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FINAL REPORT

Contract No. MPG 2003/172

Project MP/YUG/03/063



MPG-KGH d.o.o.

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S&M

Progress Report No 3 - Final report.

Contract No. MPG 2003/172

Introduction

Data Collection

For the preparation of this Report i.e. Survey to be used as one of the basic documents for the preparation of National Phase-out Plan for Serbia and Montenegro we have used following information resources

- a. Serbian Chamber of Economy – Data Bank on registered enterprises (manufacturers of refrigeration and air conditioning equipment, other manufacturing sectors using CFCs and end users);
- b. Belgrade Chamber of Economy – Data Bank on registered enterprises;
- c. Directory of enterprises , published by Media International Group in cooperation with responsible government authorities and chambers of economy, 2002;
- d. Quarterly journal KGH (Air conditioning, heating and refrigeration);
- e. Data from the first National programme for phasing-out ODS in FRY, 1998;
- f. Personal knowledge of the team members and their contacts with professional in the industrial community.

After preparation of the list of enterprises to be subject of the survey written information was send -registered mail. Set of documents was composed of following documents:

- Explanatory letter containing information concerning Montreal protocol, our obligations as a party to the MP, reasons for collecting the data concerning their consumption of CFCs and the final objective of the survey, i.e. preparation of NPP.
- Supporting letter from the Ministry of Protection of Natural Resources and Environment, giving us legitimacy for the realization of this task,
- Questionnaire no.1 or 2. (for manufacturers or end users) translated in Serbian language.

This communication was followed by many telephone explanations, e. mail communications and, finally, with large number of visits to manufacturers of refrigeration and a. conditioning (20 companies were visited), other manufacturers using CFCs (7 companies) end users (38 end users) and consultations with other stake holders who could give us some useful information (ministries and other government institutions, academic institutions, professional organizations, some importers of ODS, and similar). List of the companies which were subject of the survey is given in **Annex I**

As a result of the this process we have received, up this moment, following result;

1. (3.1) Manufacturers of refrigeration and air conditioning equipment 24.
2. (3.7) Enterprises in other sectors:
 - Foam production (soft, rigid and poly styrene) 4
 - Aerosol production (pharmaceutical industry) 4
- 3 (3.2) End users of refrigeration and air conditioning equipment using CFC 10
4. Non civil sector – end users of refrigeration and air conditioning as cumulative figure for consumption of CFC -11, CFC -12 and R-22.
5. Importers of CFC and other controlled substances

3.1 Manufacturers of refrigeration and air conditioning equipment

Our best estimation is that less than 40 - 50 very small shops, working in the field of refrigeration, mostly as service shops and with minor production capacity, are not covered by formal sources of information.

On the other hand response from the manufacturers of refrigeration and air conditioning which was less than it could be expected equipment could be justified due to following reasons:

- there rather large number of small shops, registered as manufacturers of refrigeration and air conditioning equipment, but in fact it is not their real business activity,
- in spite of repeated requests and additional information on the objectives of this survey some of the contacted were not interested to participate in the survey and didn't response,
- some of them, mostly small enterprises, or better to say shops, has no understanding of the need to make substitution of CFCs for other substances,
- it appeared that some of the entities which were contacted by us where rather confused as they have received, almost in the same time questionnaires from consultant collecting data for service sector and from Ministry of Environment preparing its data bank on CFCs,
- it seems that additional problem was on definition on what is "end user". For us it was clear that end user is enterprise using CFC in their production process only for the purposes of cooling, air conditioning, or heating, and that there final product do not contain any CFC. However consultant for service sector, in many cases contacted, same enterprises in preparation of survey on the consumption for the service activities,
- some of the largest manufacturers are going through transition process, that means privatization, or restructuring before privatization. Due this fact some them are work with very low level of utilization of their installed capacities or are not working, waiting to see the final result of privatization. It could happen that some them after privatization is realize suddenly increase their production capacity or, on contrary, change their production profile,
- missing of "full package" of regulation in this field, resulting in non – adequate control and enhancement of even existing regulations,

- not adequate level of understanding of the importance of this issue, particularly in less developed regions,
- possibility of "grey market" of raw material and selling of final products that does not allow collecting of real information

However, in spite of above mentioned obstacles to collect all relevant information concerning consumption in manufacturing sector and by end users data we believe that more than 90% of consumption is covered by our survey (data for 1999 -2002). For this draft report we prepared consumption data for 2002, and in few days we shall send data on consumption in period 1999 – 2002.

It should be mentioned that the largest manufacturer of home refrigerators and freezers OBOD from Cetinje is in the finale stage of the realization of the project of substitution of CFC-11 with non-ODS pentane, and CFC -12 with R-134a. Actually it already partially substituted R-12 with R-134 a. Also, ten SMI in Serbia manufacturing refrigeration equipment substituted R-11 with R-141b and R-12 with R-134a, seven of them by the end of 2002 and three of them by the end of 2003.

Annex II CFC Consumption in manufacturing sector

3.7. 1 Pharmaceutical industry (Tables in Annex III)

In Serbia and Montenegro leading pharmaceutical companies are GALENIKA, Belgrade, HEMOFARM, Vrsac , ZDRAVLJE, Leskovac and JUGOREMEDIJA, Zrenjanin.

Galenika, Belgrade is still using two types of mixtures for production of two medicaments in aerosol form in considerable quantities. Over 20 tons on annual basis .

Zdravlje, Leskovac till 2002 used CFC blends (R-11/12/114 as 23/54/23 %blend 5.784 kg) for production of two meter dose inhalers (Berotec, and Berodual). However since 2003, after privatization of this company, these two inhalers are not produced any more but imported from German company Boehringer Ingelheim.

This company in cooperation with Hemik Co., Kikinda is producing some cosmetic products in spray form. Actually Zdravlje is producing active substance and service filling is done by Hemik, Kikinda. Deodorized iso butane id used as propellant.

Hemofarm, Vrsac substituted its 50 tons consumption of CFC-113 as sterilizer for production of chemo dialysers in 1996 with high pressure steam. In 1998 project for retroactive payment through MLF was prepared and Hemofarm received adequate compensation for that investment.

However in spite of the fact that we visited Hemofarm and several times reminded responsible Maintenance department we have not received information on consumption of CFC or other refrigerants used in their chillers and other refrigeration or air conditioning equipment.

Jugoremedija, Zrenjanin is consumer of on type of halogenated hydro carbon but for preparation of human anesthetics. According to information received during the field visit from production manager this product with commercial name Halotan has is not ODS.

3.7.2 . Cosmetic products

Hemik, Kikinda is the largest producers of cosmetic products in spray form. However using its own resources Hemik made substitution from CFC- 11/12 consumption to iso butane in 1992. Hemik never received any retroactive compensation for this investment. We strongly recommend that it should be taken care of this fact in preparation of NPP. Besides production its own cosmetics Hemik is doing service feeling for other producers of active substances, like it is a case of Zdravlje, Leskovac.

