



# Sector market analysis

# Food Industry and Food Machinery industry in Slovenia

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## 1. Slovenia – Facts and figures

Slovenia is situated in Central Europe and covers an area of 20,273 km2 (half the size of Switzerland). It has borders with Italy, Austria, Croatia and Hungary, and stretches across the Alps, the Dinaric Alps and the Pannonian Plain to the Mediterranean. In spite of its geographically small size, it is a convergence point for a range of different landscapes, each of which has its own characteristics and unique features. The coastline is only 46.6 km long, but there are 26,000 km of rivers and streams and some 7,500 freshwater springs, including several hundred first-class therapeutic mineral springs. Forests cover half the territory of the country (10,124 km2); Slovenia is the third most forested country in Europe, after Finland and Sweden. Slovenia has 2 million inhabitants, 330.000 living in the Capital city Ljubljana.

Slovenia has become a member of the European Union on 1 May 2004 and on 1 January 2007 Slovenia joined EMU (Economic and Monetary Union) and abandoned the tolar.

**Table 1: Main economic indicators** 

Main macroeconomic indicators	2003	2004	2005	2006	2007	2008
Wall macroeconomic mulcators	2003	2004	2003	2000	forecast	forecast
GDP real growth rate (%)	2,8	4,4	4,1	5,7	5,8	4,6
GDP in mil. EUR	23.695	25.814	27.783	29.859	32.213	33.706
GDP per capita in PPS (EUR27=100)	82,5	85,5	87,1	88,1	N/A	N/A
GDP per capita in EUR	12.695	13.400	14.116	15.167	16.532	17.888
Trade balance as % of GDP	0,0	-1,2	-0,6	-0,9	0,0	0,8
External dept as % of GDP	53,2	59,4	71,0	79,7	N/A	N/A
Gross external debt in EUR million	13.225	15.343	19.614	23.895	31.958	N/A
Rate of unemployment by ILO in %	6,7	6,3	6,5	6,0	5,0	4,9
Gross wage per employee; real growth rate	1,8	2,0	2,2	2,2	2,4	2,5
Labour productivity; (% of GDP per empl.)	3,2	4,1	4,0	4,5	3,4	3,7
Gross fixed capital formation as % of GDP	24,1	25,4	25,5	26,1	28,2	28,2
Budget surplus / deficit as % of GDP	-1,4	-1,3	-1,1	-0,8	-0,9	-0,8
Inflation	5,6	3,6	2,5	2,5	3,4	3,5

Source: Invest Slovenia

Slovenia's economy is highly dependent on international trade. The ratio of merchandise trade (imports and exports) to GDP is one of the highest in the region. In the early 1990s Slovenia, faced with the loss of Yugoslav markets and the breakdown of transport and communications to south-eastern Europe, reoriented trade towards the EU and associated countries; these now account for over two thirds of Slovenia's trade. Pre-transition trade links have not disappeared, however; by 2000, the decline of trade with countries of the former Yugoslavia and Russia had been halted. The product composition of merchandise trade, still dominated by semi-finished and intermediate manufacturing goods, is shifting gradually. The shares of textiles, clothing and steel in merchandise exports are declining slightly, while those of automotive products, electronics and pharmaceuticals are increasing. In recent years the structure of Slovenian commodity exports has shifted in favour of products that use technology and human resources most intensively.

## 2. Food industry in Slovenia

In the period of last fifteen years, food-processing companies have been facing serious problems, initially as a consequence of the loss of markets in the area of former Yugoslavia and, later, as the impact of Slovenia's accession to the European Union. So the adjustment to new circumstances and restructuring of companies was necessary. Most Slovenian food enterprises have been modernised and have improved their competitiveness. Today they have a number of competitive advantages, such as: meeting demanding European standards, high quality certificates, the traceability control system, the introduction of systems ensuring food safety, food being produced in a natural environment etc. For those reasons Slovenian food enterprises represent a strong potential for qualitative and reliable business partnerships.

A lot of companies are inward-oriented and primarily supply the domestic market. The major products for export are beverages, milk products, and canned fruit and vegetables, meat and meat preparations and so on. Countries of former Yugoslavia and the European Union are the major destinations for Slovenia's food exports, together accounting for more than 80% of the total export for the greater part of export products. Imports are dominated by unprocessed products, primarily cereals, fruits and vegetables. The most important suppliers are the countries of European Union.

Meat processing and the production of bread are two major activities, in terms of the number of companies and employees, together accounting for almost a half of all employed in the food industry. Food processing facilities are mostly located in small towns and villages that produced the high degree of fragmentation with a large number of small-scale enterprises, evenly located throughout the country.

## 2.1 General overview of the sector

The table below shows some statistics on the development of the food-processing industry in the last seven years. Data refer to companies manufacturing food products and beverages.

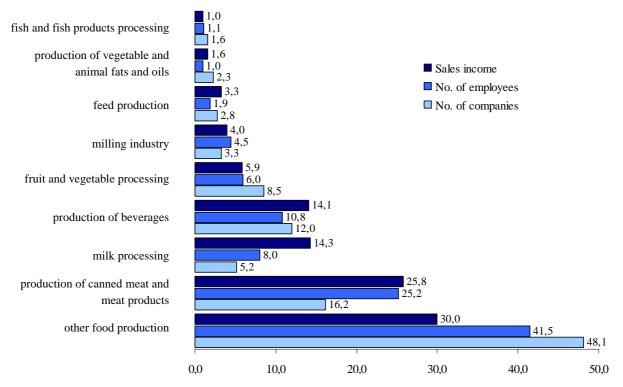
Table 2: Companies manufacturing food products and beverages: number of companies, number of persons employed and turnover in the period 2000 - 2006

	2000	2001	2002	2003	2004	2005	2006
Number of companies	818	823	835	823	807	805	947
Number of employees	23.090	23.187	22.551	22.208	19.510	21.461	19.038
Turnover (in mio EUR)	1.595,0	1.779,5	1.888,1	1.993,2	1.796,9	1.935,4	2.006,5

Source: SORS (2007)

In 2005, the production of food and drinks contributed 1,7% to the gross national product; it was the first time the share had fallen below 2%. In the same year, the Slovenian food-processing industry employed 2,2% of the total labour force in the Republic of Slovenia. We have been witnessing a trend of a fast decline in the number of people employed in the food-processing industry which, since 2000, has started to slow down. However, the growth in the number of food-processing companies we have been witnessing in the last few years has also started to slow down. In spite of all these problems, positive trends in the Slovenian food-processing industry are indicated by the export growth of mostly milk and meat products, as well as feedstuff, oil and milling products.

