article of export among invertebrates.

Export to the Czech Republic predominates (an average of 505 tonnes annually, i.e. 67.3% of the whole export of fish, invertebrates and their products), then to Hungary and Austria (in approximately the same volume – a total of 130 tonnes, i. e. 17.3%).

The total value of our export of fish, aquatic invertebrates and their products represents the value of 62.9 million SKK annually.

6 STANDARDS AND QUALITY REQUIREMENTS

The fundamental claims on innocuousness and quality of foodstuffs are set down by the Law No. 152/1995. on Food. This law defines the terms and modes of testing, gives prescriptions regarding quality, mode of labelling products, universal hygienic prescriptions in the production of foodstuffs, their manipulation and introduction into circulation, hygienic prescriptions regulating shops and market places, cooling and freezing of foodstuffs and also permissible limits of contaminants in food, as also microbiological requirements. In addition, this law incorporates claims on the quality of fish meat, aquatic animals and products from them, as well as conditions for the correct production procedures (GMP), including hazard analysis of critical control points (HACCP).

The Law on Food (No. 152/1995) constitutes a framework for a gradual passing of the authorization process set down in the Alimentary Codex of the Slovak Republic. In 1996, this Codex published universal hygienic conditions for domestic and imported products, their packaging, labelling and offer, for protecting from falsification (counterfeiting), as also limits for additives and contaminants, residual pesticides of veterinary medicaments in food products. The other parts of the Alimentary Codex are included in the authorization process. The Alimentary Codex of the Slovak Republic has been approved by the Decree No. 36/1997 of the Ministry of Agriculture SR.

In keeping with the Law on Food, quality control is divided between two ministries: the Ministry of Agriculture ensures control both through the intermediary of the State Veterinary Administration which is responsible for the control of hygiene and the quality of processing animal products, and through that of the Slovak Agriculture and Food Inspection, responsible for the surveillance over the quality of foodstuffs of vegetable origin. The Ministry of Health of the Slovak Republic exercises supervision over foodstuffs and over issuing of permits for innovating new products as regards safety of the foodstuffs, protection of citizens' health and protection of the consumer.

Technological standardization in Slovakia is governed by the Office for Standards, Metrology and Testing (in terms of the NR SR Act No. 142/1991 Zb. on Slovak technical norms). The basic technical norm for sea fish is STN 57 5010 "Sea Fish Products", while the norm governing freshwater fish is the branch norm ON 57 5110 "Processing of Freshwater Market Fish". Valid for canned fish is the norm STN 57 7602 "Sterilized Canned Foodstuffs", also regulating all sterilized foodstuffs.

Foodstuffs are also subject to further laws, for instance to Act No. 272/1994 on protection of human health, Act No. 87/1987 on veterinary care (specifies claims on raw materials and products of materials of animal origin, hence also of fish), Act No. 30/1968 on State Testing (sets down conditions for introducing foodstuffs into production and circulation and also stipulates compulsory certification of products – fish and fish products are also subject to this compulsory certification) and also Act No. 634/1992 on consumer protection which sets down certain conditions in enterprising, of significance to consumer protection, duties of public administration in the domain of consumer

protection, rights of consumers or other legal persons based on consumer protection, as also further provisions referring to production, import, sale and labelling of products and providing services, prohibition of discriminating and cheating the consumer.

7 RESEARCH AND EDUCATION

In fact, there are no special fisheries research institutes in Slovakia. The former Institute of Fishery Research and Hydrobiology in Bratislava was split in 1990 into the Institute of Fishery Research and Aquaculture and the Department of Ichthyology which is now a part of the Institute of Zoology of the Slovak Academy of Sciences. However, at the Institute of Fishery Research and Aquaculture only investigations dealing with fish farming and aquaculture are pursued. Fishery and ichthyology research is realised at the Institute of Zoology of the Slovak Academy of Sciences (Bratislava). Education and research in ichthyology and fisheries is carried out by the universities, i.e. Comenius University (Department of Zoology and Department of Ecology) at Bratislava, Agricultural University (Department of Fowl and Small Farming Animals) at Nitra, and the University of Prešov (Department of Biology) at Prešov. Education and research in food hygiene, food technology, fish parasite and diseases are pursued at the University of Veterinary Medicine at Košice. Research in ichthyology is also carried out by Slovak National Museum. However, altogether only 13 persons are working in fisheries research. There is a Technical High School of Agriculture at Ivánka pri Dunaji offering a four year course in fisheries and fish farming. The Agricultural University at Nitra provides courses in fisheries, and ichthyology is lectured at the Comenius University at Bratislava.

8 NATIONAL POLICY AND STRATEGY

By virtue of a decree of the Ministry of Agriculture of the Slovak Republic (No. 116/1998-100), subjects engaged in the domain of fisheries and fish rearing may ask for subsidies for the purpose of preserving genetically valuable fish stocks, breeding selection, improving and promoting methods of fish-farming and supporting fish production, as also for the purchase of top genetic valuable stocks from home or foreign sources. One of the conditions is that this involves fish-farming authorized by the Ministry of Agriculture in accordance with the Law on Fisheries (No. 102/1963).

Further financial resources may be obtained from the State Agriculture and Food Relief Fund near the Ministry of Agriculture SR which provides funds for the renewal of machinery and technology, improvement of competitiveness in production and export in this domain in support of private enterprise.

However, neither subsidies for technology in the fisheries industry, nor any support has been provided thus far to any subject in the fishery industry from the resources of the State Agriculture and Food Relief Fund. At the same time, the situation as regards the standard of equipment in the processing technologies is unsatisfactory, with only about 5% of fish-farmers attaining the norm; moreover, these lines fail to meet the certificates accepted in EU countries. Unfavourable conditions likewise prevail as regards conditions in the existing fish-farming installations that are considerably obsolete and polluted.

To preserve the genetically valuable fish stock, the sum of 2 mill. SKK was set apart from the budget of the Ministry of Agriculture SR in 1996, 3 mill. in 1997 and 2 mill. in 1998. However, the demands for subsidies under the present conditions exceed fivefold the sums foreseen by the budget. A further subsidy to the amount of 5 mill. SK is provided annually by the Ministry for restocking parts of the fishing-grounds, viz. major water reservoirs and streams.

There is no official strategy that would regulate export and import of fish, invertebrates and products of their flesh. Similarly, there is as yet no definite concept for regulating the development of aquaculture.

To predict the trends of further development in recreational fishing in Slovakia is hardly possible at this time. This is related to the overall developmental trend in Slovakia. We are still in the dark as regards pending amendments of laws directly related to the implementation of the fishing right as a matter of fact, a new Water Act and a new Fisheries Act are being prepared, along with the executive decrees.

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Appendix 1 Fish species found in Slovakia

Scientific name	Common Slovak name	Common English name
fam. ACIPENSERIDAE		
<i>Acipenser ruthenus</i>	jeseter malý	sterlet
<i>Acipenser gueldenstaedti</i>	jeseter ruský	Russian sturgeon
fam. ANGUILLIDAE		
<i>Anguilla anguilla</i>	úhor európsky	European eel
fam. CYPRINIDAE		
<i>Abramis ballerus</i>	pleskáč siný	zope
<i>Abramis bjoerkna</i>	pleskáč zelenkavý	white bream
<i>Abramis brama</i>	pleskáč vysoký	common bream
<i>Abramis sapa</i>	pleskáč tuponosý	zobel
<i>Alburnoides bipunctatus</i>	ploska pásavá	schneider
<i>Alburnus alburnus</i>	belička európska	bleak
<i>Aspius aspius</i>	boleň dravý	asp
<i>Barbus barbus</i>	mrena severná	barbel
<i>Barbus peloponnesius petenyi</i>	mrena Petianova	spotted barbel
<i>Carassius carassius</i>	karas zlatistý	crucian carp
<i>Carassius auratus*</i>	karas striebristý	goldfish
<i>Chondrostoma nasus</i>	podustva severná	nase
<i>Ctenopharyngodon idella*</i>	amur biely	grass carp
<i>Cyprinus carpio</i>	kapor obyčajný	common carp
<i>Gobio albipinnatus</i>	hrúz bieloplutvý	whitefin gudgeon
<i>Gobio gobio</i>	hrúz škvrnitý	gudgeon
<i>Gobio kessleri</i>	hrúz Kesslerov	Kessler's gudgeon
<i>Gobio uranoscopus</i>	hrúz fúzatý	Danubian gudgeon
<i>Hypophthalmichthys molitrix*</i>	tolstolob biely	silver carp
<i>Hypophthalmichthys nobilis*</i>	tolstolob pestrý	bighead carp
<i>Leucaspisus delineatus</i>	ovsienka striebřistá	moderlieschen
<i>Leuciscus cephalus</i>	jalec hlavatý	chub
<i>Leuciscus idus</i>	jalec tmavý	ide
<i>Leuciscus leuciscus</i>	jalec maloústy	dace
<i>Pelecus cultratus</i>	šabl'a krivočiara	ziege
<i>Phoxinus phoxinus</i>	čerebl'a pestrá	European minnow
<i>Pseudorasbora</i>	hrúzovec sieťovaný	stone moroco

<i>parva*</i>		
<i>Rhodeus amarus</i>	lopatka dúhová	bitterling
<i>Rutilus meidingeri</i>	plotica perleťová	Danube roach
<i>Rutilus pigus virgo</i>	plotica lesklá	virgo roach
<i>Rutilus rutilus</i>	plotica červenooká	roach
<i>Scardinius erythrophthalmus</i>	červenica ostrobruchá	rudd
<i>Tinca tinca</i>	lieň sliznatý	tench
<i>Vimba vimba</i>	nosál sťahovavý	zahrte
fam. COBITIDAE		
<i>Cobitis taenia</i>	plž severný	spined loach
<i>Misgurnus fossilis</i>	čík európsky	weatherfish
<i>Sabanejewia balcanica</i>	plž zlatistý	goldside loach
fam. BALITORIDAE		
<i>Barbatula barbatula</i>	slíž severný	stone loach
fam. ICTALURIDAE		
<i>Ictalurus nebulosus*</i>	sumček hnedý	brown bullhead
fam. SILURIDAE		
<i>Silurus glanis</i>	sumec veľký	wels catfish
fam. CLARIIDAE		
<i>Clarias gariepinus*</i>	klárias	North African catfish
fam. ESOCIDAE		
<i>Esox lucius</i>	štuka severná	northern pike
fam. UMBRIDAE		
<i>Umbra krameri</i>	blatniak európsky	European mudminnow
fam. COREGONIDAE		
<i>Coregonus maraena*</i>	sih maréna	whitefish
<i>Coregonus peled*</i>	sih peled'	peled whitefish
fam. SALMONIDAE		
<i>Hucho hucho</i>	hlavátka veľká	huchen
<i>Oncorhynchus mykiss*</i>	pstruh dúhový	rainbow trout
<i>Salmo trutta morpha fario</i>	pstruh potočný	brown trout
<i>Salmo trutta morpha lacustris</i>	pstruh jazerný	lake trout
<i>Salvelinus fontinalis*</i>	sivoň potočný	American brook trout
<i>Salvelinus namaycush*</i>	sivoň perlový	lake trout
fam. THYMALLIDAE		
<i>Thymallus thymallus</i>	lípeň tymiánový	European grayling
fam. GADIDAE		
<i>Lota lota</i>	mieň sladkovodný	burbot

fam. POECILIIDAE		
<i>Poecilia reticulata</i> *	živorodka pestrá	guppy
<i>Poecilia sphenops</i> *	živorodka ostropyská	sphenops molly
<i>Xiphophorus helleri</i> *	mečovka zelená	swordtail
fam. GASTEROSTEIDAE		
<i>Gasterosteus aculeatus</i> *	pichľavka siná	three-spined stickleback
fam. COTTIDAE		
<i>Cottus gobio</i>	hlaváč bieloplutvý	bullhead
<i>Cottus poecilopus</i>	hlaváč pásoplutvý	Carpathian sculpin
fam. MICROPTERIDAE		
<i>Lepomis gibbosus</i> *	slnečnica pestrá	pumpkinseed
<i>Micropterus salmoides</i> *	ostrážka veľkousta	largemouth bass
fam. PERCIDAE		
<i>Gymnocephalus baloni</i>	hrebenačna vysoká	Balon's ruffe
<i>Gymnocephalus cernuus</i>	hrebenačna pásavá	ruffe
<i>Gymnocephalus schraetser</i>	hrebenačna fľakaná	schraetser
<i>Perca fluviatilis</i>	ostriež zelenkavý	European perch
<i>Stizostedion lucioperca</i>	zubáč veľkousty	pike-perch
<i>Stizostedion volgensis</i>	zubáč volžský	eastern pike-perch
<i>Zingel streber</i>	kolok vretenovitý	streber
<i>Zingel zingel</i>	kolok veľký	zingel
fam. GOBIIDAE		
<i>Neogobius kessleri</i> *	býčko hlavatý	bighead goby
<i>Proterorhinus marmoratus</i>	býčko škvrnitý	tubenose goby