3.7.3 Foam production (Table in Annex IV)

There are several companies producing soft and rigid foams and extruded poly sturene. Largest are Prva Iskra from Baric present in this sector last 30 years.

In PI Baric chemical complex there were three companies using CFCs. Largest is FIM, producing rigid foams in a form of sandwich panel for construction purposes. It is expected that, not latter, than July 2004 project financed by MLF, on substitution of R-11 with n- pentane will be finished.

PI FIM has small production unit for special products of rigid foam. It is expected that a investment project already prepared will be approved by MLF this year.

The other company within same Holding, PI Polyurethane, producing soft foams already substituted R-11 with methylen chloride. Project financed by MLF was finished by the end of the 2003.

Last year company DELTAMATIC, Mramor near Nis, started production of extruded poly sturene. It annual consumption blend R-22 / R- 141 b (40 kg/h) is on annual level 300 tonns. However company is [planning to substitute this blend with some of the ozone friendly hydro carbons.

At the moment Laminat, Bajina Basta is largest consumer of R-11 for production of extruded poly sturene, which used for production of trays for food packing, and other type of packaging materials. Invest project is already prepared and it is expected to be approved by MLF this year. Substitution could be realized in the first half of 2005.

Two other companies which have batch production of rigid foams were contacted. In spite of several attempts and offers to help them in preparation of answer we have not received any information. According to our knowledge these two companies, one private and other public one, are in difficult economic situation.

3.2 CFC end users are grouped in several sectors:

3.2.1 Sweetmeat and chocolate production

Information – data were collected from the largest producers in this sector, like PIONIR, Subotica, JAFFA, Crvenka, BANAT, Vrsac, and SOKO Stark, Belgrade.

Generally, for this production sector it could be concluded that they are using mostly R – 22 and in very small quantities R-12, and R-502 even less. In practical terms R-11 is out of any use. R-22 is mostly used for chillers for preparation of cold water to be used in process and for air conditioning of production areas. Direct expansion is used only tunnels for chocolate products and for air conditioning of specific areas like store rooms, laboratories and some production areas.

	End user of CFC in manufacturing of sweetmeat and chocolate	R-12		R-502		R - 22	
		Charging	Service	Charging	Service	Charging	Service
1	Soko Stark	258*	136	1,5	0,5	890	408
2	Pionir	49	30	40	10	910	400
3	Banat	14	5	-	-	537	180
4	Yaffa	68**	24	-	-	230	50

* In mid 2003 company made partial change substituting R-12 with R-22.

** By the end of 2002 company changed production line and introduced R-404 a, and not using R-12 any more

3.2.2. Other CFC end users

a. Administrative and other public buildings

Larger administrative and buildings and objects, like airport Belgrade, Government buildings, Oil company business centre, Insurance company, HQ of PTT , Newspaper and publishing companies, House of Justice, and some others for air conditioning use as refrigerant R-11, R-12 in turbo chillers, manufactured in most cases by Carrier, York and Westinghouse.

Cumulative quantity of the refrigerant for 11 mayor public buildings and objects which were subject of this survey is: for R-11 is 2.500 kg and for R-12 is 900 kg.

Information for the individual objects will be given in table form in Final report.

b. Hospitals

The most important and largest clinical centers are

Complex of Belgrade clinical centre has 3 turbo chillers charged with R-12, each one 280 kg, i.e. 780 kg in total and many water chillers charged with R-22.

Complex of Military hospitals, Belgrade has four turbo chillers (Carrier) charged with R-12, each one 1.361 kg, i.e. 5.444 kg in total.

c. Super markets and fast food restaurants

We have sent questionnaire to mayor supermarkets and chain of fast food restaurants

(C- Market, Delta and McDonalds) but in spite of number of interventions we have not received these data up to this moment.

However, according to our knowledge and informal information C Market Co. consumed in 2002 3.264 kg of R-12 for its refrigeration needs (mostly for cold stores and display refrigeration).

McDonalds fast food restaurants in its installations use following quantities of refrigerants: R-12 50 kg, R-502 30 kg, R-22 300 kg and R-404 a 50 kg.

Two supermarkets from Montenegro gave us information on their consumption data:

	Company	R-12	R-22	R-502	R-134 a
1	PKB Zelenika	100	100	10	20
2	Institute SM - 2000	200	100	25	30

3.4 Hotels

We have interviewed two largest hotels in Belgrade (Hayat and Intercontinental) and 12 largest hotels at the Montenegrin coast. However, due to fact that hotels have small refrigeration equipment most of them supplied us with cumulative date for service purposes i.e. annual consumption.

	Hotel name – bed number o	R-12	R-22	R-502	R-134 a
1	HTP Boka – 2500	150	200	25	30
2	Institute SM - 2000	100	600	30	50
3	RVI Igalo - 600	40	200	20	20
4	Military hospital -	100	200	20	20
5	H. Vojvodina -300	80	100	15	20
6	H. Metalurg – 400	50	50	10	10
7	H. Delfin - 500	80	100	20	20
8	Enterprise Hotels - 500	100	50	20	20
9	Private pensions in He4rceg Novi area – 500	50	100	30	20
10	H. Slovenska Plaza Budva-800	70	280	-	-
11	H. Hayat, Belgarde - *				
12	H. Intercontinental - 1000	120	** till 2002 R-11 200 kg, from 2003 R-123 290		

* Hayat didn't send report although it has R-12 3 chillers

Data received from Statistical Bureau of Republic of Serbia

This information was received on our request with an idea to get additional information concerning the imports of parts and final products – equipment or equipment sets to be used in production of refrigeration and air conditioning equipment and for maintenance purposes i.e. service.

However we found that this type of information is of no great use as it has following deficiencies;

- it is not possible to differ between old and new imported goods,

- tariff numbers are same for the all refrigeration and air conditioning equipment irrelevant to the fact that it could be very different substance (CFC, HCFC, HFC, NH₃, or R-404a, R-134 a , R-407 c, R-410, R-600 and etc.)

Our estimation is that in the period that is covered by this report 1999 – 2002 it has been imported according the following distribution patter, concerning the refrigerant:

- 50 % R-22, 10 % NH₃, 30% 5 R-12 and 10 % for other ozone friendly refrigerant. It is expected that the fact that EU is not producing equipment with R-12 as refrigerant that in the coming years the percentage of refrigeration and air conditioning equipment using ozone friendly refrigerant will increase versus those on using R-12 and R-22.

Annex 5/ 1-4 Tables on quantities of imported refrigeration and air conditioning equipment in the period 1999 – 2002

Analysis of the data brings to the non logic information on import of hermetic compressors, particularly in the period 1999 – 2002.