Figure 1: Share of individual branches of food-processing industry in total income, employment and number of companies for 2005 (in %)



Source: Republic of Slovenia, Ministry of Agriculture, Forestry and Food

## 2.1.1. Number of companies

Source: SORS

Table 3: Number of food processing companies\* by activity in 2006

Production, processing and preserving of meat	151	Manufacture of other food products	472
and meat products		Manufacture of bread, manufacture of fresh	347
Production and preserving of meat	71	pastry goods and cakes	
Production and preserving of poultry meat	5	Manufacture of sugar	1
Production of meat and poultry meat products	75	Manufacture of rusks & biscuits, preserved	29
Processing and preserving of fish and fish prod.	7	pastry goods & cakes	
Process. and preserving of fruit and vegetables	75	Manufacture of cocoa, chocolate and sugar	12
Processing and preserving of potatoes	1	confectionery	
Manufacture of fruit and vegetable juice	10	Manufacture of macaroni, noodles, couscous &	20
Processing and preserving of fruit and vegetables	64	similar farinaceous	
Manufact. of vegetable and animal oils and fats	32	Processing of tea and coffee	33
Manufacture of crude oils and fats	17	Manufacture of condiments and seasonings	10
Manufacture of refined oils and fats	14	Manufacture of homogenised food preparations	4
Manufacture of margarine and similar edible fats	1	and dietetic food	
Manufacture of dairy products	76	Manufacture of other food products not	16
Operation of dairies and cheese making	35	elsewhere classified	
Manufacture of ice cream	41	Manufacture of beverages	86
Manufacture of grain mill products, starches	36	Man. of distilled potable alcoholic beverages	23
and starch products		Prod. of ethyl alcohol from fermented materials	1
Manufacture of grain mill products	34	Manufacture of wines	29
Manufacture of starches and starch products	2	Manufacture of other non-distilled fermented	1
Manufacture of prepared animal feeds	12	beverages	
Manufacture of prepared feeds for farm animals	10	Manufacture of beer	14
Manufacture of prepared pet foods	2	Production of mineral water and soft drinks	18

Note: data in the table refer to enterprises as legal persons and as natural persons (individual private entrepreneurs)

In Table 3 is listed how many companies of each food processing branch were active in 2006. The majority of all 947 food processing companies (49,8%) were active in the production of other food products. Of these companies 73,5% (36,6% of all food processing companies) were active in the manufacturing of bread, manufacture of fresh pastry goods and cakes.

In the production, processing and preserving of meat and meat products were active 151 companies that represent 15,9% of all food processing companies. Companies active in the production of dairy products were 76 or 8% of all food processing companies.

#### 2.1.2. Production

Share in gross value of production in each agriculture branch in Slovenia was in 2006 as follows: cattle breeding (53%), horticulture (32%), fruit production (5%) and viticulture (10%).

Table 4: Agriculture production in Slovenia (2006)

Product	Total production	Unit
Crops	868,7	1000 t
Fruit production in orchard plantations and extensive orchards	156,0	1000 t
Grape	105,5	1000 t
Vegetables (for market)	45,1	1000 t
Meat production from slaughtered animals	150,2	1000 t
Production of honey	2,3	1000 t
Net production of cow's milk	623,6	1000 1
Eggs	263.353	1000 pcs

Source: SORS

Table 5: Production of food products and beverages 2001 - 2006

Products by PRODCOM	2001	2002	2003	2004	2005	2006
Meat and meat products						
Fresh and preserved meat <sup>1)</sup>	113.653	93.522	98.807	98.997	115.431	113.647
Meat and poultry meat products <sup>1)</sup>	56.594	56.936	58.665	60.459	62.790	69.443
Process. and preserve. fruit and veget. <sup>1)</sup>	18.916	18.831	18.896	16.533	17.092	19.628
Dairy products and ice cream						
Processed liquid milk and cream <sup>1)</sup>	286.146	291.694	297.032	287.721	286.805	269.129
Cheese and curd <sup>1)</sup>	22.366	23.297	25.043	23.775	21.907	20.297
Yoghurt, fermented or acidified milk/cream <sup>1)</sup>	43.009	N/A	N/A	37.655	36.492	37.061
Grain mill products, starches and starch pro	oducts					
Cereal and vegetable flour; mixes thereof <sup>1)</sup>	129.677	122.371	121.141	117.244	109.593	124.317
Prepared animal feeds for farm, pet food <sup>1)</sup>	466.584	463.531	451.081	470.994	472.157	461.673
Other food products						
Fresh bread <sup>1)</sup>	86.688	89.907	91.721	89.102	91.020	81 071
Fresh pastry goods and cakes <sup>1)</sup>	9.399	10.136	11.235	11.375	11.054	11.048
Rusks and biscuits; preserved pastry goods and cakes <sup>1)</sup>	8.167	8.039	8.278	8.019	8.113	7.655
Cocoa; chocolate and sugar confectionery <sup>1)</sup>	11.547	12.587	13.482	14.390	15.453	15.015
Macaroni, noodles, couscous and similar p. 1)	14.407	14.814	14.035	12.967	12.527	N/A
Coffee, substitutes; extracts, essences <sup>1)</sup>	6.073	N/A	5.648	6.322	6.089	N/A
Beverages (alcoholic and non-alcoholic)						
Distilled alcoholic beverages <sup>2)</sup>	779	N/A	N/A	755	665	508
Wines <sup>3)</sup>	50.235	32.246	32.119	36.138	29.329	25.503
Mineral waters and soft drinks <sup>3)</sup>	351.243	358.297	394.929	330.740	332.633	369.178

Source: SORS Note: 1) Unit: 1000 kg, 2) Unit: 1000 l alc 100% and 3) Unit: 1000 l

#### 2.1.3. Turnover

In terms of turnover the Slovenian food processing industry has faced some changes in the period 2000 - 2006.

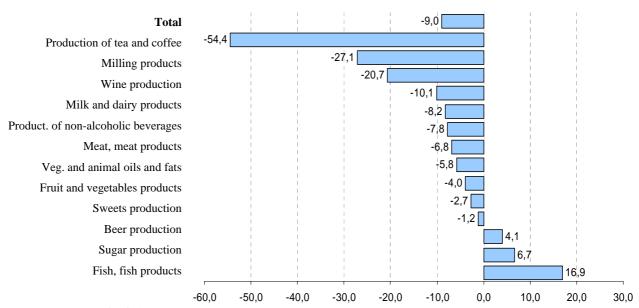
Table 6: Index of the turnover of industrial production and food production in the period 2000-2006 and share of turnover of food processing industry in total turnover of industrial production

	2000	2001	2002	2003	2004	2005	2006
Industry total	N/A	111,6	109,5	108,6	111,0	108,8	111,1
Production of food and beverages	N/A	111,6	106,1	105,6	90,2	107,7	103,7
Share of turnover of food processing industry in total turnover	4,1	4,1	4,0	3,9	3,1	3,1	2,9