*allochthonous species

Appendix 2 Composition of anglers' catch in Slovakia 1993–1997 (in tonnes)

Species	1993	1994	1995	1996	1997
Acipenseridae					
<i>Acipenser ruthenus</i>	0.04	0.07	0.5	0.5	0.4
Anguillidae					
<i>Anguilla anguilla</i>	6.50	19.50	12.8	6.9	7.6
Cyprinidae					
<i>Abramis brama</i> , <i>A. bjoerkna</i> , <i>A. ballerus</i> & <i>A. sapa</i>	78.62	101.81	140.9	111.4	102.1
<i>Aspius aspius</i>	8.36	15.90	12.6	12.0	8.9
<i>Barbus barbus</i>	16.10	20.27	24.2	18.7	20.9
<i>Carassius auratus</i> & <i>C. carassius</i>	49.75	59.64	89.7	76.0	53.3
<i>Chondrostoma nasus</i>	32.57	32.33	31.4	24.0	23.2
<i>Ctenopharyngodon idella</i>	15.53	19.18	22.7	14.7	20.9
<i>Hypophthalmichthys molitrix</i> & <i>nobilis</i>					
<i>Cyprinus carpio</i>	612.01	778.79	1063.2	778.0	746.2
<i>Leuciscus cephalus</i> , <i>L. idus</i> & <i>L. leuciscus</i>	46.29	81.12	62.4	46.9	39.1
<i>Tinca tinca</i>	4.57	4.64	7.7	8.2	9.3
<i>Vimba vimba</i>	27.69	29.88	39.5	20.4	25.2
other cyprinid species	50.65	71.35	64.1	7.5	43.5
Siluridae					
<i>Silurus glanis</i>	14.07	20.44	25.9	21.0	21.1
Esocidae					
<i>Esox lucius</i>	89.18	192.83	134.0	102.6	84.6
Salmonidae					
<i>Hucho hucho</i>	0.25	0.47	0.6	0.7	0.8
<i>Oncorhynchus mykiss</i>	11.26	9.68	15.3	15.9	15.9
<i>Salmo trutta</i> m. <i>fario</i>	34.41	30.91	45.6	33.6	39.5
<i>Salmo trutta</i> m. <i>lacustris</i>	0.72	1.14	1.0	0.3	0.1
<i>Salvelinus fontinalis</i>	0.10	0.47	1.3	0.3	0.7
<i>Thymallus thymallus</i>	14.30	16.04	24.5	17.6	16.2
Gadidae					
<i>Lota lota</i>	0.65	2.45	2.7	1.0	2.7
Percidae					
<i>Perca fluviatilis</i>	18.47	29.94	31.7	17.7	11.4
<i>Stizostedion lucioperca</i>	52.48	89.11	93.5	76.4	69.8
TOTAL	1184.57	1627.36	1948.1	1412.5	1363.4

Appendix 3 Hatchery/nursery output in Slovakia (1993–1997)

Number (in thousands) of eggs, larvae, fingerlings, juveniles, etc. released to the wild or to a controlled environment, i.e. used for stocking									
	1993		1994		1995		1996		1997
	contr.	wild	contr.	wild	contr.	wild	contr.	wild	contr. wild
Fertilized eggs									
<i>Stizostedion lucioperca</i>	--	--	--	4 400	--	--	--	--	--
Total:	--	--	--	4 400	--	--	--	--	--
0+									
<i>Cyprinus carpio</i>	--	--	4 000	4 673	--	--	3 010	--	4 681
<i>Chondrostoma nasus</i>	1 000	--	900	37	3 201	259	--	666	--
<i>Esox lucius</i>	1 000	2 130	800	4 918	3 258	2 060	4 800	1 200	436
<i>Silurus glanis</i>	100	--	150	152	583	56	120	120	115
<i>Oncorhynchus mykiss</i>	5 000	--	6 100	40	13 000	3 320	8 700	1 300	3 300
<i>Salmo trutta morpha fario</i>	3 000	1 000	3 700	810	3 100	--	3 050	1 150	3 350
<i>Salvelinus fontinalis</i>	1 500	--	1 700	12	2 500	40	2 250	150	455
<i>Hucho hucho</i>	200	400	150	233	760	--	200	--	384
<i>Thymallus thymallus</i>	1 500	--	2 000	14	3 620	--	3 000	--	746
Total:	13 300	3 530	19 500	10 891	30 023	5 737	25 130	3 920	8 379
1+									
<i>Cyprinus carpio</i>	2 000	--	1 850	420	1 934	1 250	837	992	303
<i>Chondrostoma nasus</i>	--	--	--	664	--	--	--	--	--
<i>Silurus glanis</i>	--	50	--	53	123	145	3	15	706
<i>Esox lucius</i>	--	--	--	7	--	--	--	--	36
<i>Stizostedion lucioperca</i>	--	50	--	290	59	345	--	98	7
<i>Oncorhynchus mykiss</i>	1 900	120	2 500	96	3 933	158	1 575	225	523
<i>Salmo trutta morpha fario</i>	--	370	--	598	--	567	--	605	213
<i>Salvelinus fontinalis</i>	500	470	--	--	380	135	263	37	1161
<i>Hucho hucho</i>	--	100	--	410	--	158	70	90	323
<i>Thymallus thymallus</i>	--	470	--	444	751	250	428	672	82
Total:	4 400	1 190	--	2 983	7 182	3 010	3 176	2 734	1 938

Appendix 4 Fishes and other aquatic animals imported and exported in the years 1995-1997

Code	Description	1995		1996		1997	
		Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg
	LIVE FISH	1 594 804	243 555	1 852 207	269 734	1 337 872	261 166
03 01 10 10	Ornamental freshwater fish	160	8 162	1 876	49 746	3 969	7 150
03 01 10 90	Ornamental saltwater fish	-	-	-	10	824	-
03 01 91 00	Trouts (<i>Salmo trutta</i> & <i>Oncorhynchus mykiss</i>)	-	150 335	9 000	77 318	1 000	96 231
03 01 92 00	Eels (<i>Anguilla</i> spp.)	4 900	15 400	3 485	21 800	400	32 100
03 01 93 00	Carp	1 546 369	31 630	1 780 946	66 532	1 209 861	64 410
03 01 99 11	Pacific (<i>Oncorhynchus</i> spp.), Atlantic (<i>Salmo salar</i>), and Danube (<i>Hucho hucho</i>) salmon	-	-	-	-	-	115
03 01 99 19	Other freshwater fishes	43 375	38 028	56 900	54 328	121 818	61 160
	FISH, FRESH OR CHILLED, excluding fish fillets and other fish meat	50 275	10 367	154 840	6 336	160 755	21 413
03 02 11 00	Trouts (<i>Salmo trutta</i> & <i>Oncorhynchus mykiss</i>)	-	10 000	-	-	8	-
03 02 11 90	Other salmonids	-	-	-	5 400	18	20 740
03 02 12 00	Pacific salmon (<i>Oncorhynchus</i> spp.)	-	-	-	-	4 973	-
03 02 19 00	Other salmonids	-	-	-	-	117	-
03 02 21 10	Greenland halibut (<i>Reinhardtius hippoglossoides</i>)	-	-	-	-	7	-
03 02 21 30	Atlantic halibut (<i>Hippoglossus hippoglossus</i>)	-	-	-	-	9	-
03 02 21 90	Pacific halibut (<i>Hippoglossus stenolepis</i>)	-	-	-	-	11	-
03 02 22 00	European plaice (<i>Pleuronectes platessa</i>)	-	-	-	-	55	-
03 02 23 00	Sole (<i>Solea solea</i>)	19	-	-	-	51	-
03 02 31 90	Albacore (<i>Thunnus alalunga</i>)	-	-	-	600	46	-
03 02 40 00	Herrings (<i>Clupea harengus</i> & <i>C. pallasii</i>)	2 000	-	-	11	18	-
03 02 50 90	Cods (other than <i>Gadus morhua</i> , <i>G. ogac</i> or <i>G. macrocephalus</i>)	-	40	20 970	-	2	-
03 02 61 10	European pilchard (<i>Sardinia pilchardus</i>)	-	-	-	-	124	-
03 02 61 30	Pilchards (sardines) of the genus <i>Sardinops</i> and sardinellas (<i>Sardinella</i> spp.)	40 425	-	85 335	235	30 089	374
03 02 61 91	European sprat (<i>Sprattus sprattus</i>)	-	7	-	-	-	-
03 02 64 00	Mackerels (<i>Scomber scombrus</i> , <i>S. australasicus</i> & <i>S. japonicus</i>)	-	-	46 945	-	73	-
03 02 65 90	Sharks	-	-	-	-	13	-
03 02 66 00	Eels (<i>Anguilla</i> spp.)	-	-	-	-	5	-
03 02 69 11	Carp	5 850	-	1 400	-	1 000	-
03 02 69 19	Other freshwater fish	1 865	-	-	-	30	-

Code	Description	1995		1996		1997	
		Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg
03 02 69 25	Fish of the genus <i>Eudynnus</i> , other than the skipjack (<i>E. (Katsuwonus) pelamys</i>)	96	-	2	-	-	-
03 02 69 33	Redfish (<i>Sebastes</i> spp.), other than golden redfish (<i>Sebastes marinus</i>)	-	-	96	-	-	-
03 02 69 41	Whiting (<i>Merlangius merlangus</i>)	-	-	-	-	46	-
03 02 69 55	Anchovies (<i>Engraulis</i> spp.)	-	-	-	-	789	-
03 02 69 61	Common dentex (<i>Dentex dentex</i>) and pandoras (<i>Pagellus</i> spp.)	-	-	-	-	120	-
03 02 69 66	Cape hakes (<i>Merluccius capensis</i> & <i>Merluccius paradoxus</i>)	-	-	-	-	21 016	99
03 02 69 75	Pomfrets (<i>Brama</i> spp.)	-	-	-	-	5	-
03 02 69 81	Monkfish (<i>Lophius</i> spp.)	-	-	-	-	31	-
03 02 69 85	Blue whiting (<i>Micromesistius poulassou</i>)	-	-	-	-	102	-
03 02 69 87	Swordfish (<i>Xiphus gladius</i>)	-	-	-	-	42	-
03 02 69 94	Seabass (<i>Dicentrarchus labrax</i>)	-	-	-	-	1 182	-
03 02 69 95	Gillhead seabream (<i>Sparus auratus</i>)	-	-	-	-	119	-
03 02 69 96	Other saltwater fish	20	-	-	-	-	-
03 02 69 99	Other sea fishes	-	-	-	-	654	-
03 02 70 00	Livers and roes	-	320	92	90	-	200
	FISH, FROZEN, excluding fish filets and other fish meat	4 460 249	138 881	4 732 417	92 250	4 432 383	31 095
	Salmonids, excluding livers and roes	34 364	122 185	149 290	74 949	19 091	26 983
03 03 10 00	Pacific salmon (<i>Oncorhynchus</i> spp.)	14 425	-	24 922	20	5 460	-
03 03 21 00	Trouts (<i>Salmo trutta</i> & <i>Oncorhynchus mykiss</i>)	15 919	121 685	33 088	74 929	7 007	26 983
03 03 22 00	Atlantic salmon (<i>Salmo salar</i>)	4 020	-	9 810	-	6 609	-
03 03 29 00	Other salmonids	-	500	81 470	-	15	-
	Flat fishes (Pleuronectidae, Bothidae, Cynoglossidae, Soleidae, Scophthalmidae & Citharidae), excl. livers and roes	28 888	400	3 798	-	2 057	-
03 03 31 10	Greenland halibut (<i>Reinhardtius hippoglossoides</i>)	797	-	1 647	-	575	-
03 03 32 00	European plaice (<i>Pleuronectes platessa</i>)	386	-	571	-	493	-
03 03 33 00	Sole (<i>Solea</i> spp.)	798	-	200	-	-	-
03 03 39 10	Flounder (<i>Platichthys flesus</i>)	785	400	-	-	-	-
03 03 39 80	Other flatfishes	26 122	-	1 380	-	989	-
	Tunas, excluding livers and roes	600	-	46 325	-	600	5
03 03 42 90	Yellowfin tuna (<i>Thunnus albacares</i>)	600	-	22 005	-	200	5
03 03 49 90	Other species of tuna	-	-	24 320	-	400	-
	Herrings, excluding livers and roes	1 418 680	-	1 659 976	-	1 995 311	22
03 03 50 00	Herrings (<i>Clupea harengus</i> , <i>C. pallasi</i>)	1 418 680	-	1 659 976	-	1 995 311	22