Analysis of hermetic compressors, position 1,

	Imported –year	Compressor unit weight Kg/pc.	Compressor unit price US\$/pc
1	1999	0,7145	2,44
2	2000	10,6	23,51
3	2001	11,2	23,51
4	2002	0,136	0,58

This data has no quality and reliability since the quantities of import goods under the quoted tariff numbers is not realistic for our market, and particularly unit prices. As a consequence tariff system should be improved.

3.6 External factors relevant to NPP

a. CFCs availability and price information

None of the CFCs is produced in Serbia and Montenegro. All quantities which are placed on the market are imported. In Serbia and Montenegro there are more than 20 companies registered for import and-or export of CFCs. CFCs are imported from Article 2 countries and Article 5 countries that are producing these substances.

Price of the CFCs that are placed on the market is not uniform but it varies in narrow limits.

At this moment indicative prices for CFCs and other refrigerants are:

	Refrigerant	Packing (kg)	Unit price US\$/kg
1	R-11	280.0	3.0
2	R-12	6,8	4,7
3	R-12	13,6	4,3
4	R-12	22,7	4,3
5	R-22	6,8	4,6
6	R-22	13,6	4,3
7	R-22	22,7	4,3
8	R-22	61,0	4,3
9	R-22	62,0	4,3
10	R-502	13,6	16.0

	Refrigerant	Packing (kg)	Unit price US\$/kg
1	R-134a	6,8	9,7
2	R-134a	13,6	8,9

	Refrigerant	Packing (kg)	Unit price US\$/kg
1	R-404 a	10.9	18.5
2	R-407 c	11,3	19,1
3	R-410 a	11,3	21,7
4	R-507	11,3	19,1

Rather difficult economic situation has a consequence that many companies are not working or work with limited capacity. That resulted in situation which was not in favor for our survey. Namely large percentage of refrigeration and air conditioning equipment is in rather bad technical condition or it is not used. In that situation, some technical people, responsible for maintenance and service very not cooperative in giving information for our survey.

- b. Trade agreements with neighboring countries on CFCs,**
Serbia and Montenegro signed agreements on free trade with following neighboring countries:

Agreement on free trade between Serbia and Montenegro and Albania

According to the Agreement Contracting parties shall gradually establish a free trade area in a transitional period ending by 1 January 2007, starting from the entry in force of this Agreement, in accordance with the provisions of this Agreement and in conformity with the definitions, set out in article XXIV of the GATT 1994 and the WTO.

Agreement on free trade between FR Yugoslavia and Bosnia and Herzegovina

Agreement on free trade between Federal Government of FR Yugoslavia and Bosnia and Herzegovina came into force on June 1 2002.

According to the Agreement Contracting parties shall gradually establish a free trade area in a transitional period ending by 31 December 2004, starting from the entry in force of this Agreement, in accordance with the provisions of this Agreement and in conformity with the definitions, set out in article XXIV of the GATT 1994 and the WTO.

Agreement on free trade between Serbia and Montenegro and Bulgaria

According to the Agreement Contracting parties shall gradually establish a free trade area in a transitional period ending by 1 January 2007, free trade area in accordance with the provision of this Agreement and in conformity with Article XXIV of the GATT 1994, the understanding on the interpretation of the article XXIV of the GATT 1994 the Agreement establishing WTO.

Serbia and Montenegro and the Republic of Croatia Agreement on the Free Trade Agreement (this was done by Amendment to the Free Trade Agreement between the Federal Republic of Yugoslavia and the Republic of Croatia, that was signed on 23 December 2002).

According to the Agreement Contracting parties agreed that "For each product the basic duty to which successive reductions set out in this Agreement are to be applied shall be the most Favorable Nation duty in force on August 15th 2003 or on day of signing of this Agreement on Amendments, whichever being lower".

Also two Parties agreed that " As of the entering into force of this Agreement the duties to be applied to the import of products originating in the Contracting parties listed in Annex I and annex II of the Protocol I shall be successively reduced in accordance with the following schedule:

- as of the entry in force of this Agreement all duties will be reduced to 60% of the basic duty,
- as of January 2005 all duties shall be reduced to 40% of the basic duty,
- as of January 2006 all duties shall be reduced to 20% of the basic duty,
- as of January 2007 all duties shall be abolished"

Agreement on free trade between FR Yugoslavia and Hungary

According to the Agreement the Parties shall gradually establish a free trade area on substantiality all their bilateral trade during a transitional period ending by 1 January 2006, in accordance with the provision of this Agreement and in conformity with Article XXIV of the GATT 1994, the understanding on the interpretation of the article XXIV of the GATT 1994 the Agreement establishing the World Trade Organization.

Agreement on free trade between Serbia and Montenegro and Romania

According to the Agreement the Parties shall gradually establish a free trade area on substantiality all their bilateral trade during a transitional period ending by 1 January 2006, in accordance with the provision of this Agreement and in conformity with those of the GATT 1994, in particular Article XXIV and on the Agreement on establishing WTO, especially the Understanding on the interpretation of Article XXIV of GATT 1994.

Almost all of the above mentioned Agreements define, for the purpose of these Agreements the term "industrial products" and it means the products falling within Chapter 25 -97 of the Harmonized Commodity Description and Coding System with the exception of the products listed in the corresponding Annexes to the subject Agreements.

Exception is Agreement with Bosnia and Herzegovina as that agreement is applied on all goods listed in chapter 1. – 97. of nomenclature of Harmonized system, i.e. existing Customs tariffs of contracted parties.

Serbia and Montenegro also signed Agreements on Free Trade with Slovenia, Belarus, Moldova and Ukraine.

c. Legislation on CFC control,

National legislation on CFC control consists of the following legal acts:

Basic law on environmental protection ("Official Gazette FRY" no. 44/98, 24/99, and 44/99). Article 22. of this law establishes list of substances that delete Ozone layer, as well as basic conditions of import and export of these substances.

Decree on distribution of goods and commodities for import and export ("Official Gazette FRY" no. 37/97),

Law on Ministries (Article 20. "Official Gazette of Republic of Serbia", no 35/2003) which defines responsibilities of the Ministries.

Low on ratification of Vienna Convention on Protection of Ozone Layer ("Official Gazette SFRY" , International Agreements, no. 1/90);

Law on ratification of Montreal Protocol on Substances that Deplete Ozone Layer ("Official Gazette of SFRY", International Agreements no. 16/90)

d. Certificate and licensing systems for enterprises and technicians

There are two kinds of the documents that could be obtained and considered as certificate i.e. license.

First, is diploma that is received after graduation from secondary technical school. These schools organize special training for the technicians in refrigeration sector. Second one is diploma of graduated mechanical engineer received after graduation from University/Faculty. Almost all Mechanical engineering Faculties in S&M organize last two years specialized courses in refrigeration, air conditioning and cooling.

On the other hand Law on Construction of Objects ("Official Gazette RS", no. 44/95, 24/96, 16/97, and 43/2001) defines regulations and obligations to be fulfilled by companies and professionals which could be licensed for any investment activity.