Source: SORS (previous year: 100)

#### 2.1.4. Employment

Figure 2: Change in employment (index 2006/2005)



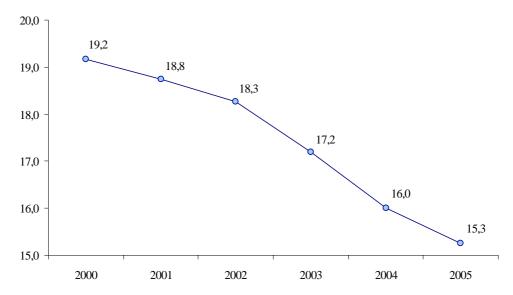
Source: Petra Medved (2007)

In year 2006 food processing companies employed 19.038 people. Compared to 2005 the total number of employees decreased by 9%. The more significant drop in number of employees can be seen in the production of tea and coffee (-54,4%). The only branches where an increase can be observed are: production of bread and bakery products (16,9%), production of animal feed (6,7%) and fish products production (4,1%).

#### 2.2 Consumption

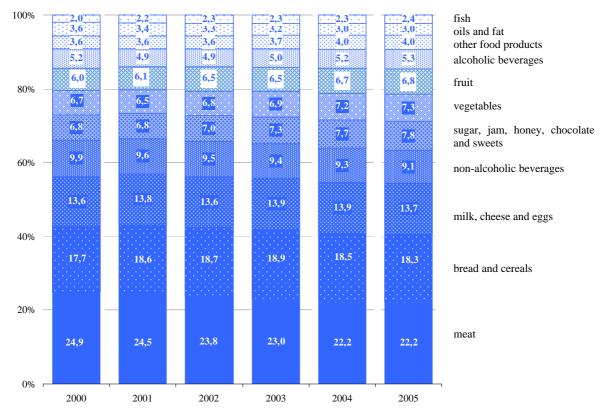
Data, collected with the Household Budget Survey, show that the percentage of annually allocated assets per Slovenian household member for food, non-alcoholic and alcoholic beverages has been, in the period 2000 – 2005, constantly dropping. In 2005 a Slovenian household member has, on average, allocated 3,9 percentage points less available assts for food, non-alcoholic and alcoholic beverages than in 2000.

Figure 3: Average annual allocated assets: Share of allocated assets per household member of households for food, non-alcoholic and alcoholic beverages, Slovenia, annually



Source: SORS

Figure 4: Average annual allocated assets for food and beverages: Structure of allocated assets per household member of households, Slovenia, annually



Source: SORS

In year 2005 a Slovenian household member has allocated, on average, 982 EUR for food, non-alcoholic and alcoholic beverages. Analysing the structure of allocated assets for food in 2005 we see, that a household member has on average allocated 22,2% of allocated assets for food and beverages

for meat and meat products (218 EUR); 18,3% for bread and cereals (180 EUR), and 13,7% for milk, cheese and eggs (135 EUR). Detailed data are presented in Figure 4.

Comparing the average annual quantity of purchase food and beverages per household member in 2001 and 2005 we realise that there have been some significant changes. The more significant drops can be seen in the purchase of bread and pastries (-24,1%), sugar and honey (-23,4), rice (-22,5%), and edible oils (-22,2%). On the other hand the more significant increases can be seen in the quantity of purchased sour and preserved vegetables (+30,1%), chocolate and cocoa (+25,3%), milk products (+21,3%), and biscuits, teacakes and waffles (+21,3%). Detailed data are presented in Figure 5.

30,1 Sour and preserved vegetables 25,3 Chocolate and cocoa 21,3 Milk products 18,1 Biscuits, teacakes and waffles 9,5 Fresh vegetables 5,5 Fresh fruits 3,4 Milk (sweet and sour) 3,3 Processed and preserved fruit 2,6 Alcoholic beverages 1,4 Pasta -3.7Coffee -4,9 Meat 16,0 Eggs -19,8 Flour, all kinds and grits -22,2Edible oils -22,5Rice -23.4 Sugar and honey -24,1Bread and pastries -20,0 -30,0 -10,0 0,0 10,0 20,0 30,0

Figure 5: Average annual quantity of purchased food and beverages per household member (index 2005/2001)

Source: SORS

A brief survey of consumer price indices shows that in contrast to 2005, when the inflation rate in Slovenia fell to the European level and stopped at 2,3%, at the end of 2006 the annual inflation rate was slightly higher (at 2,8%), while the average price growth was 2,5%. Nevertheless, in some groups price trends were still high above the average. Also prices for food and non-alcoholic beverages grew more than the annual inflation rate (by 3,8%). Actually, the biggest impact on the total growth of prices in 2006 was that of food and non-alcoholic beverages (0,65 of a percentage point).

In 2007 consumer prices increased by 5,6% and the 12-month average price growth was 3,6% (in 2006 only 2,5%). In one year prices increased the most in the group of food and non-alcoholic beverages (on average by 12,9%). In the group food and non-alcoholic beverages the prices of milk, cheese and eggs jumped by 21,2%, of fruit by 20,6%, of oils and fats by 20,1% and of bread and cereals by 18,3%. These higher prices in the group food and non-alcoholic beverages contributed the most to the total rise in consumer prices (2,19 percentage points).

#### 2.3 International trade

In 2006, Slovenia's international trade in agricultural and food products totalled EUR 1.297,6 million, 20% more than the year before. Imports rose by 23,4%, while exports by 18,3%. The characteristic trade deficit seen in these products widened by a further EUR 42,8 million, and the coverage of imports by exports increased slightly in 2006 at 54,7%.

Table 7: Exports and imports of food products and beverages in Slovenia in year 2006

Exports (in mio EUR)	Exports: index 2006/2005	Imports (in mio EUR)	Imports: index 2006/2005
458,63	123,4	838,99	118,3

Source: SORS (2007)

In 2003, changes in trade in individual groups of agro-food products resulted from varying factors. The deficit in trade in cereals and vegetables widened by EUR 50,3 million and EUR 48,6 million, respectively, because of lower domestic crops, while deficits in other food-processing products widened due to the liberalisation of international trade. This was particularly evident in cocoa and cocoa products (by EUR 37,6 million), bakery and pastry products (by EUR 33,3 million), sugar and sugar products (by EUR 16,2 million) and in the group of miscellaneous food products (by EUR 37,0 million). Conversely, the deficit narrowed in three groups with the largest shares: fruit (by EUR 63,1 million) because of increased exports of apples thanks to the bumper crops of 2002, meat (by EUR 21,7 million) because of trade barriers, and milled products (by EUR 20,7 million) because of lower imports of flour resulting from higher imports of cereals. As regards products which traditionally record a surplus, this surplus narrowed in trade in beverages (by EUR 89,1 million) and milk products (by EUR 31,3 million) because of the discovery of the antibiotic chloramphenicol.