Code	Description	1995		1996		1997	
		Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg
	Cods, excluding livers and roes						
03 03 60 11	Atlantic cod (<i>Gadus morhua</i>)	28 423	-	21 098	-	5 072	-
03 03 60 19	Greenland cod (<i>Gadus ogac</i>)	19 556	-	21 098	-	72	-
	Other fish, excluding livers and roes	8 967	-	-	-	5 000	-
		2 949 294	16 296	2 851 810	17 301	2 410 252	4 466
03 03 71 30	Pilchards (sardines) of the genus <i>Sardinops</i> , sardinellas (<i>Sardinella</i> spp.)	-	-	-	-	300	-
03 03 71 90	European sprat (<i>Sprattus sprattus</i>)	10 416	-	3 528	-	11 634	-
03 03 72 00	Haddock (<i>Melanogrammus aeglefinus</i>)	19 997	-	-	-	-	-
03 03 73 00	Saithe, or pollock (<i>Pollockius virens</i>)	104 672	2 700	23 180	-	1 048	-
03 03 74 10	Atlantic mackerel (<i>Scomber scombrus</i>) and chub mackerel (<i>S. japonicus</i>)	1 809 119	1 716	1 796 907	-	1 706 376	300
03 03 74 90	Blue mackerel (<i>Scomber australis</i>)	2 243	-	2 703	-	-	-
03 03 75 20	Picked or spiny dogfish (<i>Squalus acanthias</i>)	-	-	152	-	22 736	-
03 03 75 50	Carsharks (<i>Scyliorhinus</i> spp.)	-	-	-	-	350	-
03 03 75 90	Other sharks	17 774	-	3 265	-	5 525	5
03 03 76 00	Eels (<i>Anguilla</i> spp.)	21 425	-	144	-	172	-
03 03 78 10	Hakes of the genus <i>Merluccius</i>	354 338	-	402 414	4 608	135 558	-
03 03 78 11	Cape hakes (<i>Merluccius capensis</i> & <i>M. paradoxus</i>)	-	-	-	-	31 108	3 729
03 03 78 12	Argentine hake (<i>Merluccius hubbsi</i>)	44 192	-	20 010	-	13 193	-
03 03 78 90	Hakes of the genus <i>Urophycis</i>	25 560	-	47 368	520	33 194	-
03 03 79 11	Carp	11 218	-	13 077	-	15 021	-
03 03 79 19	Other freshwater fish	80 892	-	61 494	-	53 880	-
03 03 79 31	Fish of the genus <i>Eurhynchus</i> , other than the skipjack (<i>E. (Katsuwonus) pelampus</i>)	1 344	-	1 231	-	1 544	-
03 03 79 35	Golden redfish (<i>Sebastes marinus</i>)	251 535	-	222 567	-	104 630	432
03 03 79 55	Alaska pollack (<i>Theragra chalcogramma</i>) and pollack (<i>Pollockius pollackius</i>)	-	-	-	-	10 054	-
03 03 79 65	Anchovies (<i>Engraulis</i> spp.)	-	-	-	-	50	-
03 03 79 75	Pomfrets (<i>Brama</i> spp.)	103 160	-	-	-	77 100	-
03 03 79 83	Blue whiting (<i>Micromesistius pouasou</i>)	-	-	-	-	1 940	-
03 03 79 85	Southern blue whiting (<i>Micromesistius australis</i>)	-	-	-	-	400	-
03 03 79 87	Swordfish (<i>Xiphias gladius</i>)	100	-	150	-	2 094	-
03 03 79 91	Atlantic horse mackerel (<i>Trachurus trachurus</i>)	2 168	-	-	-	1 121	-
03 03 79 92	Blue grenadier (<i>Macrurus novaezealandiae</i>)	-	-	5 616	-	130 775	-
03 03 79 96	Other saltwater fish	88 941	11 880	248 004	12 096	-	-
03 03 80 00	Livers and roes	-	-	120	-	-	19

Code	Description	1995		1996		1997	
		Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg
	FISH FILLETS & OTHER MEAT (whether or not minced), fresh, chilled or frozen	10 890 790	198 626	11 599 377	116 416	12 591 235	122 819
	Fresh or chilled fillets	185 785	-	248 847	76	180 348	-
03 04 10 13	Of Pacific salmon (<i>Oncorhynchus</i> spp.), Atlantic salmon (<i>Salmo salar</i>)	222	-	2 557	48	1	-
03 04 10 31	Of cods (<i>Gadus morhua</i> , <i>G. ogac</i> , <i>G. macrocephalus</i>) and polar cod (<i>Boreogadus saida</i>)	38 604	-	32 145	-	21 385	-
03 04 10 33	Of saithe or polluck (<i>Pollachius virens</i>)	20 790	-	84 461	-	151 816	-
03 04 10 38	Of other fish	126 169	-	129 684	28	7 146	-
	Fresh or chilled other fish meat (whether or not minced)	4 646	-	46 200	-	164 386	-
03 04 10 93	Flaps of herring	4 646	-	46 200	-	164 376	-
03 04 10 98	Flaps of other fish	-	-	-	-	10	-
	Frozen fillets	10 027 226	198 626	10 585 524	116 290	10 942 579	112 819
03 04 20 11	Of trouts (<i>Salmo trutta</i> & <i>Oncorhynchus mykiss</i>)	-	2 524	1 000	-	-	1 890
03 04 20 13	Of Pacific salmon (<i>Oncorhynchus</i> spp.) and Atlantic salmon (<i>Salmo salar</i>)	3 369	-	21 910	5	7 934	-
03 04 20 19	Of other freshwater fish	20 970	-	22 233	-	18 045	-
03 04 20 21	Of Pacific cod (<i>Gadus macrocephalus</i>)	7 813	-	162 705	-	-	-
03 04 20 29	Of other cod species	321 653	-	588 382	1 518	111 180	62
03 04 20 31	Of saithe or polluck (<i>Pollachius virens</i>)	75 646	-	142 614	21 744	89 922	-
03 04 20 33	Of haddock (<i>Melanogrammus aeglefinus</i>)	66 693	-	104 479	-	970	-
03 04 20 35	Of golden redfish (<i>Sebastes marinus</i>)	-	-	-	-	396	-
03 04 20 37	Of redfish (<i>Sebastes</i> spp.) other than <i>S. marinus</i>	373 188	100	219 848	100	88 635	-
03 04 20 41	Of whiting (<i>Merlangius merlangus</i>)	-	-	43 680	-	155 316	-
03 04 20 45	Of tuna (of the genus <i>Thunnus</i>) and of fish of the genus <i>Euthynnus</i>	24 316	-	200	-	4	-
03 04 20 51	Of blue mackerel (<i>Scomber australis</i>)	80 547	-	51 568	-	48 323	-
03 04 20 53	Of other mackerel species	836 325	3 210	551 511	-	359 155	-
03 04 20 56	Of Argentine hake (<i>Merluccius hubbsi</i>)	-	-	-	-	249 692	20 250
03 04 20 58	Of other hakes of the genus <i>Merluccius</i>	2 952 128	173 348	2 951 667	72 186	1 761 098	23 900
03 04 20 59	Of hakes of the genus <i>Urophycis</i>	-	-	23 260	-	30 237	-
03 04 20 61	Of dogfish (<i>Squalus acanthias</i> and <i>Scylliorhinus</i> spp.)	-	-	420	-	18 000	-
03 04 20 69	Of other sharks	6 668	-	6 227	-	31 403	-
03 04 20 71	Of European plaice (<i>Pleuronectes platessa</i>)	-	-	110	-	50	-
03 04 20 73	Of flounder (<i>Platichthys flesus</i>)	90	-	-	-	1 493	-
03 04 20 75	Of herring (<i>Clupea harengus</i> , <i>Clupea pallasii</i>)	2 084 584	-	1 746 465	-	1 468 255	-
03 04 20 83	Of anglers or monkfish (<i>Lophius</i> spp.)	-	-	17	-	-	-

Code	Description	1995		1996		1997	
		Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg
03 04 20 85	Of Alaska pollock (<i>Theragra chalcogramma</i>)	1 175 675	16 651	2 234 288	-	5 427 776	46 794
03 04 20 96	Of other saltwater fish	1 997 561	2 793	1 712 940	20 737	1 064 695	19 923
	Other	673 133	-	718 901	50	1 303 922	-
03 04 90 05	Surimi	2 123	-	3 005	-	20 265	-
03 04 90 10	Of freshwater fish	-	-	-	-	966	-
03 04 90 20	Of herrings (<i>Clupea harengus</i> & <i>Clupea pallasi</i>)	45 516	-	69 670	-	107 660	-
03 04 90 35	Of Pacific cod (<i>Gadus macrocephalus</i>)	-	-	24 200	-	-	-
03 04 90 39	Of other species of the genus <i>Gadus</i>	-	-	-	50	-	-
03 04 90 47	Of hakes of the genus <i>Merluccius</i>	-	-	49 589	-	29 480	-
03 04 90 57	Of monkfish (<i>Lophius</i> spp.)	-	-	-	-	20 400	-
03 04 90 59	Of blue whiting (<i>Micromesistius pouassou</i>)	-	-	51 588	-	850 450	-
03 04 90 61	Of Alaska pollock (<i>Theragra chalcogramma</i>)	-	-	20 882	-	97 666	-
03 04 90 97	Of other saltwater fish	625 494	-	499 872	-	177 035	-
	FISH, DRIED, SALTED OR IN BRINE; SMOKED FISH	156 778	4 273	156 128	63 196	178 775	89 830
03 05 10 00	Flours, meals and pellets of fish fit for human consumption	-	-	-	-	1	-
	Fish fillets, dried, salted or in brine but not smoked	16 768	1 649	2 828	730	26	48
03 05 30 11	Of Pacific cod (<i>Gadus macrocephalus</i>)	-	180	-	-	-	48
03 05 30 19	Of cods (<i>Gadus</i> spp.)	13 700	1 469	-	730	-	-
03 05 30 30	Of Pacific (<i>Oncorhynchus</i> spp.) and Atlantic (<i>Salmo salar</i>) salmon, salted or in brine	-	-	1	-	26	-
03 05 30 90	Of other fish	3 068	-	2 827	-	-	-
	Smoked fish, including filets	139 864	2 624	152 462	62 466	178 680	84 569
03 05 41 00	Pacific salmon (<i>Oncorhynchus</i> spp.) and Atlantic salmon (<i>Salmo salar</i>)	3 395	-	5 529	53 953	2 458	-
03 05 42 00	Herrings (<i>Clupea harengus</i> & <i>Clupea pallasi</i>)	25 390	-	24 439	6 788	100 755	28
03 05 43 00	Mackerels (<i>Scomber scombrus</i> , <i>S. australis</i> & <i>S. japonicus</i>)	67 812	100	122 494	1 725	74 374	80 289
03 05 49 40	Trouts (<i>Salmo trutta</i> & <i>Oncorhynchus mykiss</i>)	-	2 374	-	-	-	4 065
03 05 49 50	Eels (<i>Anguilla</i> spp.)	-	10	-	-	92	-
03 05 49 80	Other fish	43 267	140	-	-	1 001	187
	Dried fish, whether or not salted	-	-	6	-	-	3
03 05 59 90	Other fish	-	-	6	-	-	3
	Fish salted but not dried or smoked and fish in brine	146	-	832	-	68	5 210
03 05 61 00	Herrings (<i>Clupea harengus</i> & <i>Clupea pallasi</i>)	-	-	830	-	-	5 210
03 05 69 90	Other fish	146	-	2	-	68	-