Since 2003 all licensed engineers and companies were requested to get approval through newly established procedure.

However it is expected that licensing system for technicians and workshops engaged in assembling, maintenance and servicing of refrigeration and air conditioning activities will be improved during implementation of National Phase Out Plan and that they will be obliged to get special training and based on that to receive license for work.

e. Other factors

A large problem for the implementation of the Phase-out programme was import of "second hand" equipments and commodities, mostly from the Western Europe. Namely, due to difficult economic situation, last 5 years a large number of different "second hand" equipment entered in country (TV sets, computers, tires, Air conditioners, refrigerators, display refrigerators and other). According to statistical data only in the last year, 2003, more than 80.000 different refrigeration units were imported in S&M. Large number still having CFC 12 as a refrigerant. To overcome this situation Ministry of Science and Environment Protection of Republic Serbia issued a Decree by which all this "second hand" import is banned.

Annex I

No.	Company	Street Address	Place	Tel.	Fax.
1	D.O.O. ZA PROIZVODNJU I USLUGE - FRIGO	VIHORSKA 8	KRAGUJEVAC	035/ 231-819	
2	SION ELECTRONICS	STUBALSKIH BORACA 11	TRSTENIK		
3	FABRIKA VAGONA KRALJEVO – TERMOPLASTIKA AD	KARADORĐEVA BB	KRALJEVO	036/ 351- 552	
4	STANKOVIĆ MIROSLAV I DRUGI – SERVIS MIKI	BRANISLAVA NUŠIĆA 21	BOR	030/ 444-744	
5	INTERMEDIJA D.O.O.	GAJEVA 14	NOVI SAD	021/ 064 064	021/ 122-7015
6	FRIGO OPREMA D.O.O.	PREDRAGA STANOJEVIĆA 7	KRUŠEVAC		
7	EI KLIMA D.O.O.	SVETOG CARA KONSTANTINA 80	NIŠ		
8	CER	DR. DRAGIŠE MIŠOVIĆA 169	ČAČAK	032 / 221-541	032/ 221- 173
9	BELFRIGO D.O.O.	FRANCUSKA 22	BEOGRAD	011/ 3242-880	
10	TERMOMETAL	USTANIČKA 242 G	BEOGRAD	011/ 347-0548	
11	TERM ENGINEERING D.O.O	KNJEGINJE ZORKE 38	BEOGRAD		
12	TEMAC D.O.O.	DUBLJANSKA 24	BEOGRAD		
13	TECHNOFRIG D.O.	KNEZA MILOŠA 35	ČUPRIJA		
14	TABU ULJMA	JNA 8	VRŠAC	023/ 898- 2721	
15	SENA D.O. O.	INDUSTRIJSKA BB	KRAGUJEVAC	034/ 384-322	
16	SAVIĆ I OSTALI D.O.	MIJE KOVAČEVIĆA 19	BEOGRAD		
17	PI	HILANDARSKA 6	BEOGRAD	011/ 334- 0874	
18	OMIK	PAŠIĆEVA 52	INĐIJA		
19	OMEGA ELEKTRO	KNEZA MILOŠA 135	BEOGRAD - SOPOT	011/ 825-7146	
20	OBOD NIŠ D.O.O.	RAJIĆEVA 13	NIŠ		
21	NOPEX D.O.O.	KOSTE GLAVINIĆA 2	BEOGRAD		
22	NITEHNOKLIMA D.O.O.	VITKA RADENKOVIĆA 34	GADŽIN HAN		
23	MP 96 D.O.O.	KNEZA VIŠESLAVA 63	BEOGRAD	011/ 532-1841	
24	MINEL MONTAŽA	TRG NIKOLE PAŠIĆA 8	BEOGRAD	011/ 323-2912	011/ 3235-056
25	METAL	PRIGREVAČKA 72	APATIN	025/ 025/	

				773-544	773-108
RB	PREDUZEĆE	ADRESA	MESTO	TEL.	FAX
26	MELODY	MARŠALA TITA 134	RUMA	022/ 421-63	
27	MEGAVAT D.O.O.	ĆUPRIJSKA 5	NIŠ		
28	MASTER FRIGO D.O.O.	VOJISLAV IVETIĆA BB	BEOGRAD	011/ 332-5159	
29	MARINEX FRIGO D.O.O.	RADE KONČARA 21A	KULA	025/ 722-811	025/ 726-476
30	LOS D.O.O. – POZEGA, RASNA		POŽEGA RASNA		
31	LEJON GROSS D.O.O. - ARANĐELOVAC	GOCE DELČEVA 30	ARANĐELOVA C		
32	KOTA KLIMA D.O.O.	BULEVAR CRVENE ARMIJE 97	BEOGRAD	011/ 324-8111	
33	KOMATRIKS D.O.O.	VIŠNJIČKI VENAC 13	BEOGRAD		
34	KOLMING D.O.O.	JURIJA GAGARINA 263	BEOGRAD	011/ 318-0941	
35	KLIMA KUZMAN D.O.O.	TOME MARETIĆA 10A	NOVI SAD - PETROVARADI N	021/ 367-936	
36	INTERFRIGO D.O.O.	BULEVAR ARSENJA ČARNOJEVIĆA 117	NOVI BEOGRAD	011/ 135-647	011/ 138-963
37	I & INTERCLIMA ENGINEERING D.O.O.	BRAĆE BARUH 1	BEOGRAD		
38	HLADING D.O.O.	BULEVR VOJVODE MIŠIĆA 14	BEOGRAD	016/ 655-885	
39	HEMOFRIGO D.O.O.	DRUGOG SRPSKOG USTANKA 16	LESKOVAC	016/ 533-55	
40	H.V.A.C. – KLIMA CO. D.O.O.	BORIVOJA STEVANOVIĆA 43	BEOGRAD	011/ 489-7425	
41	FS FRIGOMONTAŽA	VIŠEVAČKA 78	BEOGRAD	011/ 561-820	
42	FRIGO – TEHNA D.O.O.	HEROJA PINKIJA 2	NOVI SAD	021/ 468-423	
43	FRIGOPLAST D.O.O.	NASELJE RADE ZUNIĆA 26 ULICA 12	LESKOVAC	016/ 258-678	
44	PREDUZEĆE “FRIGOMEKS”	BOSANSKA 12	11.211 BORČA		011/ 3324-215
45	FRIGO ČIKARA D.O.O.	SUVOPLANINSKA 2	NIŠ	018/ 325-474	
46	FREON KOP	VELJKA VLAHOVIĆA 20	KRAGUJEVAC		
47	ENERGY A.C. – INT D.O.O. – Vranjska Banja	GRMAĐA 44	VRANJE		