#### 2.4 Distribution channels

As regards retail trade activities, compared to 2005, in 2006 the highest growth of turnover was registered in retail trade with food, beverages and tobacco (by 15,5%). The share of turnover (without VAT) by commodity groups in retail trade in 2006 of retail trade of food represented was 32% (10.282 mio EUR).

The results of the survey on sales capacities in retail trade for 2005 show that in the total number of stores retail stores for sale of food represented 25,8 % (3.097 stores). Comparing the data for 2001 and 2005 we can see that the total number of stores for retail sale of food decreased by 14,6% (from 3.924 to 3.097). In spite of the reduction in the number of retail stores selling food, we observed an increase in the sales area to 561.242 m<sup>2</sup> (by 12,7%) and in 2005 represented 28,3% of all available sales area.

These data show a concentration in the retail sector. In fact, in terms of concentration in retail trade sector, Slovenia ranks among the European countries with high value of this indicator. Several data confirm the consolidation of the retail trade sector in Slovenia and a marked increase in concentration. This in turn had numerous positive effects on productivity and profitability of the industry, as well as on the quality and the level of trade services, which in some areas are comparable with the most developed economies. However, the situation in retail trade industry (oligopoly/ oligopoly market situation) no doubt also changed the relations with suppliers and consumers.

In Slovenia the domination of trade has increased. Indeed, the negative phenomena in the vertical relations between domestic food producers and trade sector have been comparable to that in developed economies, but in Slovenia the vertical relations have gone extremely in favour of trade. Thus, the pressures and predominance of trade have been - because of structural deficits and problems with horizontal coordination (consortium of suppliers) - even more intense for Slovenian food-processing companies.

As stated before, concentration in trade has been increasing, reflected most obviously in the pressures on purchase prices, shifting of an increasing share of transaction and distribution costs to suppliers, and in other demands and conditions for cooperation. Besides, Slovenian food-processing industry, when reacting to the strategies of leading trade companies, as a rule reacted in favour of the trade companies. Retailing industry having an increasing control over the economic flows is a global phenomenon clearly present also in Slovenia. It is therefore often stated as the key reason behind the deteriorated economic position of food-processing industry.

Market power was reflected in increasing (secret) obligations of suppliers in the form of vertical restrictions of various forms: paying of commissions for being placed on the list of suppliers, shelf costs, retroactive discounts, clause on the most favourable terms of supply, unfoundedly high costs of promotion and other costs. The most efficient defence strategy against the exorbitant demands of distributing companies is a customer loyalty to certain brand. However, not many Slovenian producers paid attention to this in the past. Eventually, the actual prices, additional costs and various concessions fail to cover long-term cost levels of developmentally-oriented cooperation. The companies fail to obtain sufficient accumulation to be able to invest in strengthening of their own brands, marketing and promotion activities, development of new products and also technological development and normative alignment may be put at risk in the long run. Too weak brands of Slovenian food-processing companies are clearly reflected in a rapid penetration of private label brands of trade companies, which customers are prepared to quickly exchange for their traditional brands. In Slovenia, trade companies have been successful in introducing private label brands, whilst the producers acted rather clumsily. The contracts for production of private label brands were concluded with no supplementing strategies which would prevent canibalisation of the market share. The strategy used by trade companies when introducing their private label brands took advantage of the unelaborated strategy of producers – it prevented differentiation between producer's brand and private label brand and often there were in fact no difference between the two. Additional impetus for the successful penetration of private label brands lied also in the legal obligation that the whole name and address of producer has to be indicated on the product, which makes Slovenia rather unique in the European Union. Although this legal obligation was later cancelled, there are only a few private label brand products where no name of producer is indicated, which is not the case with products from abroad.

#### 2.5 Food safety and concern for the consumer

Food and beverages produced in Slovenia have always been a synonym for quality, also because producers follow strict food safety regulations. In the area of food safety in the Republic of Slovenia, the so-called »Food Law« ((ES) Regulation No. 178/2002 of the European Parliament and Council), defining the general principles and demands of the food production legislation, the founding of the

European Agency for Food Safety and the procedures connected with food safety has been in force since the country joined the EU on 1 May 2004. In developing its food production legislation, the EU determined a high level of health protection which is used without discrimination and independent of whether food is to be marketed in the internal or international market.

European standards in the field of food and foodstuffs safety are implemented in Slovenia and assure a high level of consumer health safety. This enhances the confidence of domestic and foreign consumers in the food produced and processed in Slovenia. In order to maintain the high level of food safety, the Ministry of Agriculture, Forestry and Food operates systems for the traceability of animals from their birth through to their slaughtering that are equivalent to the EU standards.

The marketing of quality agricultural products and foodstuffs in the Republic of Slovenia is included in the enhancement of the quality system of specific agricultural products or foodstuffs consistent with the corresponding EU legislation. That is why the Ministry of Agriculture, Forestry and Food is working intensely on the certification of specific agricultural products or foodstuffs. Certification is one of the most important means for ensuring the high quality of foodstuffs, with a special emphasis on specific agricultural products and foodstuffs. These are products with a Protected Designation of Origin label, Protected Geographical Indication label, Traditional Speciality Guaranteed label or Higher Quality label. Work on certification takes place in line with the common European policy on quality adopted in July 2003.

The European legislation distinguishes two groups of protection at the European level and three labels: in the first group of geographical denomination it is possible to acquire the Protection Designation of Origin label or the Protected Geographical Indication label, while in the second group of certificates of a specific character it is possible to acquire the Traditional Speciality Guaranteed label. Procedures for acquiring either the national or European protection are precise and very demanding and, in return, the acquired label guarantees quality to the consumer and enhances the value of the product.

On 1 March 2007, Slovenia boasted 29 protected Slovenian specific agricultural products or foodstuffs. Eleven of them carry the Protected Designation of Origin label (eight of which have already been certified), seven of them carry the Protected Geographical Indication (four of which have already been certified), five carry the Traditional Speciality Guaranteed label (two certified), while six products carry the Higher Quality label and only one of them has not been certified. In 2007, Slovenia joined the 16 European countries that protected their products at the European level – at the beginning of 2007 Extra Virgin Olive Oil from the Slovenian Istria was registered at the EU level.

For the producers, integration into quality schemes is an opportunity to achieve greater market competitiveness, higher product specificity and the better interaction of all members in the chain performing together in the market. Due to the ever increasing interest of potential investors concerning the possibility of protecting new products in the Republic of Slovenia, the country is interested in supporting measures upholding the quality schemes for specific agricultural products or foodstuffs that will also be supported in the future. In addition, the Ministry of Agriculture, Forestry and Food emphasises the providing of information and raising of awareness of consumers by preparing new foldouts and publications each year.