Code	Description	1995		1996		1997	
		Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg
	CRUSTACEANS	16 085	1 604	20 018	549	21 645	340
	Frozen	12 639	694	15 700	4	19 613	-
03 06 11 90	Rock lobsters and other sea crawfish (<i>Palinurus</i> spp., <i>Panulirus</i> spp. & <i>Jasus</i> spp.)	-	-	80	-	46	-
03 06 12 10	Lobsters (<i>Homarus</i> spp.) - whole	80	-	360	-	45	-
03 06 12 90	Lobsters (<i>Homarus</i> spp.) - other	-	-	7	-	-	-
03 06 13 10	Shrimps and prawns of the family Penaeidae	200	-	192	-	251	-
03 06 13 30	Shrimps of the genus <i>Crangon</i>	-	-	-	-	450	-
03 06 13 50	Shrimps of the genus <i>Penaeus</i>	-	-	-	-	1 316	-
03 06 13 80	Other shrimps and prawns	10 641	-	11 558	4	11 631	-
03 06 14 30	Edible crab (<i>Cancer pagurus</i>)	-	-	-	-	701	-
03 06 14 90	Other crabs	504	-	-	-	2 782	-
03 06 19 10	Freshwater crayfish	14	-	576	-	-	-
03 06 19 90	Other crustaceans, including flours, meals and pellets, fit for human consumption	1 200	694	2 927	-	2 391	-
	Not frozen	3 446	910	4 318	545	2 032	340
03 06 21 00	Spiny lobsters & rock lobsters (<i>Palinurus</i> spp., <i>Panulirus</i> spp. & <i>Jasus</i> spp.)	-	-	-	-	3	-
03 06 22 10	Lobsters (<i>Homarus</i> spp.) - live	-	-	-	-	2	-
03 06 22 91	Lobsters (<i>Homarus</i> spp.) - whole	450	-	1 000	-	7	-
03 06 22 99	Lobsters (<i>Homarus</i> spp.) - other	-	-	-	-	11	-
03 06 23 10	Shrimps and prawns of the family Penaeidae	-	-	-	-	6	-
03 06 23 31	Crangonid shrimps (family Crangonidae)	-	-	-	-	23	-
03 06 23 90	Shrimps and prawns	-	-	200	-	-	-
03 06 24 30	Edible crab (<i>Cancer pagurus</i>)	-	-	-	-	44	-
03 06 24 90	Crabs other than <i>Paralithodes camtschatica</i> , <i>Chionectes</i> spp. & <i>Cancer pagurus</i>	-	-	200	-	-	-
03 06 29 10	Freshwater crayfish	9	-	-	-	-	-
03 06 29 30	Norway lobster (<i>Nephrops norvegicus</i>)	-	-	-	-	168	-
93 06 29 90	Other crustaceans, incl. flours, meals and pellets, fit for human consumption	2 987	910	2 918	545	1 768	340
	MOLLUSCS, whether in shell or not, other AQUATIC INVERTEBRATES	26 263	35 433	22 329	21 480	17 340	4 900
03 07 10 10	Fiat oysters (<i>Osireia</i> spp.) - live	-	-	-	-	19	-
03 07 10 90	Fiat oysters (<i>Osireia</i> spp.) - other	-	-	1 558	-	470	-
03 07 21 00	Scallops - live, fresh or chilled	424	-	500	-	-	-
03 07 29 10	Common scallop (<i>Pecten maximus</i>)	-	-	-	-	12	-
03 07 31 10	Mussels (<i>Mytilus</i> spp.) - live, fresh or chilled	-	-	-	-	40	-

Code	Description	1995		1996		1997	
		Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg
03 07 39 10	Mussels (<i>Mytilus</i> spp.) - other	1 109	-	2 156	-	1 180	-
03 07 39 90	Mussels (<i>Perna</i> spp.)	150	-	-	-	92	-
03 07 41 10	Cuttle fish (<i>Sepia officinalis</i> , <i>Rossia macrosoma</i> , <i>Sepioida</i> spp.), not live, fresh or chilled	-	-	92	-	15	-
03 07 41 99	Other squids	-	-	-	-	4	-
03 07 49 01	Lesser cuttle fish (<i>Sepioida rondeleti</i>)	145	25	-	-	-	-
03 07 49 11	Other cuttle fish (<i>Sepioida</i> spp.)	-	-	-	-	756	-
03 07 49 18	Cuttle fish (<i>Sepia officinalis</i> & <i>Rossia macrosoma</i>), but not the genus <i>Sepioida</i> - frozen	-	-	80	-	-	-
03 07 49 35	<i>Loligo patagonica</i> - frozen	1 014	-	680	-	726	-
03 07 49 38	Other <i>Loligo</i> species	108	-	-	-	60	-
03 07 49 59	Other squids - frozen	-	-	-	-	1 260	-
03 07 49 99	Other squids - other	-	-	120	-	612	-
03 07 51 00	Octopus (<i>Octopus</i> spp.) - live, fresh or chilled	-	-	350	-	15	-
03 07 59 10	Octopus (<i>Octopus</i> spp.) - frozen	1 229	-	1 074	-	2 307	-
03 07 60 00	Snails, other than sea snails - live, fresh or chilled	-	17 958	-	17 800	4	-
03 07 91 00	Other aquatic invertebrates - live, fresh or chilled	19 190	16 300	7 680	1 180	3 900	4 500
03 07 99 13	Striped venus and other species of the family Veneridae - frozen	499	-	3 095	-	-	-
03 07 99 18	Other aquatic invertebrates - frozen	1 129	-	4 904	1 700	910	400
03 07 99 90	Other aquatic invertebrates - other than frozen	1 266	1 150	40	800	4 958	-
TOTAL		17 195 244	632 739	18 537 316	569 961	18 640 005	521 963

Appendix 5 Preparations of meat of fish and other aquatic animals exported and imported in the years 1995-1997

Code	Description	1995		1996		1997	
		Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg
	EXTRACTS AND JUICES OF MEAT, fish or crustaceans, molluscs or other aquatic invertebrates	-	-	852	1 100	-	-
16 03 00 30	In immediate packing of a net content more than 1 kg but less than 20 kg	-	-	-	-	-	-
16 03 00 90	In immediate packing of a net content more than 20 kg	-	-	852	-	-	-
	PREPARED OR PRESERVED FISH; CAVIAR and caviar substitutes	4 236 043	96 179	5 276 787	133 177	5 373 828	315 611
	Fish whole or in pieces, but not minced	2 764 930	83 323	3 744 564	24 347	3 671 947	103 632
16 04 11 00	Salmon	804	-	3 289	2	4	343
16 04 12 10	Herrings - fillets, raw, merely coated with batter or breadcrumbs, deep frozen	8 047	-	27 483	15	10 032	1 971
16 04 12 91	Herrings - in airtight containers	63 234	-	101 154	25	105 639	4 351
16 04 12 99	Herrings - other	311 916	717	248 347	124	225 102	-
16 04 13 11	Sardines - in olive oil	24 136	6 007	69 226	54	128 463	63
16 04 13 19	Sardines - other	721 064	21 306	1 440 978	6 382	869 563	19 628
16 04 13 90	Sardinella and brisling or sprats	349 362	6 202	273 253	1 325	322 612	56 916
16 04 14 00	Tunas and skipjack	328 736	12 405	491 136	4 422	406 504	261
16 04 15 11	Mackerels of the species <i>Scomber scombrus</i> and <i>S. japonicus</i> - fillets	42 540	-	12 500	40	4 686	-
16 04 15 19	Mackerels of the species <i>Scomber scombrus</i> and <i>S. japonicus</i> - other	198 863	12 704	248 638	8 153	160 641	-
16 04 15 90	Blue mackerel (<i>Scomber australasicus</i>)	33 033	-	3 918	1 550	8 082	-
16 04 16 00	Anchovies	2	-	-	-	-	-
16 04 19 10	Salmonidae, other than salmon	70	-	2 047	-	-	-
16 04 19 39	Fish of the genus <i>Euthynnus</i> , other than skipjack (<i>Euthynnus (Katsuwonus) pelamis</i>)	60	-	2 772	-	-	-
16 04 19 91	Other fish, fillets, raw, merely coated with batter or breadcrumbs, deep frozen	465 717	1 940	620 306	1 810	1 053 301	20 099
16 04 19 92	Cods (<i>Gadus morhua</i> , <i>G. ogac</i> , <i>G. macrocephalus</i>)	-	-	40 764	-	60 637	-
16 04 19 93	Saithe (<i>Pollachius virens</i>)	-	-	-	-	3 364	-
16 04 19 94	Hakes (<i>Merluccius</i> spp., <i>Urophycis</i> spp.)	139 161	20 160	1 900	-	990	-
16 04 19 95	Alaska pollack (<i>Theragra chalcogramma</i>) and pollack (<i>Pollachius pollachius</i>)	12 549	-	12 330	445	73 624	-
16 04 19 98	Other fish	65 636	1 882	144 523	-	238 703	-
	Other prepared or preserved fish	1 466 657	12 850	1 526 996	108 815	1 690 830	210 907
16 04 20 05	Preparations of surimi	320	-	100	-	-	-
16 04 20 10	Of salmon	3 049	-	4271	1 496	6 692	-
16 04 20 30	Of salmonidae, other than salmon	20 880	-	22 181	70	-	-

Code	Description	1995		1996		1997	
		Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg	Import netto in kg	Export netto in kg
16 04 20 40	Of anchovies	22 972	-	9 688	864	4 316	-
16 04 20 50	Of sardines, bonito, mackerels of the species <i>Scomber scombrus</i> & <i>S. japonicus</i> , and plain bonito (<i>Orcynopsis unicolor</i>)	329 637	12 303	308 207	52	480 004	6 778
16 04 20 70	Of tunas, skipjack or other fish of the genus <i>Euthynnus</i>	91 219	12	185 548	112	231 290	-
16 04 20 90	Of other fish	998 580	535	997 001	106 221	968 528	204 129
	Caviar and caviar substitutes	4 456	6	5 227	15	11 051	1 072
16 04 30 10	Caviar (sturgeon roe)	2 221	6	3 361	15	4 139	1 071
16 04 30 90	Caviar substitutes	2 235	-	1 866	-	6 912	1
	CRUSTACEANS, MOLLUSCS & other AQUATIC INVERTEBRATES,	29 957	-	23 727	75	14 866	41
16 05 10 00	Crab	4 905	-	2 936	-	-	-
16 05 20 10	Shrimps and prawns - in airtight containers	1 235	-	3 004	24	691	-
16 05 20 91	Shrimps and prawns - in immediate packings of a net content not exceeding 2 kg	670	-	250	-	70	22
16 05 30 90	Lobsters	-	-	-	-	-	15
16 05 40 00	Other crustaceans	780	-	3 666	-	-	-
16 05 90 11	Mussels (<i>Mytilus</i> spp., <i>Perna</i> spp.) - in airtight containers	5 102	-	1 393	10	130	-
16 05 90 19	Mussels (<i>Mytilus</i> spp., <i>Perna</i> spp.) - other	9 775	-	4 814	-	4 719	-
16 05 90 30	Other molluscs	2 797	-	150	21	3 766	4
16 05 90 90	Other aquatic invertebrates	4 693	-	7 514	20	5 490	-
TOTAL		4 266 000	96 179	5 301 366	134 352	5 388 694	315 652