RB	PREDUZEĆE	ADRESA	MESTO	TEL.	FAX
48	C.M. MITROVIĆ IVAN I DRUGI	CRVENI KRST 110	KRALJEVO		
49	ART ING D.O.O.	PAPA PAVLA 23	NOVI SAD	021/ 562-551	021/ 063-063
50	ALFA ELEKTRO	SAVE TEKELIJE 36	KANJIŽA		024/ 871-365
51	PK SOMBOR	APATINSKI PUT BB		025/ 386-99	
52	NOLE MONT D.O.O.	TOŠE JOVANOVIĆA 14	BEOGRAD	011/ 354-9115	
53	KLIMAEXPORT D.O.O.	DRAGE SPASIĆ 11	NOVI SAD		
54	PREDUZEĆE "MORAR"	M. VELIKOG 41	23.300 KIKINDA		023/ 29-286
55	PREDUZEĆE "FRIGOTERM"	GEN. P. DRAPŠINA 19	24.400 SENTA		024/ 813-226
56	PREDUZEĆE "EKO ELEKTROFRIGO" D.O.O.	TOŠIN BUNAR 164	11.070 N. BEOGRAD		375-7289
57	PREDUZEĆE "TEHNOMAG – TECO"	D. VASILJEVA 21	21.000 NOVI SAD		021/ 420-621
58	SZRS "SOLAROV"	B. ŠUPUTA 64	21.000 NOVI SAD		021/ 504-536
59	PREDUZEĆE "PINGVIN"	P. MAJA 35	21.220 BEČEJ		021/ 811-074
60	PREDUZEĆE "FRIGOTEHNA"	HEROJA PINKIJA 2	21.000 NOVI SAD		021/ 369-482
61	PREDUZEĆE "JUGOKLIMA"	JASIČKI PUT B.B.	37.000 KRUŠEVAC		037/ 280-27
62	PREDUZEĆE FRIGOTEHNIKA"	"BUL. V. VLAHOVIĆA 177	18.205 NIŠ BANJA		018/ 541-808
63	PREDUZEĆE "FRIGOTEHNIKA"	DANIČIĆEVA 11	18.000 NIŠ		018/ 361-455
64	PREDUZEĆE "JUGOSTROJ MILE I SINOVI"	VELJKA DUGOŠEVIĆA 44	11.000 N. BEOGRAD		417-619
65	PREDUZEĆE "FRIGOSTROJ"	TRNSKA 1	11.000 N. BEOGRAD		433-026
66	PREDUZEĆE "FRIGOMONT"	ZRENJANINSKI PUT 98A	11.000 N. BEOGRAD		712-730
67	PREDUZEĆE "FRIGO 2000"	SVETOGORSKA 22	11.000 N. BEOGRAD		3221-049
68	PREDUZEĆE "FRIGO KLIMA"	3 BULEVAR 1	11.070 N. BEOGRAD		213-8104
69	FRIGO OPREMA D.O.O.	PREDRAGA STANOJEVIĆA 7	KRUŠEVAC		
70	BS INZENJERING	Miloja Djaka 12 a	BEOGRAD		2660775
71	DELTA MATIK	Mramorno brdo bb	18 251 MRAMOR		
72	ALFA KLIMA		19350KNJAZEV		

			AC		
73	JUGOSTROJ	Patrijarha Dimitrija	Beograd	011 3564639	
74	PRVA ISKRA – POLIURETANI FPP	Baricka reka bb	11504 BARIC		8701 260
75	DUTA	Lazin trg bb	35210 SVILAJNAC	035	312614
76	C MARKET	Cika Ljubina	11000 BEOGRAD		632879
77	PIONIR	Sencanski put bb	24000 SUBOTICA		024 554555
78	VISKOZA KORD		15300 LOZNICA		015 874713
79	VISKOZA VISKOPROM		15300 LOZNICA		015 874907
80	SOKO STARK	Kumodraska 249	11000 Beograd		
81	METALIA COM	Karlovacka 35/2			109912
82	JUGOREMEDIJA	Pancevacka bb	ZRENJANIN		
83	CONTAL	Cika Ljubina 14/5	BEOGRAD		
84	YU EXCEEL	Rastka Petrovica 45	BEOGRAD		
85	VRECO	29 Novembra 41	24430 ADA		024 852 864
86	RAJVEKS	Sime Solaje 38	11000 BEOGRAD		107579
87	FORUM	Nusiceva 16	BEOGRAD		
88	DERKIN		BEOGRAD		
89	LEDO GAS	Visoka 29 a	BEOGRAD		
90	TEHNOOPREMA	29 Novembra 1	BEOGRAD		
91	TEHNOFRIZ	Rada Koncara 97	ZEMUN		
92	ITAL FRIGO	7 JULA 341	24400 SENTA		
93	DJUKA POL	Vojvode Stepe 310	Beograd	063 200154	
94	MING	Toplicin venac 3	11000 BEOGRAD		
95	PRVA ISKRA – FIM	Baricka reka bb	11504 BARIC		
96	PRVA PETOLETKA KOCNA TEHNIKA	Cara Dusana 101	37240 TRSTENIK		03771432 9
97	ARHTIK	Veljka od Rasine 27a	BEOGRAD		
98	MINISTARSTVO ODBRANE SCG	VP 1089-20			
99	LAMINAT AD	M.Obrenovica 101	31250 BAJINA BASTA		
100	GALENKA	Batajnicky drum bb	ZEMUN		
101	ISP RADNIK	Knjaza Milosa 95	31210 POZEGA		
102	FRIGO ZIKA SOKO RUMA		22400 RUMA		
103	AS FRIGO		24410 SUBOTICA		
104	FRIGOJAGODINA	Vihorska 8	35000 JAGODINA		03524525 3