## 3. Food machinery industry

### 3.1 Manufacturers of machinery for food and beverages

Comparing the number of Manufacturers of machinery for food and beverage, we notice, that in 2006, compared to 2000, the number of enterprises has doubled (from 62 in year 2000 to 127 in 2006).

Table 8: Number of enterprises: manufacture of machinery for food, beverage and tobacco processing, Slovenia, annually

	2000	2001	2002	2003	2004	2005	2006	20071)
Manufacture of machinery for food,	62	63	73	70	05	106	127	121
beverage and tobacco processing	02	03	73	13	73	100	127	131

Source: SORS

Note: 1) data from the Business Directory of Republic of Slovenia

Based on the data of the Business Directory of Republic of Slovenia (Table 8) there were, in 2007 there were registered 131 companies active in the production, installation, maintenance and repair of food machinery.

Table 9: Number of enterprises: manufacturers of machinery for food and beverage, 2007

1	PROD	UCTION	
Machines for kneading paste	3	Machines and equipment for prod. of beverages	5
Hotel trade machines	3	Machines and pasteurising devices for ice cream	1
Cellarman's equipment	3	Machines for industrial production of food	3
Butchery machines	4	Machines for industrial food preparation	4
Kneading machines	3	Machines for milling industry	2
Dairy's machines	1	Machines for oil industry	1
Mills, crushing	3	Machines for bottling of drinks	2
Mills, installation	3	Machines for meat processing	1
Units for production of smoked meaT	1	Machines for milk processing	2
Equipment for slaughtering poultry	2	Machines for fruit processing	1
Equipment for slaughter houses	2	Machines for cleaning of grains	1
Equipment for preparing food in hotel trade	4	Machines for food industry	6
Pasteurisation units	2	Decanting pump systems for drinks, automated, for hotel trade	1
Baking machines	5	Viticulture equipment	1
Baking tins, production	1	Cream skimmers	1
Tile stoves, for baking of bread, non-electric	1	Cheese manufacture units	2
	O	THER	
Machines for food industry, installation	10	Machines for food industry, maintenance	11
Machines for food industry, repair	7	Salami slicers, assembly and repair	2

Source: Business Directory of Republic of Slovenia

## 3.2 Employment analysis

Annual enterprise statistics on manufacturing enterprises producing machinery for food, beverage and tobacco processing (Table 10) show, that in 2005 compared to the data for the previous year the number of persons employed has decries by more than 20%, while in the whole Slovenian manufacturing sector the number of persons employed has decreased by 2,8%.

Table 10: Annual employment statistics – Number of persons employed

	2001	2002	2003	2004	2005
Manufacturing (D)	N/A	257.164	243.727	239.694	232.923
Manufacture of machinery for food, beverage and tobacco processing (D 29.530)	N/A	819	824	844	672

Source: Eurostat

#### 3.3 Production analysis

Annual enterprise statistics on manufacturing enterprises producing machinery for food, beverage and tobacco processing (Table 11) show, that the turnover in 2005 compared to the data for the previous year has decries by almost 18%, while in the whole Slovenian manufacturing sector has increased by 4,7%. Also by comparing data on the production value of the Slovenian enterprises producing machinery for food, beverage and tobacco processing in 2005 we notice a significant decries (-15%), while the value of the whole Slovenian manufacturing sector has increased by 5,4%.

**Table 11: Annual enterprise statistics** 

	2001	2002	2003	2004	2005						
Manufacture of machinery for food, beverage and tobacco processing (D 29.530)											
Turnover or gross premiums written	37,5	42,5	46,4	50,6	41,5						
Production value	35,2	40,8	41,6	46,0	39,1						
Manufacturing (D)	Manufacturing (D)										
Turnover or gross premiums written	16.901,8	17.948,0	18.456,4	19.862,4	20.809,6						
Production value	15.566,3	16.787,1	16.736,9	18.059,2	19.030,7						

Source: Eurostat

Comparing the share of turnover produced by companies manufacturing machinery for food, beverage and tobacco processing in the total value of turnover produced by all manufacturing companies we notice, that in 2005 represented only 0,2%, while in 2004 0,25%.

### 3.4 Export analysis

Table 12: Export of food machinery per main countries of destination: in 1.000 EUR and percentage of total value of export (period 2006 and 2007)

	2006	2006	2007*	2007*		2006	2006	2007*	2007*
	2000	2000	2007*	2007*		2000	2000	2007*	2007*
	1.000	%	1.000	%	country	1.000	%	1.000	%
country	EUR	70	EUR	70 P		EUR	70	EUR	70
Russian									
Federation	8.956	15,3	3.844	7,2	Ukraine	1.757	3,0	3.221	6,1
Croatia	8.580	14,6	6.620	12,4	Netherlands	1.151	2,0	962	1,8
Germany	5.522	9,4	6.807	12,8	Lithuania	953	1,6	539	1,0
BIH	4.521	7,7	2.887	5,4	USA	854	1,5	462	0,9
Serbia	4.131	7,0	3.422	6,4	France	834	1,4	665	1,3
Italy	2.805	4,8	3.199	6,0	Montenegro	764	1,3	346	0,7
Austria	2.591	4,4	2.867	5,4	Hungary	673	1,1	679	1,3
Romania	2.297	3,9	5.632	10,6	other countries	10.162	17,3	9.859	18,5
Poland	2.152	3,7	1.186	2,2	TOTAL	58.703	100,0	53.197	100,0

Source: SORS

\*Note: Data for 2007 refer to the period from months 1 to 10.

In year 2006 54% of the total value of all exported food machinery was achieved by exporting to five markets: the Russian Federation, Croatia, Germany, BiH and Serbia.

Statistical data on the value of exports show that mayor export markets for Slovenian producers of food machinery are: the Russian Federation, Croatia and Germany. By comparing the data for 2006 and the first ten months of 2007 we notice a significant decrease of the value of exports to the Russian Federation and Poland, and on the other hand an increase of the value of exports to Romania, Ukraine and Germany. Consequently in 2007 the mayor export markets, by % in total value of exports, were represented by Germany (12,8), Croatia (12,4%) and Romania (10,6%).

other countries ■ Russian Federation 2,0 3.0 ☐ Croatia 24,3 ☐ Germany ■ BiH Serbia Italy Austria 15,3 ■ Romania Poland 14,6 □ Ukraine Netherlands

Figure 6: Export of food machinery in 2006 (in % per country of destination)

Source: SORS

By analyzing statistical data on the value of exports of different types of food machinery in 2006 worldwide (Table 13) we notice, that more than 57,9% of total value of exported food machinery is represented by the value of export of (1) other packing or wrapping machinery, (2) percolators and other appliances for making coffee and other hot drinks, and (3) machinery for filling, closing, sealing or labelling; machinery for capsuling; machinery for aerating beverages. The same structure of values of exports of different types of food machinery can be noticed for main export markets.