**Appendix 6 List of import tariffs of fish and other aquatic animals
(valid from 1st January 1999)**

CN Code	Description	Rate of duty	
		auto-nomous	conventional
	LIVE FISH		
03 01 10 10	Ornamental freshwater fishes	free	free
03 01 10 90	Ornamental saltwater fishes	free	free
03 01 91 10	Trouts of the species <i>Oncorhynchus apache</i> & <i>O. chrysogaster</i>	5.0	free
03 01 91 90	Other trouts (<i>Salmo trutta</i> , <i>Oncorhynchus mykiss</i> , etc.)	7.0	6.2
03 01 92 00	Eels (<i>Anguilla</i> spp.)	5.0	free
03 01 93 00	Carp	12.0	10.4
03 01 99 11	Pacific (<i>Oncorhynchus</i> spp.), Atlantic (<i>Salmo salar</i>), and Danube (<i>Hucho hucho</i>) salmon	5.0	free
03 01 99 19	Other freshwater fishes	5.0	free
03 01 99 90	Other saltwater fishes	7.0	6.0
	FISH, FRESH OR CHILLED, excluding fish fillets and other fish meat		
03 02 11 10	Trouts of the species <i>Oncorhynchus apache</i> & <i>O. chrysogaster</i>	5.0	free
03 02 11 90	Other trouts (<i>Salmo trutta</i> , <i>Oncorhynchus mykiss</i> , etc.)	5.0	1.0
03 02 12 00	Pacific (<i>Oncorhynchus</i> spp.), Atlantic (<i>Salmo salar</i>), and Danube (<i>Hucho hucho</i>) salmon	5.0	free
03 02 19 00	Other salmonids	5.0	free
03 02 21 10	Greenland halibut (<i>Reinhardtius hippoglossoides</i>)	5.0	free
03 02 21 30	Atlantic halibut (<i>Hippoglossus hippoglossus</i>)	5.0	free
03 02 21 90	Pacific halibut (<i>Hippoglossus stenolepis</i>)	5.0	free
03 02 22 00	European plaice (<i>Pleuronectes platessa</i>)	5.0	free
03 02 23 00	Soles (<i>Solea</i> spp.)	5.0	free
03 02 29 10	Megrimms (<i>Lepidorhombus</i> spp.)	5.0	free
03 02 29 90	Other flatfishes	5.0	free
03 02 31 00	Albacore (<i>Thunnus alalunga</i>)	5.0	free
03 02 32 00	Yellowfin tuna (<i>Thunnus albacares</i>)	5.0	free
03 02 33 00	Skipjack or stripe belled bonito (<i>Euthynnus (Katsuwonus) pelamys</i>)	5.0	free
03 02 39 00	Other tunas	5.0	free
03 02 40 00	Herrings (<i>Clupea harengus</i> & <i>C. pallasii</i>)	5.0	free
03 02 50 00	Cods (<i>Gadus morhua</i> , <i>G. ogac</i> or <i>G. macrocephalus</i>)	5.0	free
03 02 61 00	Pilchards (<i>Sardina pilchardus</i> , <i>Sardinops</i> spp.), sardinellas (<i>Sardinella</i> spp.) and sprats (<i>Sprattus sprattus</i>)	5.0	free
03 02 62 00	Haddock (<i>Melanogrammus aeglefinus</i>)	5.0	free
03 02 63 00	Coalfish (<i>Pollachius virens</i>)	5.0	free
03 02 64 00	Mackerels (<i>Scomber scombrus</i> , <i>S. australasicus</i> & <i>S. japonicus</i>)	5.0	free
03 02 65 00	Dogfishes and other sharks	5.0	free
03 02 66 00	Eels (<i>Anguilla</i> spp.)	5.0	free
03 02 69 11	Carp	12.0	0.6
03 02 69 19	Other freshwater fishes	5.0	free
03 02 69 20	Fishes of the genus <i>Euthynnus</i> , other than the skipjack (<i>E. (Katsuwonus) pelamys</i>)	5.0	free
03 02 69 31	Redfishes (<i>Sebastes</i> spp.)	5.0	free
03 02 69 35	Polar cod (<i>Boreogadus saida</i>)	5.0	free
03 02 69 41	Whiting (<i>Merlangius merlangus</i>)	5.0	free
CN Code	Description	Rate of duty	
		auto-nomous	conventional
03 02 69 45	Ling (<i>Molva molva</i>)	5.0	free
03 02 69 51	Alaska pollack (<i>Theragra chalcogramma</i>) and pollack (<i>Pollachius pollachius</i>)	5.0	free
03 02 69 55	Anchovies (<i>Engraulis</i> sp.)	5.0	free
03 02 69 61	Common dentex (<i>Dentex dentex</i>) and pandoras (<i>Pagellus</i> spp.)	5.0	free

03 02 69 66	Cape hakes (<i>Merluccius capensis</i> & <i>Merluccius paradoxus</i>)	5.0	free
03 02 69 67	Southern hake (<i>Merluccius australis</i>)	5.0	free
03 02 69 68	Other hakes of the genus <i>Merluccius</i>	5.0	free
03 02 69 69	Hakes of the genus <i>Urophycis</i>	5.0	free
03 02 69 75	Pomfrets (<i>Brama</i> spp.)	5.0	free
03 02 69 81	Monkfishes (<i>Lophius</i> spp.)	5.0	free
03 02 69 85	Blue whiting (<i>Micromesistius poutassou</i>)	5.0	free
03 02 69 86	Southern blue whiting (<i>Micromesistius australis</i>)	5.0	free
03 02 69 87	Swordfish (<i>Xiphias gladius</i>)	5.0	free
03 02 69 91	Atlantic horse mackerel (<i>Trachurus trachurus</i>)	5.0	free
03 02 69 92	Pink cusk-eel (<i>Genypterus blacodes</i>)	5.0	free
03 02 69 93	Fish of the species <i>Kathetostoma giganteum</i>	5.0	free
03 02 69 94	Seabass (<i>Dicentrarchus labrax</i>)	5.0	free
03 02 69 95	Gilthead seabream (<i>Sparus auratus</i>)	5.0	free
03 02 69 99	Other saltwater fishes	5.0	free
03 02 70 00	Livers and roes	5.0	free
	FISH, FROZEN, excluding fish fillets and other fish meat		
	Salmonids, excluding livers and roes		
03 03 10 00	Pacific salmon (<i>Oncorhynchus</i> spp.)	5.0	free
03 03 21 10	Trouts of the species <i>Oncorhynchus apache</i> and <i>O. chrysogaster</i>	5.0	free
03 03 21 90	Other trouts (<i>Salmo trutta</i> , <i>Oncorhynchus mykiss</i> , etc.)	7.0	0.1
03 03 22 00	Atlantic salmon (<i>Salmo salar</i>) and Danube salmon (<i>Hucho hucho</i>)	5.0	free
03 03 29 00	Other salmonids	5.0	free
	Flat fishes (Pleuronectidae, Bothidae, Cynoglossidae, Soleidae, Scophthalmidae & Citharidae), excl. livers and roes		
03 03 31 10	Greenland halibut (<i>Reinhardtius hippoglossoides</i>)	5.0	free
03 03 31 30	Atlantic halibut (<i>Hippoglossus hippoglossus</i>)	5.0	free
03 03 31 90	Pacific halibut (<i>Hippoglossus stenolepis</i>)	5.0	free
03 03 32 00	European plaice (<i>Pleuronectes platessa</i>)	5.0	free
03 03 33 00	Soles (<i>Solea</i> spp.)	5.0	free
03 03 39 10	Flounder (<i>Platichthys flesus</i>)	5.0	free
03 03 39 20	Megrim (<i>Lepidorhombus</i> sp.)	5.0	free
03 03 39 30	Sand flounders (<i>Rhombosolea</i> spp.)	5.0	free
03 03 39 80	Other flatfishes	5.0	free
	Tunas, excluding livers and roes		
03 03 41 00	Albacore (<i>Thunnus alalunga</i>)	5.0	free
03 03 42 00	Yellowfin tuna (<i>Thunnus albacares</i>)	5.0	free
03 03 43 00	Skipjack or stripe bellied bonito (<i>Euthynnus (Katsuwonus) pelamys</i>)	5.0	free
03 03 49 00	Other tunas	5.0	free
	Herrings, excluding livers and roes		
03 03 50 00	Herrings (<i>Clupea harengus</i> , <i>C. pallasii</i>)	5.0	free
CN Code	Description	Rate of duty	
		auto-nomous	conventional
	Cods, excluding livers and roes		
03 03 60 11	Atlantic cod (<i>Gadus morhua</i>)	5.0	free
03 03 60 19	Greenland cod (<i>Gadus ogac</i>)	5.0	free
03 03 60 90	Pacific cod (<i>Gadus macrocephalus</i>)	5.0	free
	Other fish, excluding livers and roes		
03 03 71 10	European pilchard (<i>Sardina pilchardus</i>)	5.0	free
03 03 71 30	Pilchards (sardines) of the genus <i>Sardinops</i> and sardinellas (<i>Sardinella</i> spp.)	5.0	free
03 03 71 90	European sprat (<i>Sprattus sprattus</i>)		
03 03 72 00	Haddock (<i>Melanogrammus aeglefinus</i>)	5.0	free
03 03 73 00	Saithe, or pollock (<i>Pollachius virens</i>)	5.0	free
03 03 74 10	Atlantic mackerel (<i>Scomber scombrus</i>) and chub mackerel (<i>S. japonicus</i>)	5.0	free
03 03 74 90	Blue mackerel (<i>Scomber australis</i>)	5.0	free
03 03 75 20	Picked dogfish (<i>Squalus acanthias</i>)	5.0	free

03 03 75 50	Catsharks (<i>Scylliorhinus</i> spp.)	5.0	free
03 03 75 90	Other sharks	5.0	free
03 03 76 00	Eels (<i>Anguilla</i> spp.)	5.0	free
03 03 77 00	Seabass (<i>Dicentrarchus labrax</i>) and spotted sea bass (<i>D. punctatus</i>)	5.0	free
03 03 78 11	Cape hakes (<i>Merluccius capensis</i> & <i>M. paradoxus</i>)	5.0	free
03 03 78 12	Argentine hake (<i>Merluccius hubbsi</i>)	5.0	free
03 03 78 13	Southern hake (<i>Merluccius australis</i>)	5.0	free
03 03 78 19	Other hakes of the genus <i>Merluccius</i>	5.0	free
03 03 78 90	Hakes of the genus <i>Urophycis</i>	5.0	free
03 03 79 11	Carp	5.0	0.6
03 03 79 19	Other freshwater fishes	5.0	free
03 03 79 20	Fish of the genus <i>Euthynnus</i> , other than the skipjack (<i>E. (Katsuwonus) pelamys</i>)	5.0	free
03 03 79 35	Redfishes (<i>Sebastes</i> spp.)	5.0	free
03 03 79 41	Polar cod (<i>Boreogadus saida</i>)	5.0	free
03 03 79 45	Whiting (<i>Merlangius merlangus</i>)	5.0	free
03 03 79 51	Ling (<i>Molva molva</i>)	5.0	free
03 03 79 55	Alaska pollack (<i>Theragra chalcogramma</i>) and pollack (<i>Pollachius pollachius</i>)	5.0	free
03 03 79 6	Plain bonito (<i>Orcynopsis unicolor</i>)	5.0	free
03 03 79 65	Anchovies (<i>Engraulis</i> spp.)	5.0	free
03 03 79 71	Common dentex (<i>Dentex dentex</i>) and pandoras (<i>Pagellus</i> spp.)	5.0	free
03 03 79 75	Pomfrets (<i>Brama</i> spp.)	5.0	free
03 03 79 81	Monkfishes (<i>Lophius</i> spp.)	5.0	free
03 03 79 83	Blue whiting (<i>Micromesistius poutassou</i>)	5.0	free
03 03 79 85	Southern blue whiting (<i>Micromesistius australis</i>)	5.0	free
03 03 79 87	Swordfish (<i>Xiphus gladius</i>)	5.0	free
03 03 79 91	Atlantic horse mackerel (<i>Trachurus trachurus</i>)	5.0	free
03 03 79 92	Blue grenadier (<i>Macruronus novaezealandiae</i>)	5.0	free
03 03 79 93	Pink cusk-eel (<i>Genypterus blacodes</i>)	5.0	free
03 03 79 94	Fish of the species <i>Pelotretis flavilatus</i> and <i>Peltorhamphus novaezealandiae</i>	5.0	free
03 03 79 95	Fish of the species <i>Kaheostoma giganteum</i>	5.0	free
03 03 79 96	Other saltwater fish	5.0	free
03 03 80 00	Livers and roes	5.0	free
CN Code	Description	Rate of duty	
		auto-nomous	conventional
	FISH FILLETS & OTHER MEAT (whether or not minced), fresh, chilled or frozen		
	Fresh or chilled fillets		
03 04 10 11	Of trouts (<i>Salmo trutta</i> , <i>Oncorhynchus mykiss</i> , etc.)	5.0	free
03 04 10 13	Of Pacific (<i>Oncorhynchus</i> spp.), Atlantic (<i>Salmo salar</i>), and Danube salmon (<i>Hucho hucho</i>)	5.0	free
03 04 10 19	Of other freshwater fishes	5.0	free
03 04 10 31	Of cods (<i>Gadus morhua</i> , <i>G. ogac</i> , <i>G. macrocephalus</i>) and polar cod (<i>Boreogadus saida</i>)	5.0	free
03 04 10 33	Of saithe or pollock (<i>Pollachius virens</i>)	5.0	free
03 04 10 35	Of redfishes (<i>Sebastes</i> spp.)	5.0	free
03 04 10 38	Of other saltwater fish	5.0	free
	Fresh or chilled other fish meat (whether or not minced)		
03 04 10 91	Of freshwater fish	5.0	free
03 04 10 94	Flaps of herring	5.0	free
03 04 10 98	Flaps of other saltwater fishes	5.0	free
	Frozen fillets		
03 04 20 11	Of trouts (<i>Salmo trutta</i> , <i>Oncorhynchus mykiss</i> , etc.)	5.0	free
03 04 20 13	Of Pacific (<i>Oncorhynchus</i> spp.), Atlantic (<i>Salmo salar</i>) and Danube salmon (<i>Hucho hucho</i>)	5.0	free
03 04 20 19	Of other freshwater fish	5.0	free
03 04 20 20	Of cods (<i>Gadus morhua</i> , <i>G. macrocephalus</i> , <i>G. ogac</i>) and Polar cod (<i>Boreogadus saida</i>)	5.0	free
03 04 20 29	Of other cod species	5.0	free
03 04 20 31	Of saithe or pollock (<i>Pollachius virens</i>)	5.0	free
03 04 20 33	Of haddock (<i>Melanogrammus aeglefinus</i>)	5.0	free
03 04 20 35	Of golden redfish (<i>Sebastes marinus</i>)	5.0	free