105	ELEKTROFRIGO	Steve Jovanovica 29	11272 BEOGRAD	8467657	8465345
106	NIS RAFINERIJA	Spoljnostarcevacka bb	26000 PANCEVO		
107	DELTAMATIK	Mramorno brdo bb	18251 MRAMOR		
108	EFES VAJFERT	Stevana Supljicka bb	26000 PANCEVO	01333118 6	
109	MIRKOVIC SZR	Vranjani	31210 POZEGA		
110	HEMIK	Basadinski put 25	23300KIKINDA		
111	BANAT	Vojvode Stepe Stepanovica	V RSAC	013 822241	
112	SOKO STARK	Kumodraska 249	11000 BEOGRAD	467 851	
113	JAFFA		CRVENKA	025 731144	
114	HEMOFARM	Beogradski put bb	VRSAC	01382957 9	01382136 2
115	MLEKARA	2 Otopra 103	26300VRSAC	01382175 5	013 821 788
116	VRSACKI VINOGRADI	Svetosavski trg 1	VRSAC		013 811442
117	Mesna industrija BANAT		BANATSKI KARLOVAC		
118	HOTEL INTERKONTINENTAL	Vladimira Popovica 10	BEOGRAD	3112508	
119	HOTEL HAJAT	Milentija Popovica 5	BEOGRAD	3011234	3112234
120	AERODROM		BEOGRAD		
121	ZDRAVLJE	Vlajkova 199	16000 LESKOVAC	01625024 4	
122	SOKO	14 Decembra	BEOGRAD		
123	JAT	Bulevar Umetnosti	BEOGRAD		
124	DUVANSKA INDUSTRIJA	Obilicev venac 78/31	18000 NIS		
125	DELTA	Milentija Popovica 7b	BEOGRAD		
126	FILTERFRIGO	Ustanicka 135	BEOGRAD	4894817	
127	PETROHEMIJA	Spoljnostarcevacka bb	26000 PANCEVO		
128	INSTITUT TORLAK	Vojvode Stepe 458	BEOGRAD	460637	
129	HOTEL PLAZA		HERCEG NOVI		
130	OBOD		CETINJE		
131	FRIGO		PODGORICA	081 254 263	
132	Hotel Sovenska plaza		Becici	086 451434	
133	FRESH NESS	Murska 14	11000 beograd	4441971	
134	INSTITUT TORLAK	Vojvode Stepe 458	BEOGRAD	01146063 7	
135	POLITIKA – duboka stampa	Pancevacki put bb	Beograd-Krnjaca		

136	POLITIKA – Direkcija	Makedonska	11000 Beograd		
137	VMA bolnica		BEOGRAD		
138	BORBA	Trg Nikole Pasica	11000 Beograd		
139	SIV		11000 Beograd		
140	Jugopetrol	Srpskih Vladara	11000 Beograd		
141	KLINICKI CENTAR SRBIJE		11000 Beograd		
142	SIV III		11000 Beograd		
143	JUGOBANKA	Kralja Petra	11000 BEOGRAD		
144	DUNAV OSIGURANJE				
145	PTT	Katiceva	11000 Beograd		
146	Uprava carine		11000 BEOGRAD		
147	Republicki MUP	Kneza Milosa	11000 Beograd		
148	PTT-INEX	27 MARTA	Beograd		
149	BIROGRAFIKA		SUBOTICA		
150	PALATA PRAVDE	Savska	11000 Beograd		
151	McDonalds		11000 Beograd		
152	Hotel HTP Boka		Herceg Novi		
153	Hotel- Institute SM		Igalo		
154	RVI		Igalo		
155	Vojna Bolnica		Meljine		
156	H. Vojvodina		Herceg Novi		
157	PKB Zelenika		Zelenika		
158	Mijesovito		Herceg Novi		
159	Hotel Metalurg		Igalo		
160	H. Delfin		Bijela		
161	Company Pension		Herceg Novi		
162	Termoizol	Kralja Aleksandra 40	Pozega	031 814192	
163	MIKROTRI		Beograd	011 628286	
164	MILTEX		Novi Sad	063 8624135	
165	VAPEX		Preljina – Cacak	032 381003	
166	PROTON	Vojvode Stepe 119	Kraljevo	063 644588	
167	DALAS	Revolucije bb	Tutin (Novi Pazar)	020 87 611	
168	PALMA		Sabac	015 390160	

MANUFACTURING OF REFRIGERATION & AIR CONDITIONING EQUIPMENT IN 1999 in kg/year

No.	Manufacturer	R-11 foaming	R-11 cleaning and other	R-11 Total	R-12 Initial charge	R-12 Service	R-12 Total
1.	Marting 33-Beograd	/	/	/	10		10
2.	MP 96-Beograd	/	/	/	30		30
3.	EIDA* -Nis	1.000		1.000 *	900	100	1.000*
4.	Frigotehnika Nis		50	50	120	80	200
5.	Frigo 2000 Mladenovac (uvoznik za dalju prodaju)	/	/	/	/	/	/
6.	Pingvin –Becej		5	5	8	70	78
7.	Prva Petoletka* Trstenik	/	/	/	2.658	230	2.888
8.	SENA –Kragujevac	use	R22				
9.	Frigo Jagodina* - Jagodina	1.000	/	1.000	700	1.900	2.600*
10.	BS Inzenjering*-Beograd	3.300		3.300	2.000	200	2.200
11.	Frigo Zika* -Ruma	9.000		9.000	2.250	50	2.300
12.	Solarov -Novi Sad	/	/	/	50	30	80
13.	Alfa Klima* - Knjazevac		350	350	1.100	250	1.350
14.	Duta –Svilajnac		300	300	400	600	1.000
15.	SOKO inz. –Beograd		1855	1855	2.200	600	2800
16.	TERMOPLASTIKA* -Kraljevo	/	/	/	880*	1.950	2.830
17.	ELEKTROFRIGO* - Dobanovci	258	/	258	391	360	751
18.	OBOD –Cetinje	57.000		57.000	8.512	425	8.937
19.	Frigo elektro - Podgorica Crna Gora				1.360	2.000	27.200** (importer)
20.	ARKTIK –Beograd	data not	received				
21.	AS FRIGO –Horgos		600	600		800	800
22.	Jugostroj –Beograd	400	-	400	1.100	100	1.200
23.	Termofriz –Umka	data not	received				
24.	Freshness	-	-	-		244	244
25.	Hemofrigo Leskovac	-	-	-	130	-	130
26.	Frigomeks Borca - Bgd	-	200	200	1.200	-	6.000* *
27.	Jugoklima - Krusevac	60		60	54	384 -	438
28.	Filter Frigo Beograd	-	1110	1110	600	690	1290
& OTHERS (not confirmed yet)							
1.	EI katodne cevi						
2.	EI stampana kola						
3.	EI tranzistori						

* - from 2003 they don't use refrigerant R-11 and R-12

** - combined servicing and selling

Annex III

MANUFACTURERS OF AEROSOLS 1999 in kg/yaer				
No.	Manufacturer	R-11	R-114/R-12	R-11/R-12/R-114
1.	Galenika – Beograd*	9.625		
2.	Zdravlje –Leskovac	102 (for Berodual) !0 (fot Berotec)		4.960 473
3.	Jugoremedija – Zrenjanin	Do not import CFC import “HALOTAN”		
4.	Hemofram –Vrsac	not responded		
5.	Hemik -Kikinda	use iso butane 1994		

MANUFACTURING OF SOFT AND RIGID FOAMS IN 1999 in kg/year

No.	Manufacturer	R-11 foaming	R-11	R-11 Total	R-12	Blends R-22/R- 142 b	Total
1.	Laminat – Bajina Basta	35.000		35.000	/	/	/
2.	*Prva Iskra – Baric Polion.	21.000		21.000	*		
3.	Deltamatik – Mramorsko brdo				blend	300.000	
4.	Prva Iskra – Baric FIM	40.000		40.000			
5.	Djuka pol* -						
6.	Mirkovic – Pozega	4.000		4.000			
7.	Radnik -Pozega						
8	Termoizol Pozega	2.000		2.000			