Table 13: Export of food machinery by type (2006)

CN code	FOOD MACHINERY	Export (wh	ole world)	Export (main countries of destination) <sup>1</sup>		
		1.000 EUR	%	1.000 EUR	%	
8422 40 00	Other packing or wrapping machinery (including heat-shrink wrapping machinery)	14.874	25,3	11.280	23,2	
8419 81 20	Percolators and other appliances for making coffee and other hot drinks	10.395	17,7	9.238	19,0	
8422 30 00	Machinery for filling, closing, sealing or labelling; machinery for capsuling; machinery for aerating beverages	8.725	14,9	8.003	16,5	
8421 21 00	Filtering or purifying machinery and apparatus for liquids: For filtering or purifying water	5.610	9,6	4.379	9,0	
8417 20	Bakery ovens, including biscuit ovens	5.024	8,6	4.447	9,2	
8438 10 90	Machinery for the manufacture of macaroni, spaghetti or similar products	4.336	7,4	3.383	7,0	
8435	Presses, crushers and similar machinery used in the manufacture of wine, cider, fruit juices or similar beverages	3.495	6,0	2.883	5,9	
8438 80	Other machinery for industrial preparation of food	1.650	2,8	1.110	2,3	
8438 50 00	Machinery for the preparation of meat or poultry	462	0,8	338	0,7	
	Other <sup>2</sup>	4.132	7,0	3.480	7,2	
	TOTAL	58.703	100,0	48.541	100,0	

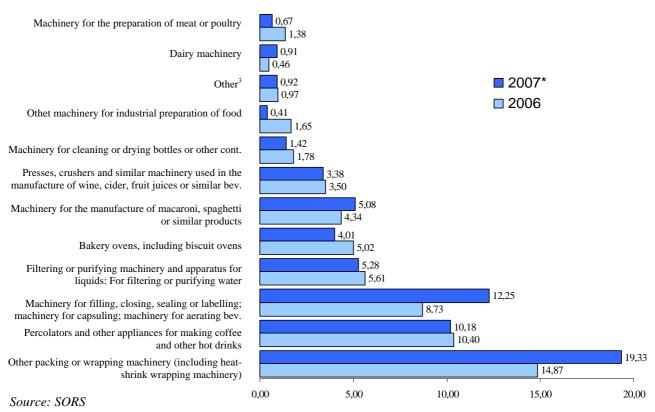
Source: SORS

Statistical data presented in Figure 7 show the percentages of value of each type of food machinery in the total value of food machinery exported worldwide. Forecast for 2007 is calculated on the bases of data for period months 1 to 10 of 2007. Comparing the data for 2006 and forecast for 2007 we notice a significant increase of the percentage of the value of exported (1) other packing or wrapping machinery (including heat-shrink wrapping machinery) – 4,46 percentage point, and (2) machinery for filling, closing, sealing or labelling; machinery for capsuling; machinery for aerating beverages – 3,52 percentage point.

<sup>1</sup> Table 13 / Cumulative data for the Russian Federation, Croatia, Germany, BIH, Serbia, Italy, Austria, Romania, Poland, Ukraine, Netherlands, Lithuania, USA, France, Montenegro and Hungary.

<sup>2</sup> Table 13 / Other: Machinery for cleaning or drying bottles or other containers; Machinery for the preparation of fruits, nuts or vegetables; Machinery for the manufacture of confectionery, cocoa or chocolate; Filtering or purifying machinery and apparatus for liquids: For filtering or purifying beverages other than water; Dryers for agricultural products; Dairy machinery; Machinery used in the milling industry or for the working of cereals or dried leguminous vegetables, other than farm-type machinery; Cream separators; Brewery machinery; Machinery for the extraction or preparation of animal or fixed vegetable fats or oils; and Machinery for sugar manufacture.

Figure 7: Export of food machinery in 2006 and forecast for 2007 (in mio EUR)



2007\*: Forecast for 2007 based on data for period months 1 to 10 of 2007

## 3.5 Import analysis

Table 14: Import of food machinery per main countries of origin: in 1.000 EUR and percentage of total value of import (period 2006 and 2007)

	-	\ <b>L</b>							
	2006	2006	2007*	2007*		2006	2006	2007*	2007*
country	1.000 EUR	%	1.000 EUR	%	country	1.000 EUR	%	1.000 EUR	%
Germany	19.916	36,1	26.451	47,0	Greece	832	1,5	132	0,2
Italy	18.670	33,9	16.180	28,7	Croatia	526	1,0	584	1,0
Austria	5.457	9,9	2.877	5,1	USA	324	0,6	141	0,3
France	1.993	3,6	2.003	3,6	GB	357	0,6	873	1,6
Czech									
Republic	1.812	3,3	693	1,2	Hungary	178	0,3	287	0,5
Netherlands	1.553	2,8	2.045	3,6	Serbia	99	0,2	408	0,7
Sweden	967	1,8	337	0,6	other countries	2.411	4,4	3.302	5,9
					TOTAL	55.095	100	56.313	100

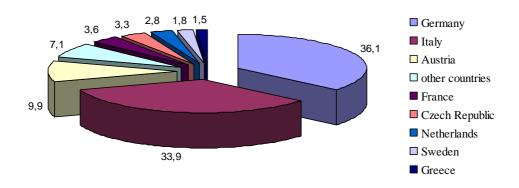
Source: SORS \*Note: Data for 2007 refer to the period from months 1 to 10.

Statistical data on the value of imports are presented in Table 14 and Figure 8. These data show that mayor Slovenian import partners for food machinery are from Germany, Italy and Austria. By

<sup>&</sup>lt;sup>3</sup> Figure 7 /Other: Machinery for the preparation of fruits, nuts or vegetables; Machinery for the manufacture of confectionery, cocoa or chocolate; Filtering or purifying machinery and apparatus for liquids: For filtering or purifying beverages other than water; Dryers for agricultural products; Machinery used in the milling industry or for the working of cereals or dried leguminous vegetables, other than farm-type machinery; Cream separators; Brewery machinery; Machinery for the extraction or preparation of animal or fixed vegetable fats or oils; and Machinery for sugar manufacture.

comparing the percentage of import from each country in the total value of imports, for 2006 and the first ten months of 2007, we notice a significant increase of value of imports from Germany (+10,9 percentage point) and a decrease of the value of imports from Italy (-5,2 percentage point) and Austria (-4,8 percentage points).