03 04 20 37	Of redfishes (<i>Sebastes</i> spp.) other than <i>S. marinus</i>	5.0	free
03 04 20 41	Of whiting (<i>Merlangius merlangus</i>)	5.0	free
03 04 20 43	Of lings (<i>Molva</i> spp.)	5.0	free
03 04 20 45	Of tuna (of the genus <i>Thunnus</i>) and of fish of the genus <i>Euthynnus</i>	5.0	free
03 04 20 51	Of blue mackerel (<i>Scomber australasicus</i>)	5.0	free
03 04 20 53	Of other mackerel species	5.0	free
03 04 20 55	Of cape hakes (<i>Merluccius capensis</i> and <i>M. paradoxus</i>)	5.0	free
03 04 20 56	Of Argentine hake (<i>Merluccius hubbsi</i>)	5.0	free
03 04 20 58	Of other hakes of the genus <i>Merluccius</i>	5.0	free
03 04 20 59	Of hakes of the genus <i>Urophycis</i>	5.0	free
03 04 20 61	Of pickled dogfish (<i>Squalus acanthias</i>) and catsharks (<i>Scyliorhinus</i> spp.)	5.0	free
03 04 20 69	Of other sharks	5.0	free
03 04 20 71	Of European plaice (<i>Pleuronectes platessa</i>)	5.0	free
03 04 20 73	Of flounder (<i>Platichthys flesus</i>)	5.0	free
03 04 20 75	Of herrings (<i>Clupea harengus</i> & <i>Clupea pallasii</i>)	5.0	free
03 04 20 79	Of megrims (<i>Lepidorhombus</i> spp.)	5.0	free
03 04 20 81	Of pomphrets (<i>Brama</i> spp.)	5.0	free
03 04 20 83	Of anglers or monkfishes (<i>Lophius</i> spp.)	5.0	free
03 04 20 85	Of Alaska pollack (<i>Theragra chalcogramma</i>)	5.0	free
03 04 20 87	Of swordfish (<i>Xiphias gladius</i>)	5.0	free
03 04 20 91	Of blue grenadier (<i>Macruronus novaezealandiae</i>)	5.0	free
03 04 20 96	Of other saltwater fish	5.0	free
CN Code	Description	Rate of duty	
		auto-nomous	conventional
	Other		
03 04 90 05	Surimi	5.0	free
03 04 90 10	Of freshwater fish	5.0	free
03 04 90 20	Of herrings (<i>Clupea harengus</i> & <i>Clupea pallasii</i>)	5.0	free
03 04 90 31	Of redfishes (<i>Sebastes</i> spp.)	5.0	free
03 04 90 35	Of Pacific cod (<i>Gadus macrocephalus</i>)	5.0	free
03 04 90 38	Of Atlantic cod (<i>Gadus morhua</i>)	5.0	free
03 04 90 39	Of other species of the genus <i>Gadus</i>	5.0	free
03 04 90 41	Of saithe or pollock (<i>Pollachius virens</i>)	5.0	free
03 04 90 45	Of haddock (<i>Melanogrammus aeglefinus</i>)	5.0	free
03 04 90 47	Of hakes of the genus <i>Merluccius</i>	5.0	free
03 04 90 49	Of hakes of the genus <i>Urophycis</i>	5.0	free
03 04 90 51	Of megrims (<i>Lepidorhombus</i> spp.)	5.0	free
03 04 90 55	Of pomfrets (<i>Brama</i> spp.)	5.0	free
03 04 90 57	Of monkfishes (<i>Lophius</i> spp.)	5.0	free
03 04 90 59	Of blue whiting (<i>Micromesistius poutassou</i>)	5.0	free
03 04 90 61	Of Alaska pollack (<i>Theragra chalcogramma</i>)	5.0	free
03 04 90 65	Of swordfish (<i>Xiphias gladius</i>)	5.0	free
03 04 90 97	Of other saltwater fish	5.0	free
	FISH, DRIED, SALTED OR IN BRINE; SMOKED FISH		
03 05 10 00	Flours, meals and pellets of fish fit for human consumption	38.0	free
03 05 20 00	Livers and roes, dried, smoked, salted or in brine	5.0	free
	Fish fillets, dried, salted or in brine but not smoked		
03 05 30 11	Of Pacific cod (<i>Gadus macrocephalus</i>)	free	free
03 05 30 19	Of other cods (<i>Gadus</i> spp.)	free	free
03 05 30 30	Of Pacific (<i>Oncorhynchus</i> spp.), Atlantic (<i>Salmo salar</i>) and Danube salmon (<i>Hucho hucho</i>)	free	free
03 05 30 50	Of Greenland halibut (<i>Reinhardtius hippoglossoides</i>)	free	free
03 05 30 90	Of other fish	free	free
	Smoked fish, including filets		
03 05 41 00	Pacific (<i>Oncorhynchus</i> spp.), Atlantic (<i>Salmo salar</i>) and Danube salmon (<i>Hucho hucho</i>)	free	free
03 05 42 00	Herrings (<i>Clupea harengus</i> & <i>Clupea pallasii</i>)	free	free

03 05 49 10	Greenland halibut (<i>Reinhardtius hippoglossoides</i>)	5.0	free
03 05 49 20	Atlantic halibut (<i>Hippoglossus hippoglossus</i>)	5.0	free
03 05 49 30	Mackerels (<i>Scomber scombrus</i> , <i>S. australasicus</i> & <i>S. japonicus</i>)	5.0	free
03 05 49 40	Trouts (<i>Salmo trutta</i> , <i>Oncorhynchus mykiss</i> , etc.)	5.0	free
03 05 49 50	Eels (<i>Anguilla</i> spp.)	5.0	free
03 05 49 80	Other fish	5.0	free
	Dried fish, whether or not slated but not smoked		
03 05 51 00	Cods (<i>Gadus morhua</i> , <i>G. ogac</i> & <i>G. macrocephalus</i>)	5.0	free
03 05 59 10	Polar cod (<i>Boreogadus saida</i>)	5.0	free
03 05 59 30	Herrings (<i>Clupea harengus</i> & <i>C. pallasii</i>)	5.0	free
03 05 59 50	Anchovies (<i>Engraulis</i> spp.)	5.0	free
03 05 59 60	Greenland (<i>Reinhardtius hippoglossoides</i>) and Pacific halibut (<i>Hippoglossus stenolepis</i>)	5.0	free
03 05 59 70	Atlantic halibut (<i>Hippoglossus hippoglossus</i>)	5.0	free
03 50 59 90	Other fishes	5.0	free
CN Code	Description	Rate of duty	
		auto-nomous	conventional
	Fish salted but not dried or smoked and fish in brine		
03 05 61 00	Herrings (<i>Clupea harengus</i> & <i>Clupea pallasii</i>)	5.0	free
03 05 62 00	Cods (<i>Gadus morhua</i> , <i>G. ogac</i> & <i>G. macrocephalus</i>)	5.0	free
03 05 63 00	Anchovies (<i>Engraulis</i> spp.)	5.0	free
03 05 69 10	Polar cod (<i>Boreogadus saida</i>)	5.0	free
03 05 69 20	Greenland (<i>Reinhardtius hippoglossoides</i>) and Pacific halibut (<i>Hippoglossus stenolepis</i>)	5.0	free
03 05 69 30	Atlantic halibut (<i>Hippoglossus hippoglossus</i>)	5.0	free
03 05 69 50	Pacific (<i>Oncorhynchus</i> spp.), Atlantic (<i>Salmo salar</i>) and Danube salmon (<i>Hucho hucho</i>)	5.0	free
03 05 69	Other fishes	5.0	free
	CRUSTACEANS		
	Frozen		
03 06 11 00	Spiny lobsters & rock lobsters (<i>Palinurus</i> spp., <i>Panulirus</i> spp. & <i>Jasus</i> spp.)	10.0	free
03 06 12 00	Lobsters (<i>Homarus</i> spp.)	10.0	free
03 06 13 10	Shrimps and prawns of the family Pandalidae	10.0	free
03 06 13 30	Shrimps of the genus <i>Crangon</i>	10.0	free
03 06 13 40	Deepwater rose shrimp (<i>Parapenaeus longirostris</i>)	10.0	free
03 06 13 50	Shrimps of the genus <i>Penaeus</i>	10.0	free
03 06 13 80	Other shrimps and prawns	10.0	free
03 06 14 10	Kamchatka king crab (<i>Paralithodes kamchaticus</i>), Pacific snow crabs (<i>Chionectes</i> spp.), and blue crab (<i>Callinectes sapidus</i>)	10.0	free
03 06 14 30	Edible crab (<i>Cancer pagurus</i>)	10.0	free
03 06 14 90	Other crabs	10.0	free
03 06 19 10	Freshwater crayfish	7.0	free
03 06 19 30	Norway lobster (<i>Nephrops norvegicus</i>)	7.0	free
03 06 19 90	Other crustaceans, including flours, meals and pellets, fit for human consumption	7.0	free
	Not frozen		
03 06 21 00	Spiny lobsters & rock lobsters (<i>Palinurus</i> spp., <i>Panulirus</i> spp. & <i>Jasus</i> spp.)	9.5	free
03 06 22 00	Lobsters (<i>Homarus</i> spp.)	9.5	free
03 06 23 10	Shrimps and prawns of the family Pandalidae	9.5	free
03 06 23 30	Shrimps of the genus <i>Crangon</i>	9.5	free
03 06 23 90	Other shrimps and prawns	9.5	free
03 06 24 10	Kamchatka king crab (<i>Paralithodes kamchaticus</i>), Pacific snow crabs (<i>Chionectes</i> spp.), and blue crab (<i>Callinectes sapidus</i>)	9.5	free
03 06 24 30	Edible crab (<i>Cancer pagurus</i>)	9.5	free
03 06 24 90	Other crabs	9.5	free
03 06 29 10	Freshwater crayfish	7.5	free
03 06 29 30	Norway lobster (<i>Nephrops norvegicus</i>)	7.5	free
93 06 29 90	Other crustaceans, incl. flours, meals and pellets, fit for human consumption	7.5	free
	MOLLUSCS, whether in shell or not,		
	OTHER AQUATIC INVERTEBRATES		