* - use metilen hlorid from 2003

MANUFACTURING OF REFRIGERATION & AIR CONDITIONING EQUIPMENT IN 2000 in
kg/year

No.	Manufacturer	R-11 foaming	R-11 cleaning and other	R-11 Total	R-12 Initial charge	R-12 Service	R-12 Total
1.	Marting 33-Beograd	/	/	/	25		25
2.	MP 96-Beograd	/	/	/	15		15
3.	EIDA* -Nis	3.700		3.700 *	3.240	360	3.600*
4.	Frigotehnika -Nis		50	50	120	30	150
5.	Frigo 2000 Mladenovac (uvoznik za dalju prodaju)	/	/	/	1.700	200	28.039**
6.	Pingvin -Becej		5		4	75	79
7.	Prva Petoletka* Trstenik	/	/	/	4.340	350	4.690
8.	SENA -Kragujevac	use	R22				
9.	Frigo Jagodina* - Jagodina	2.500	/	2.500	850	1.950	2.800*
10.	BS Inzenjering* - Beograd	6.300		6.300	2.250	250	2.500
11.	Frigo Zika* -Ruma	12.000		12.000	2.460	270	2.730
12.	Solarov -Novi Sad	/	/	/	70	80	150
13.	Alfa Klima* - Knjazevac		300		640	300	940
14.	Duta -Svilajnac		300	300	400	600	1.000
15.	SOKO inz. -Beograd		970	970	1.200	480	1.680
16.	TERMOPLASTIKA* -Kraljevo	/	/	/	1380*	2.850	4230
17.	ELEKTROFRIGO* - Dobanovci	980	/	980	1552	210	1.762
18.	OBOD -Cetinje	57.000		57.000	8.512	425	8.937
19.	Frigo elektro - Podgorica Crna Gora				1.360	2.000	27.200** (importer)
20.	ARKTIK -Beograd	data not	received				
21.	AS FRIGO -Horgos		600	600		1.000	1.000
22.	Jugostroj -Beograd	3.500	-	3.500	7.500	3.000	10.500
23.	Termofriz -Umka	data not	received				
24.	Freshness	-	130-	130		235	235
25.	Hemofrigo Leskovac	-	-	-	60	-	60
26.	Frigomeks Borca - Bgd	-	240	240	1.500	-	8.000* *
27.	Jugoklima - Krusevac	180		180	154	320 -	474
28.	Filter Frigo Beograd	-	1440	1440	1260	720	1980
		& OTHERS (not confirmed yet)					
1.	El katodne cevi						
2.	El stampana kola						
3.	El tranzistori						

* - from 2003 they don't use refrigerant R-11 and R-12

** - combined servicing and selling

Annex III

MANUFACTURERS OF AEROSOLS 2000 in kg/yaer				
No.	Manufacturer	R-11	R-114/R-12	R-11/R-12/R-114
1.	Galenika – Beograd*	10.000	-	
2.	Zdravlje –Leskovac	58 (for Berodual)		2.834
3.	Jugoremedija – Zrenjanin	Do not import CFC import "HALOTAN"		
4.	Hemofram –Vrsac	not responded		
5.	Hemik -Kikinda	use iso butane 1994		

MANUFACTURING OF SOFT AND RIGID FOAMS IN 2000 in kg/year

No.	Manufacturer	R-11 foaming	R-11	R-11 Total	R-12	Blends R-22/R- 142 b	Total
1.	Laminat – Bajina Basta	68.000		68.000	/	/	/
2.	*Prva Iskra – Baric Polion.	28.000		28.000	*		
3.	Deltamatik – Mramorsko brdo						
4.	Prva Iskra – Baric FIM	40.000		40.000			
5.	Djuka pol* -						
6.	Mirkovic – Pozega	3.800		3.800			
7.	Radnik -Pozega						
8.	Termoizol Pozega	1.700		1.700			

* - use metilen hlorid from 2003

MANUFACTURING OF REFRIGERATION & AIR CONDITIONING EQUIPMENT IN 2001 in
kg/year

No.	Manufacturer	R-11 foaming	R-11 cleaning and other	R-11 Total	R-12 Initial charge	R-12 Service	R-12 Total
1.	Marting 33-Beograd	/	/	/	40		40
2.	MP 96-Beograd	/	/	/	40		40
3.	EIDA* -Nis	2.590		2.590 *	2.268	252	2.520*
4.	Frigotehnika –Nis		50	50	100	30	130
5.	Frijo 2000 Mladenovac (uvoznik za dalju prodaju)	/	/	/	2.560	262	31.560**
6.	Pingvin –Becej		3		7	60	67
7.	Prva Petoletka* Trstenik	/	/	/	3.835	390	4.295
8.	SENA –Kragujevac	use	R22				
9.	Frijo Jagodina* - Jagodina	2.900	/	2.900	1.100	2.800	3.900*
10.	BS Inzenjering* - Beograd	4.270		4.270	1.500	200	1.700
11.	Frijo Zika* -Ruma	7.200		7.200	1.530	100	1.630
12.	Solarov -Novi Sad	/	/	/	80	50	130
13.	Alfa Klima* - Knjazevac		410		660	380	1.040
14.	Duta –Svilajnac		300	300	400	600	1.000
15.	SOKO inz. –Beograd		1950	1950	1700	400	2100
16.	TERMOPLASTIKA* -Kraljevo	/	/	/	1.405*	2.450	3.855
17.	ELEKTROFRIGO* - Dobanovci	1.371	/	1.371	2.059	190	2.249
18.	OBOD –Cetinje	57.000		57.000	8.512	425	8.937
19.	Frijo elektro - Podgorica Crna Gora				1.360	2.000	27.200** (importer)
20.	ARKTIK –Beograd	data not	received				
21.	AS FRIGO –Horgos		1000	1000		1.200	1.200
22.	Jugostroj –Beograd	2.000	-	2.000	5.700	1.500	7.200
23.	Termofriz –Umka	data not	received				
24.	Freshness	-	195	195		202	202
25.	Hemofrijo Leskovac	-	-	-	40	-	40
26.	Frigomeks Borca - Bgd	-	480	480	2.000	-	11.000* *
27.	Jugoklima - Krusevac	160		160	120	250 -	370
28.	Filter Frijo Beograd	-	655	655	1680	885	2565
& OTHERS (not confirmed yet)							
1.	EI katodne cevi						
2.	EI stampana kola						
3.	EI tranzistori						

* - from 2003 they don't use refrigerant R-11 and R-12

** - combined servicing and selling

Annex III

MANUFACTURERS OF AEROSOLS 2001 in kg/yaer				
No.	Manufacturer	R-11	R-114/R-12	R-11/R-12/R-114
1.	Galenika – Beograd*	6.800	127	
2.	Zdravlje –Leskovac	131 (for Berodual)		6.377
3.	Jugoremedija – Zrenjanin	Do not import CFC import "HALOTAN"		
4.	Hemofram –Vrsac	not responded		
5.	Hemik -Kikinda	use iso butane 1994		