Figure 8: Import of food machinery in 2006 (in % per country of origin)



Source: SORS

By analyzing statistical data on the value of imports of different types of food machinery in 2006 worldwide we notice, that more than 59,5% of total value of imported food machinery is represented by the value of import of (1) other packing or wrapping machinery (including heat-shrink wrapping machinery); (2) filtering or purifying machinery and apparatus for liquids: for filtering or purifying water; and (3) machinery for filling, closing, sealing or labelling; machinery for capsuling; machinery for aerating beverages. The same structure of values of imports of different types of food machinery can be noticed for main import markets.

Table 15: Import of food machinery by type (2006)

CN code	FOOD MACHINERY	Import (wh	nole world)	Import (main countries of origin) <sup>4</sup>		
		1.000 EUR	%	1.000 EUR	%	
8422 40 00	Other packing or wrapping machinery (including heat-shrink wrapping machinery)	15.157	27,5	14.258	27,1	
8421 21 00	Filtering or purifying machinery and apparatus for liquids: For filtering or purifying water	8.903	16,2	8.070	15,3	
8422 30 00	Machinery for filling, closing, sealing or labelling; machinery for capsuling; machinery for aerating beverages	8.700	15,8	8.454	16,0	
8419 81 20	Percolators and other appliances for making coffee and other hot drinks	5.903	10,7	5.788	11,0	
8438 10 90	Machinery for the manufacture of macaroni, spaghetti or similar products	3.692	6,7	3.627	6,9	
8438 50 00	Machinery for the preparation of meat or poultry	3.356	6,1	3.331	6,3	
8438 80	Other machinery for industrial preparation of food	2.520	4,6	2.420	4,6	
	Presses, crushers and similar machinery used in the manufacture of wine, cider, fruit					
8435	juices or similar beverages	1.526	2,8	1.514	2,9	
8417 20	Bakery ovens, including biscuit ovens	1.383	2,5	1.382	2,6	
	*Other	3.955	7,2	3.840	7,3	
	TOTAL	55.095	100,0	52.684	100,0	

Source: SORS \*Other: see note under Table 12.

Statistical data presented in Figure 9 show the percentages of import value of each type of food machinery in the total value of imported food machinery worldwide. Forecast for 2007 is calculated on the bases of average value of the period January - November 2007. Comparing the data for 2006 and forecast for 2007 we notice a significant increase of the percentage of the value of import of (1) percolators and other appliances for making coffee and other hot drinks (+ 6,93 percentage point), and (2) machinery for filling, closing, sealing or labelling; machinery for capsuling; machinery for aerating beverages (+6,57 percentage point).

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<sup>&</sup>lt;sup>4</sup> Table 15: Cumulative data for the Russian Federation, Croatia, Germany, BIH, Serbia, Italy, Austria, Romania, Poland, Ukraine, Netherlands, Lithuania, USA, France, Montenegro and Hungary.

0,41 Dairy machinery 0,69 0,89 Machinery for cleaning or drying bottles or other containers 0,96 **2007**\* 1,38 Bakery ovens, including biscuit ovens **2006** 1,75 Presses, crushers and similar machinery used in the 1.53 manufacture of wine, cider, fruit juices or similar bev. 2.40 2,52 Othet machinery for industrial preparation of food 2.94 2,65 Other 4.40 3,36 Machinery for the preparation of meat or poultry 3.78 3,69 Machinery for the manufacture of macaroni, spaghetti or similar products 12,83 5,90 Percolators and other appliances for making coffee and other hot drinks 15,27 8,70 Machinery for filling, closing, sealing or labelling; machinery for capsuling; machinery for aerating bev. 8,37 8.90 Filtering or purifying machinery and apparatus for 13.94 liquids: For filtering or purifying water 15,16 Other packing or wrapping machinery (including heatshrink wrapping machinery) 10,00 0.00 5.00 15,00

Figure 9: Import of food machinery in 2006 and forecast for 2007 (in mio EUR)

Source: SORS

2007\*: Forecast for 2007 based on data for period months 1 to 10 of 2007

\*Other: see note under Figure 7.

## 4. Intellectual propriety rights

Slovenia became a member of the World Intellectual Property Organization in 1991, with the notification of the majority of WIPO conventions and agreements whose signatory was the former Yugoslavia. With entry into the EU in 2004, Slovenia began to enforce the legal protection of industrial designs and trademarks in accordance with the European legislation.

#### 4.1 Industrial propriety rights

#### 4.1.1. Patents

According to the Slovenian Industrial Property Act (Official Gazette RS, No 51/2006), patents are granted for any inventions, in all fields of technology, which are new, involve an inventive step and are susceptible of industrial application. Apart from excluding discoveries, scientific theories, mathematical methods, and other rules, schemes, methods and processes for performing mental acts as such, protection can be denied only for inventions the exploitation of which would be contrary to public order or morality or for inventions of surgical or diagnostic methods or methods of treatment practised directly on the living human or animal body.

A patent confers the exclusive right to prevent third parties not having the owner's consent from the acts of making, using, offering for sale, selling, or importing for these purposes the invention. It also

confers the right to take legal action against any person exploiting the patented invention without the owner's consent, and the right to claim damages. It is up to the owner to bring an action under civil law for any such infringement. The Slovenian Intellectual Property Office, however, does not take sides in any dispute.

The first step to obtain a Slovenian patent is the filing of a patent application with the Slovenian Intellectual Property Office. It may be filed in any foreign language, provided that it includes at least the indication of the right requested and the indication allowing the applicant to be contacted by the Office, in the Slovenian, English, French or German language. The Office then invites the applicant to submit, within three months, the translation of the application in the Slovenian language. The application is examined only as to formal requirements and the excludability examination is made before its publication. Patents are granted without a substantive (novelty) examination 18 months after the application filing date or the date of the claimed priority. The protection conferred by the Slovenian patent is limited to 20 years as from the date of filing the application.

Foreign natural and legal persons having neither residence nor real and effective industrial or commercial establishment in Slovenia shall have a representative whose name has been entered in the register of patent agents. However, foreign applicants may file applications, perform acts relating to the establishment of the filing date, pay fees, file copies of first applications when claiming the right of priority and receive notifications by the Office relating to those proceedings, without a representative, provided that they communicate to the Office an address for correspondence which is in the territory of Slovenia.

#### 4.1.2. <u>Industrial designs</u>

According to the Slovenian Industrial Property Act (Official Gazette RS, No 51/2006) an industrial design means the outward appearance of the whole or a part of a product, resulting from the features of, in particular, the lines, contours, colours, shape, texture and/or materials of the product itself and/or its ornamentation. A product is any industrial or handy craft item, including parts intended to be assembled into a complex item, packaging, get-up, graphic symbols and typographic typefaces, but excluding computer programs.