Frozen			
03 07 10 10	Flat oysters (<i>Ostrea</i> spp.)	10.0	free
03 07 10 90	Other oysters	10.0	free
Scallops			
03 07 21 00	Scallops of the genera <i>Pecten</i> , <i>Chlamys</i> or <i>Placopecten</i> – live, fresh or chilled	10.0	free
CN Code	Description	Rate of duty	
		auto-nomous	conventional
03 07 29 10	Common scallop (<i>Pecten maximus</i>) – not live, fresh or chilled	10.0	free
03 07 29 90	Other scallops – not live, fresh or chilled	10.0	free
Mussels			
03 07 31 10	Mussels (<i>Mytilus</i> spp.) – live, fresh or chilled	10.0	free
03 07 31 90	Mussels (<i>Perna</i> spp.) – live, fresh or chilled	10.0	free
03 07 39 10	Mussels (<i>Mytilus</i> spp.) – other	10.0	free
03 07 39 90	Mussels (<i>Perna</i> spp.) – other	10.0	free
Cuttle fish and squid			
03 07 41 10	Cuttle fishes (<i>Sepia officinalis</i> , <i>Rossia macrosoma</i> & <i>Sepiolo</i> spp.) – live, fresh or chilled	10.0	free
03 07 41 91	Squids (<i>Todarodes sagittatus</i> , <i>Loligo</i> spp.) – live, fresh or chilled	10.0	free
03 07 41 99	Other squids (<i>Ommastrephes</i> , <i>Notodarus</i> or <i>Sepioteuthis</i> spp.) – live, fresh or chilled	10.0	free
03 07 49 01	Lesser cuttle fish (<i>Sepiolo rondeleti</i>) – frozen	10.0	free
03 07 49 11	Other cuttle fishes of the genus <i>Sepiolo</i> – frozen	10.0	free
03 07 49 18	Other cuttle fishes (<i>Sepia officinalis</i> , <i>Rossia macrosoma</i> , etc.) – frozen	10.0	free
03 07 49 31	Common squid (<i>Loligo vulgaris</i>) – frozen	10.0	free
03 07 49 33	Longfin squid (<i>Loligo pealei</i>) – frozen	10.0	free
03 07 49 35	(<i>Loligo patagonica</i>) – frozen	10.0	free
03 07 49 38	Other squids of the genus <i>Loligo</i>	10.0	free
03 07 49 51	European flying squid (<i>Todarodes sagittatus</i>) – frozen	10.0	free
03 07 49 59	Other squids (<i>Ommastrephes</i> spp., <i>Notodarus</i> spp., <i>Sepioteuthis</i> spp.) – frozen	10.0	free
03 07 49 71	Cuttle fishes (<i>Sepia officinalis</i> , <i>Rossia macrosoma</i> & <i>Sepiolo</i> spp.) – other	10.0	free
03 07 49 91	Squids (<i>Todarodes sagittatus</i> , <i>Loligo</i> spp.) – other	10.0	free
03 07 49 99	Other squids (<i>Ommastrephes</i> spp., <i>Notodarus</i> spp., <i>Sepioteuthis</i> spp.) – frozen	10.0	free
Octopus			
03 07 51 00	Octopus (<i>Octopus</i> spp.) – live, fresh or chilled	10.0	free
03 07 59 00	Octopus (<i>Octopus</i> spp.) – other	10.0	free
Snails			
03 07 60 00	Snails, other than sea snails – live, fresh or chilled	5.0	free
Other aquatic invertebrates			
03 07 91 00	Other aquatic invertebrates – live, fresh or chilled	5.0	free
03 07 99 11	Shortfin squid (<i>Illex</i> spp.) – frozen	8.0	free
03 07 99 13	Striped venus and other species of the family Veneridae – frozen	8.0	free
03 07 99 15	Jettyfish (<i>Rhopilema</i> spp.) – frozen	8.0	free
03 07 99 18	Other aquatic invertebrates – frozen	8.0	free
03 07 99 00	Other aquatic invertebrates – other, incl. flours, meals and pellets, fit for human consum.	8.0	free

Appendix 7 List of import tariffs of preparations of meat of fish and other aquatic animals

(valid from 1st January 1999)

CN Code	Description	Rate of duty	
		auto-nomous	conventional
	EXTRACTS AND JUICES OF MEAT, fish or crustaceans, molluscs or other aquatic invertebrates		
16 03 00 30	In immediate packing of a net content more than 1 kg but less than 20 kg	21.0	free
16 03 00 90	In immediate packing of a net content more than 20 kg	21.0	free
16 03 00 90	Other	21.0	free
	PREPARED OR PRESERVED FISHES, CAVIAR and caviar substitutes prepared from fish eggs		
	Fish whole or in pieces, but not minced		
16 04 11 00	Salmon	7.0	free
16 04 12 10	Herrings - fillets, raw, merely coated with batter or breadcrumbs, deep frozen	7.0	free
16 04 12 91	Herrings - in airtight containers	7.0	free
16 04 12 99	Herrings - other	7.0	free
16 04 13 11	Sardines - in olive oil	7.0	free
16 04 13 19	Sardines - other	7.0	free
16 04 13 90	Sardinellas and brislings or sprats	7.0	free
16 04 14 11	Tunas and skipjack - in vegetable oil	7.0	free
16 04 14 16	Tunas and skipjack - fillets known as "loins"	7.0	free
16 04 14 18	Tunas and skipjack - other	7.0	free
16 04 14 90	Bonitos (<i>Sarda</i> spp.)	7.0	free
16 04 15 11	Mackerels of the species <i>Scomber scombrus</i> and <i>S. japonicus</i> - fillets	7.0	free
16 04 15 19	Mackerels of the species <i>Scomber scombrus</i> and <i>S. japonicus</i> - other	7.0	free
16 04 15 90	Blue mackerel (<i>Scomber australasicus</i>)	7.0	free
16 04 16 00	Anchovies	7.0	free
16 04 19 10	Salmonidae, other than salmon	7.0	free
16 04 19 30	Fish of the genus <i>Euthynnus</i> , other than skipjack (<i>Euthynnus (Katsuwonus) pelamis</i>)	7.0	free
16 04 19 50	Plain bonito (<i>Orcynopsis unicolor</i>)	7.0	free
16 04 19 91	Other fish, fillets, raw, merely coated with batter or breadcrumbs, deep frozen	7.0	free
16 04 19 92	Cods (<i>Gadus morhua</i> , <i>G. ogac</i> & <i>G. macrocephalus</i>)	7.0	free
16 04 19 93	Saithe (<i>Pollachius virens</i>)	7.0	free
16 04 19 94	Hakes (<i>Merluccius</i> spp. & <i>Urophycis</i> spp.)	7.0	free
16 04 19 95	Alaska pollack (<i>Theragra chalcogramma</i>) and pollack (<i>Pollachius pollachius</i>)	7.0	free
16 04 19 98	Other fish	7.0	free
	Other prepared or preserved fish		
16 04 20 05	Preparations of surimi	7.0	free
16 04 20 10	Of salmon	7.0	free
16 04 20 30	Of salmonidae, other than salmon	7.0	free
16 04 20 40	Of anchovies	7.0	free
16 04 20 50	Of sardines, bonito, mackerels of the species <i>Scomber scombrus</i> & <i>S. japonicus</i> , and plain bonito (<i>Orcynopsis unicolor</i>)	7.0	free
16 04 20 70	Of tunas, skipjack or other fish of the genus <i>Euthynnus</i>	7.0	free
16 04 20 90	Of other fish	7.0	free
CN Code	Description	Rate of duty	
		auto-nomous	conventional
	Caviar and caviar substitutes		
16 04 30 10	Caviar (sturgeon roe)	5.0	free
16 04 30 90	Caviar substitutes	5.0	free
	CRUSTACEANS, MOLLUSCS & other AQUATIC INVERTEBRATES, prepared or preserved		

16 05 10 00	Crabs	18.0	free
	Shrimps and prawns		
16 05 20 10	Shrimps and prawns – in airtight containers	18.0	free
16 05 20 91	Shrimps and prawns – in immediate packings of a net content not exceeding 2 kg	18.0	free
16 05 20 99	Shrimps and prawns – other	18.0	free
	Lobsters		
16 05 30 10	Lobster meat, cooked, for the manufacture of lobster butte or of lobster pastes, pâtes, soups and sauces	18.0	free
16 05 30 90	Lobsters – other	18.0	free
16 05 40 00	Other crustaceans	18.0	free
	Molluscs		
16 05 90 11	Mussels (<i>Mytilus</i> spp., <i>Perna</i> spp.) – in airtight containers	23.0	free
16 05 90 19	Mussels (<i>Mytilus</i> spp., <i>Perna</i> spp.) - other	23.0	free
16 05 90 30	Other molluscs	23.0	free
16 05 90 90	Other aquatic invertebrates	23.0	free

Appendix 8 List of major fish farms in Slovakia

1. **ESOX, rybárska spoločnosť**
Address: Senné 21, SK - 072 13 PALÍN
Phone: + 421 - 946 - 97 390
Manager: Ján Išky
2. **ESOX, chov rýb**
Address: Iňačovce 51, SK - 072 11 ČEČEHOV
Phone: + 421 - 946 - 90 279
Manager: Ing. Ľudovít Janošov
3. **JANEX - Slovensko, spol. s. r. o.**
Address: Hollého 32, SK - 036 01 MARTIN
Phone: + 421 - 842 - 34 084
Fax.: + 421 - 842 - 34 084
Manager: Ing. Ján Tomka
4. **MARYB, spol. s. r. o.**
Address: SK - 036 01 MARTIN - STRÁNE
Phone: + 421 - 842 - 23 80 49
Manager: Ján Petráš
5. **Miroslav Martočko**
Address: Hrnčiarska 34, SK - 048 01 ROŽŇAVA
Phone: + 421 - 924 - 22 085
Manager: Miroslav Martočko
6. **Rybochov, spol. s. r. o.**
Address: Park 397/2, SK-900 31 STUPAVA
Phone: + 421 - 7 - 65 93 43 40
Fax.: + 421 - 7 - 65 93 33 42
Manager: Ildikó Brázová
7. **Rybochov, spol. s. r. o., hospodárstvo Dolný Štál**
Address: Hlavná 47/24, SK - 929 01 DUNAJSKÁ STREDA
Phone: + 421 - 709 - 55 22 70 4
Manager: Štefan Kalmár
8. **Rybochov, spol. s. r. o., hospodárstvo Jakubov**
Address: SK - 900 63 JAKUBOV 416
Phone: + 421 - 703 - 77 33 220
Manager: Rudolf Lopoš
9. **Rybochov, spol. s. r. o., hospodárstvo Keť**
Address: SK - 935 64 KEŤ 428
Phone: + 421 - 903 - 50 22 88
Manager: Róbert Straňák
10. **Rybochov, spol. s. r. o., hospodárstvo Levice**
Address: Mochovská 40, SK - 934 01 LEVICE
Phone: + 421 - 813 - 63 12 094
Manager: Pavol Varga

- 11. Rybochov, spol. s. r. o., hospodárstvo Veľké Leváre**
Address: SK – 908 73 VEĽKÉ LEVÁRE 1021
Phone: + 421 – 703 – 77 94 574
Manager: Tibor Kovár
- 12. Ryboprodukt, spol. s. r. o.**
Address: Pelíškova 13, SK – 909 01 SKALICA
Phone: + 421 – 801 – 46 44 083
Fax.: + 421 – 801 – 46 44 083
- 13. SALMO**
Address: Tyršova D2/C13, SK – 073 01 SOBRANCE
Manager: Eduard Dudra
- 14. Slovenský rybársky zväz, stredisko Brzotín**
Address: Rybníky, SK – 049 51 BRZOTÍN
Phone: + 421 – 942 – 26 026
Manager: Ing. Július Makara
- 15. Slovenský rybársky zväz, stredisko Kľúčovec**
Address: Rybníky, SK – 930 07 KLÚČOVEC
Phone: + 421 – 709 – 99 178
Manager: Csaba Gyürky
- 16. Slovenský rybársky zväz, stredisko Košarovce**
Address: Rybníky, SK – 094 08 KOŠAROVCE
Phone: + 421 – 931 – 98 188
Manager: Ing. Peter Makara
- 17. Slovenský rybársky zväz, stredisko Lučenec**
Address: Rybníky, SK – 980 01 LUČENEC
Phone: + 421 – 863 – 43 22 826
Manager: Miroslav Kľučiar
- 18. Slovenský rybársky zväz, stredisko Malé Zálužie**
Address: Rybníky, SK – 072 34 MALÉ ZÁLUŽIE
Phone: + 421 – 87 – 94 933
Manager: Ing. Jaroslav Fuka
- 19. Slovenský rybársky zväz, stredisko Paríž - Ľuba**
Address: SK – 943 53 PARÍŽ ĽUBA
Phone: + 421 – 905 – 35 16 42
Manager: Alexander Gyürky
- 20. Slovenský rybársky zväz, stredisko Slovianska Dolina**
Address: Slovianska Dolina, SK – 038 35 VALČA
Phone: + 421 – 842 – 29 41 50
Manager: Karol Kováčik
- 21. Slovenský rybársky zväz, stredisko Trstená**
Address: Rybníky, SK – 028 01 TRSTENÁ
Phone: + 421 – 847 – 39 25 81
Manager: Ing. František Štefanides
- 22. Slovenský rybársky zväz, stredisko Uzovská Panica**
Address: SK – 980 22 UZOVSÁ PANICA
Phone: + 421 – 866 – 56 96 202
Manager: Ing. Roman Mesiarik

- 23. SLOVRYB, a.s., stredisko Biely Potok a Podsuhá**
Address: Lepenkáreň 15, SK – 034 03 RUŽOMBEROK 3
Phone: + 421 – 848 – 32 45 43
Fax.: + 421 – 848 – 32 93 54
Manager: Ing. Štefan Janček
- 24. SLOVRYB, a.s., stredisko Bytča**
Address: Rybníky, SK – 014 01 BYTČA
Phone: + 421 – 821 – 37 75
Manager: Miloš Podrazil
- 25. SLOVRYB, a.s., stredisko Dedinky**
Address: SK – 049 73 DEDINKY
Phone: + 421 – 942 – 98 243
Manager: Štefan Kravec
- 26. SLOVRYB, a.s., stredisko Demänová**
Address: SK – 032 51 DEMÄNOVSKÁ DOLINA
Phone: + 421 – 849 – 75 91 51
Manager: Ľubomír Kokavec
- 27. SLOVRYB, a.s., stredisko Považská Bystrica**
Address: Žilinská 776/3, SK – 038 42 POVAŽSKÁ BYSTRICA
Phone: + 421 – 822 – 32 59 17
Fax.: + 421 – 822 – 32 59 17
Manager: Branislav Branse
- 28. SLOVRYB, a.s., stredisko Příbovce**
Address: SK – 038 42 PRÍBOVCE
Phone: + 421 – 842 – 29 42 22
Fax.: + 421 – 842 – 29 42 22
Manager: Ing. Branislav Košťan
- 29. SLOVRYB, a.s., stredisko Svít**
Address: Rybníky, SK – 059 21 SVIT
Phone: + 421 – 92 – 75 64 55
Manager: Ing. Ján Árvay
- 30. Vaicenbacher**
Address: Park 20, SK – 900 31 STUPAVA
Phone: + 421 – 7 – 65 93 53 27
Manager: Ing. Juraj Vaicenbacher
- 31. Východoslovenský rybársky podnik, š. p.**
Address: Kostolné námestie 10, SK – 071 91 MICHALOVCE
Phone: + 421 – 946 – 24 276
Manager:
- 32. ZÚGOV, spol. s r. o.**
Address: Zúgov 1, P. O. Box 34, SK – 940 01 NOVÉ ZÁMKY
Phone: + 421 – 817 – 42 47 80
Fax.: + 421 – 817 – 41 44 00
Manager: MVDr. Juraj Mészáros, CSc.

Appendix 9 List of major Slovak fish processing companies

1. RADOMA, spol. s r.o.

Address: Vážska 32, SK – 820 14 BRATISLAVA

Phone: + 421 – 7 – 45 52 42 10 or 45 52 42 12

Fax: + 421 – 7 – 45 52 42 21

Manager: Ing. Ivan Škopec

2. RADOMA, spol. s r.o.

Address: Továrenská 1, SK – 900 65 ZÁHORSKÁ VES

Phone: + 421 – 703 – 92 333 or 92 452

Fax: + 421 – 703 – 92 454

Manager: Ing. Peter Hrušovský

3. RYBA, spol. s r.o.

Address: Košická 4, SK – 825 14 BRATISLAVA

Phone: + 421 – 7 – 55 66 79 10 or 55 66 79 16

Fax: + 421 – 7 – 55 66 79 17

Manager: MVDr. Dagmar Krtilová

4. RYBA, spol. s r.o.

Address: Južná trieda 54, SK – 043 75 KOŠICE

Phone: + 421 – 95 – 62 51 308 or 62 57 369

Fax: + 421 – 95 – 62 51 306

Manager: Ing. Jozef Gima

5. RYBA, spol. s r.o.

Address: Hviezdoslavova 5, SK – 010 98 ŽILINA

Phone: + 421 – 89 – 76 34 326 or 76 49 102

Fax: + 421 – 89 – 76 34 878

Manager: Ing. Ján Lipták

6. MRAZIARNE, spol. s r.o.

Address: Staničná 9, SK – 059 51 POPRAD – MATEJOVCE

Phone: + 421 – 92 – 73 16 94 or 73 15 81

Fax: + 421 – 92 – 73 16 94

Manager: MVDr. Peter Žoldoš

7. PARTNERS, spol. s r. o

Address: Odborárska 1, SK – 915 01 NOVÉ MESTO NAD VÁHOM

Phone: + 421 – 834 – 71 08 80 or 71 39 63

Fax: + 421 – 834 – 71 34 97

Appendix 10 List of fisheries-related institutions in Slovakia

1. **Ministerstvo pôdohospodárstva Slovenskej republiky**
[Ministry of Agriculture of the Slovak Republic]
Oddor zahraničných vzťahov [Foreign Relations Department]
Address: Dobrovičova 12, SK – 812 66 BRATISLAVA
Phone: + 421 – 7 – 59 26 62 93
Fax: + 421 – 7 – 59 26 62 88
e-mail: multila@mps.sanet.sk
Responsible person: Ing. Barbara Hellebrandtová
2. **Ministerstvo životného prostredia Slovenskej republiky**
[Ministry of the Environment of the Slovak Republic]
Oddor ochrany prírody a krajiny [Department of Nature and Landscape Protection]
Address: Nám. Ľ. Štúra 1, SK – 812 35 BRATISLAVA
Phone: + 421 – 7 – 59 56 21 89
Fax: + 421 – 7 – 59 56 20 31
Responsible person: Mgr. Peter Pilinský
3. **Slovenská poľnohospodárska a potravinárska komora**
[Slovak Agriculture and Food Chamber]
Address: Krížna 52, SK – 821 08 BRATISLAVA
Phone: + 421 – 7 – 55 56 26 56
4. **Štátna veterinárna správa Slovenskej republiky**
[State Veterinary Administration of the Slovak Republic]
Address: Botanická 17, SK – 842 13 BRATISLAVA
Phone: + 421 – 7 – 65 42 02 58
Fax: + 421 – 7 – 65 42 21 28
e-mail: lovas@basknet.sk
Responsible person: MVDr. Bohuslav Lovas
5. **Slovenský rybársky zväz** [Slovak Fisheries' Union]
Address: A.Kmeľa 20, SK – 010 55 ŽILINA
Phone: + 421 – 89 – 62 35 83 or 62 12 51
Fax: + 421 – 89 – 62 69 06
e-mail: srzrada@mail.pvt.sk
Responsible person: Ing. Ferdinand Balaž
6. **Ústav rybárstva a akvakultúry** [Institute of Aquaculture and Fisheries]
Address: Nádražná ul., SK – 900 28 IVÁNKA PRI DUNAJI
Phone: + 421 – 903 – 47 30 93
Responsible person: RNDr. Juraj Masár
7. **Slovenská akadémia vied** [Slovak Academy of Sciences]
Ústav zoológie [Institute of Zoology]
Address: Dúbravská cesta 9, SK – 842 06 BRATISLAVA
Phone: + 421 – 7 – 59 41 26 23
Fax: + 421 – 7 – 54 78 97 57
e-mail: uzacholc@savba.savba.sk
Responsible person: RNDr. Juraj Holčík, CSc.
8. **Slovenská poľnohospodárska univerzita** [Slovak Agriculture University]
Katedra hydínarstva a malých hospodárskych zvierat
(Department of Poultry and Small Farming Animals)
Address: Trieda A. Hlinku 2, SK – 949 76 NITRA
Phone: + 421 – 87 – 51 17 51, ext. 700
Fax: + 421 – 87 – 51 15 89

e-mail: stranai@sai.uniag.sk
Responsible person: Doc. Ing. Ivan Straňai., CSc.

9. **Univerzita Komenského** [Comenius University]
Katedra zoológie [Department of Zoology]
Address: Mlynská dolina B-1, SK – 842 15 BRATISLAVA
Phone: + 421 – 7 – 60 29 63 70
Fax.: + 421 – 7 – 65 42 41 38
e-mail: hensel@fns.uniba.sk
Responsible person: Prof. RNDr. Karol Hensel, CSc.
10. **Univerzita veterinárskeho lekárstva** [University of Veterinary Medicine]
Katedra hygieny a technológie potravín
[Department of Hygiene and Food Technology]
Address: Komenského 73, SK – 041 81 KOŠICE
Phone: + 421 – 95 – 63 31 817
Fax.: + 421 – 95 – 63 31 816
Responsible person: MVDr. Peter Košuth, CSc.
11. **Stredná poľnohospodárska škola** [High School of Agriculture]
Address: SK – 900 28 IVÁNKA PRI DUNAJI
Phone: + 421 – 7 – 45 94 30 62
Fax.: + 421 – 7 – 45 94 33 22
Responsible person: Ing. Oldrich Švestka

Appendix 11 Close season by species

Species	Season	Duration (days)
<i>Aspius aspius</i>	16 March – 31 May	77
<i>Cyprinus carpio</i>		
<i>Chondrostoma nasus</i>		
<i>Tinca tinca</i>		
<i>Vimba vimba</i>	1 January – 15 April	105
<i>Oncorhynchus mykiss</i>		
<i>Acipenser ruthenus</i>	16 March – 30 June	107
<i>Barbus barbus</i>		
<i>Silurus glanis</i>		
<i>Esox lucius</i>	1 January – 31 May	151
<i>Stizostedion lucioperca</i>		
<i>Thymallus thymallus</i>		
<i>Salmo trutta m. fario</i>		
<i>Salmo trutta m. lacustris</i>	1 September – 15 April	227
<i>Salvelinus fontinalis</i>		
<i>Hucho hucho</i>	1 January – 1 December	334
<i>Acipenser gueldenstaedti</i>	All year	365
<i>Eudontomyzon spp</i>		
<i>Gobio kesselri</i>		
<i>Gobio uranoscopus</i>		
<i>Lampetra spp.</i>		
<i>Pelecus cultratus</i>		
<i>Umbra krameri</i>		
<i>Zingel zingel</i>		
<i>Zingel streber</i>		
<i>Proterorhinus marmoratus</i>		

Appendix 12 Minimum body length of fish

Species	Length
<i>Ctenopharyngodon idella</i>	
<i>Hucho hucho</i>	70 cm
<i>Silurus glanis</i>	
<i>Esox lucius</i>	50 cm
<i>Salmo trutta m. lacustris</i>	
<i>Acipenser ruthenus</i>	
<i>Anguilla anguilla</i>	45 cm
<i>Hypophthalmichthys molitrix</i>	
<i>Hypophthalmichthys nobilis</i>	
<i>Stizostedion lucioperca</i>	
<i>Aspius aspius</i>	40 cm
<i>Barbus barbus</i>	35 cm
<i>Cyprinus carpio</i>	
<i>Thymallus thymallus</i>	27 cm
<i>Abramis bjoerkna</i>	
<i>Abramis ballerus</i>	
<i>Abramis brama</i>	
<i>Abramis sapa</i>	
<i>Barbus peloponnesius petenyi</i>	25 cm
<i>Chondrostoma nasus</i>	
<i>Leuciscus cephalus</i>	
<i>Leuciscus idus</i>	
<i>Stizostedion volgense</i>	
<i>Vimba vimba</i>	
<i>Oncorhynchus mykiss</i>	
<i>Salmo trutta m. fario</i>	23 cm
<i>Salvelinus fontinalis</i>	
<i>Scardinius erythrophthalmus</i>	20 cm
<i>Tinca tinca</i>	
<i>Leuciscus leuciscus</i>	15 cm
<i>Rutilus rutilus</i>	
<i>Carassius carassius</i>	
<i>Carassius auratus</i>	no limit
<i>Lota lota</i>	
<i>Perca fluviatilis</i>	