A registered industrial design confers on its owner the exclusive right to use it and the right to prevent any third party not having his consent from using it. Such use covers, in particular, the making, offering, putting on the market, importing, exporting or using of a product to which the design is applied, or stocking such a product for those purposes. Registering an industrial design with the Slovenian Intellectual Property Office protects rights in Slovenia only.

The first step to register a industrial design in Slovenia is to file a national industrial design application with the Slovenian Intellectual Property Office. It may be filed in a foreign language, provided that it includes at least the indication of the right requested, and the indication allowing the applicant to be contacted by the Office, in the Slovenian, English, French or German language. The Office then invites the applicant to submit, within three months, the translation of the application in the Slovenian language. The applicant may request that the publication of the design be deferred for a period not exceeding 12 months from the date of filing the application or, if priority is claimed, from the date of priority. The application is first examined as to formal requirements, which is followed by an

examination as to whether the design to which the application relates may be protected under the Act, but excluding examination as to novelty, individual character and disclosure of a design. If the design meets all requirements, the Office issues a decision on the registration of the industrial design, enters it in the register and publishes the mention of the registration in the Official Journal. If the requirements are not met, the Office refuses the application wholly or in part.

Not all designs can be registered. According to Article 36 of the Act, a design shall not be registered if it is not new or has not an individual character, if it is contrary to public order or morality or contains official symbols covered by Article 6ter of the Paris Convention, or if it subsists in features of appearance of a product, which are solely dictated by its technical function and must not necessarily be reproduced in their exact form and dimension. A design is considered new if no identical design has been made available to the public before the first date of filing of the application. Designs are identical also if their features differ only in immaterial details. A design is considered to have individual character if the overall impression it produces on the informed user (not a design expert) differs from the overall impression produced on such a user by any design.

#### 4.1.3. Trademarks

According to the Slovenian Industrial Property Act (Official Gazette RS, No 51/2006), a trademark is any sign, or any combination of signs, capable of distinguishing the goods or services of one undertaking from those of another undertaking and capable of being graphically represented, in particular words, including personal names, letters, numerals, figurative elements, three dimensional images, including the shape of goods or of their packaging, combination of colours as well as any combination of such signs. A registered trademark confers the exclusive right to use the trademark to identify goods or services and the right to prevent third parties not having the owner's consent from using it in the course of trade.

To register a trademark in Slovenia the first step is to file a national trademark application with the Slovenian Intellectual Property Office. It may be filed in a foreign language, provided that it includes at least the indication of the right requested, and the indication allowing the applicant to be contacted by the Office, in the Slovenian, English, French or German language. The Office then invites the applicant to submit, within three months, the translation of the application in the Slovenian language. The application is first examined as to formal requirements, which is followed by an examination for absolute grounds for refusal. If the latter exist, the Office gives the applicant an opportunity to make observations. If the trademark is accepted for registration, the application is published in the Official Journal to allow the owner of an earlier trademark to oppose, within three months, the registration. If no opposition is filed or it has been refused, the trademark is registered.

#### 4.1.4. Geographical indications

Geographical indications eligible for registration under the Slovenian Industrial Property Act are indications which identify a good as originating in a territory, or a region or a locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin. The name of a good, which has become generally known through long-term use in the course of trade as the name indicating that the good originates in a specific place or region, is

also registrable as a geographical indication. Geographical indications for agricultural products and foodstuffs as well as for wines and other products obtained from grapes or wine are eligible for registration under the Agriculture Act and Wine Act.

A registered geographical indication is a collective right and may be used as such in the course of trade only by those who produce or market the goods protected by the geographical indication. The term of a registered geographical indication is unlimited. However, it is not possible to register a geographical indication if:

- it indicates or suggests that the good in question originates in a geographical area other than the true place of origin in a manner which misleads the public as to the geographical origin of the good;
- although literally true as to the territory, region or locality in which the good originates, it falsely represents to the public that the good originates in another territory;
- it has become generally known through long-term use in the course of trade as a designation for a specific kind of goods;
- in the light of a mark's reputation and renown and the length of time it has been used, registration is liable to mislead the consumer as to the true identity of the product.

### 4.2 Slovenian Intellectual Property Office

The organization responsible for the field of industrial property and copyright in Slovenia is the Slovenian Intellectual Property Office (SIPO). It was established on 25 June 1991 within the Ministry of Science and Technology under the name the Slovenian Industrial Property Protection Office. In 1994 it was assigned competence in the field of copyright and related rights, changing its name to the Slovenian Intellectual Property Office. As from December 2000, it operates as an autonomous body within the Ministry of the Economy.

#### Main tasks of SIPO are:

- carrying out of proceedings for the grant of patents and supplementary protection certificates for medicinal and plant protection products, and proceedings for the registration of industrial designs, trademarks, topographies of integrated circuits and geographical indications, with exception of those relating to agricultural products, foodstuffs, wines and other products obtained from grapes or wine,
- keeping of registers of industrial property rights,
- preparation of legal regulations in the field of intellectual property,
- provision of information services relating to industrial property rights,
- issuance of authorisations to collecting societies of authors and holders of related rights for collective management of their rights, and supervision of the operation of such societies,
- representation of the Republic of Slovenia in foreign and international organisations in the field of intellectual property,
- publication of the Official Bulletin on Industrial Property,
- performing administrative-technical tasks for the Conciliation Board for disputes concerning employment related inventions, operating at SIPO premises and

- providing administrative help to the Copyright Board and mediators in disputes involving collecting societies and representative associations of users of protected works.

## SIPO and International cooperation

Since its establishment in 1991, SIPO actively cooperates with all key international institutions operating in the filed of intellectual property:

- World Intellectual Property Organization (WIPO)
- European Union
- European Patent Organisation (EPO)
- Office for Harmonization in the Internal Market (Trade Marks and Designs) (OHIM)
- Bilateral cooperation with other related national offices

#### **Address**

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Tel. +386 1 478 31 00 Fax. +386 1 478 31 10

Email. sipo@uil-sipo.si

## 4.3 Legislation on intellectual property

An exhaustive list of legislation in force in the Republic of Slovenia can be found in the document published on the web site of SIPO.

http://www.uil-sipo.si/uploads/media/sipo\_legislation\_01-2008.pdf

Several Slovenian regulations have been translated in English as the Industrial Property Act (Official Gazette RS, No 51/2006), published at this link:

http://www.uil-sipo.si/fileadmin/upload\_folder/zakonodaja/ZIL\_EN\_2006.pdf

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- Slovenia partner (<a href="http://www.sloveniapartner.com">http://www.sloveniapartner.com</a>)
- Statistical Office of the Republic of Slovenia (http://www.stat.si)