MANUFACTURING OF SOFT AND RIGID FOAMS IN 2001 in kg/year

No.	Manufacturer	R-11 foaming	R-11	R-11 Total	R-12	Blends R-22/R- 142 b	Total
1.	Laminat – Bajina Basta	70.000		70.000	/	/	/
2.	*Prva Iskra – Baric Polion.	35.000		35.000	*		
3.	Deltamatik – Mramorsko brdo				blend	300.000	
4.	Prva Iskra – Baric FIM	40.000		40.000			
5.	Djuka pol* -						
6.	Mirkovic – Pozega	2.000		2.000			
7.	Radnik -Pozega						
8	Termoizol- Pozega	1.900		1900			

* - use metilen hlorid from 2003

MANUFACTURING OF REFRIGERATION & AIR CONDITIONING EQUIPMENT IN 2002 in
 kg/year

No.	Manufacturer	R-11 foaming	R-11 cleaning and other	R-11 Total	R-12 Initial charge	R-12 Service	R-12 Total
1.	Marting 33-Beograd	/	/	/	50		50
2.	MP 96-Beograd	/	/	/	40		40
3.	EIDA* -Nis	2.590		2.590 *	2.268	250	2.520*
4.	Frigotehnika –Nis		50	50	120	30	150
5.	Frijo 2000 Mladenovac (uvoznik za dalju prodaju)	/	/	/	1.658	170	21.550**
6.	Pingvin –Becej		3		4	50	54
7.	Prva Petoletka* Trstenik	/	/	/	3.424	370	3.794
8.	SENA –Kragujevac	use	R22				
9.	Frijo Jagodina* - Jagodina	3.300	/	3.300	1.200	3.000	4.200*
10.	BS Inzenjering* - Beograd	4.100		4.100	1.480	150	1.630
11.	Frijo Zika* -Ruma	6.800		6.800	1.470	80	1.550
12.	Solarov -Novi Sad	/	/	/	100	80	180
13.	Alfa Klima* - Knjazevac		260		270	350	620
14.	Duta –Svilajnac		300	300	400	600	1.000
15.	SOKO inz. –Beograd		1950	1950	1700	400	2100
16.	TERMOPLASTIKA* -Kraljevo	/	/	/	424*	1.350	1.774
17.	ELEKTROFRIGO* - Dobanovci	1.190	/	1.190	1980	170	2.150
18.	OBOD –Cetinje	57.000		57.000	8.512	425	8.937
19.	Frijo elektro - Podgorica Crna Gora				1.360	2.000	27.200** (importer)
20.	ARKTIK –Beograd	data not	received				
21.	AS FRIGO –Horgos		1500	1500		1.600	1.600
22.	Jugostroj –Beograd	1.130	-	1.130	3.000	1.050	4.050
23.	Termofriz –Umka	data not	received				
24.	Freshness	-	162	162		295	295
25.	Hemofrijo Leskovac	-	-	-	40	-	40
26.	Frigomeks Borca - Bgd	-	600	600	3.000	-	18.000* *
27.	Jugoklima - Krusevac	160		160	154	250 -	404
28.	Filter Frijo Beograd	-	685	685	1400	810	2210

& OTHERS (not confirmed yet)

1. EI katodne cevi
2. EI stampana kola
3. EI tranzistori

* - from 2003 they don't use refrigerant R-11 and R-12

** - combined servicing and selling

Annex III

MANUFACTURERS OF AEROSOLS 2002 in kg/yaer				
No.	Manufacturer	R-11	R-114/R-12	R-11/R-12/R-114
1.	Galenika – Beograd*	20.660	140	
2.	Zdravlje –Leskovac	116 (for Berodual)		5.669
3.	Jugoremedija – Zrenjanin	Do not import CFC import "HALOTAN"		
4.	Hemofram –Vrsac	not responded		
5.	Hemik -Kikinda	use iso butane 1994		

MANUFACTURING OF SOFT AND RIGID FOAMS IN 2002 in kg/year

No.	Manufacturer	R-11 foaming	R-11	R-11 Total	R-12	Blends R-22/R- 142 b	Total
1.	Laminat – Bajina Basta	72.000		72.000	/	/	/
2.	*Prva Iskra – Baric Polion.	35.000		35.000	*		
3.	Deltamatik – Mramorsko brdo				blend	300.000	
4.	Prva Iskra – Baric FIM	40.000		40.000			
5.	Djuka pol* -						
6.	Mirkovic – Pozega	2.000		2.000			
7.	Radnik -Pozega						
8	Termoizol Pozega	2.100		2.100			

* - use metilen hlorid from 2003

IMPORT of components and final products in 1999. Annex V/1

NAME	quantity in Kg	quantity in unit of measurement	value in US \$
841430002100- Hermetic Compressors	753426	1053885	2572734
841430002900-Others refrigerating compressors	2290	197	22094
841430009100- Refrigerating compressors , reciprocating,	7264	1084	78039
841430009200-Refrigerating compressors , screw,	18636	322	345150
841430009900-Refrigerating compressors , others	8072	367	65517
841581900000-Air conditioning unit, with valve and compressors , others	321292	7470	2636041
841582900000-Air conditioning unit, others	8457	231	306981
841810900000-Combined refrigerating and freezing cabinet, others	221982	3887	695562
841821001000-Domestic refrigerating cabinet, table type, compression	22212	596	50946
841821002000-Domestic refrigerating cabinet, compression	20239	478	62963
841821009000-Domestic refrigerating cabinet, compression,others	116160	2807	381835
841830009000-Freezing cabinet, horizontal max 800l, others	61547	1022	178375
841840009000-Freezing cabinet, vertical max 900l, others	55166	1132	191151
841850001000-Refrigerated counter,cold box	41130	187	139023
841850009000-Refrigerated show case and similar refrigerating units,others	5290	46	25171
841861900000-Heat pumps,compression, others	46825	3005	433110
TOTAL IMPORT	1709988	1076716	8184692

IMPORT of components and final products in 2000. Annex V/2

NAME	quantity in Kg	quantity in unit of measurement	quantity in unit of measurement
841430002100-Hermetic Compressors	1103287	103749	2439214
841430002900-Others refrigerating compressors	21496	186	282411
841430009100-Refrigerating compressors , reciprocating,	20381	4907	278566
841430009200-Refrigerating compressors , screw,	73129	1755	989988
841430009900-Refrigerating compressors , others	10882	262	79037
841581900000-Air conditioning unit, with valve and compressors , others	712335	15219	5050793
841582900000-Air conditioning unit, others	101938	3042	757484
841810900000-Combined refrigerating and freezing cabinet, others	801965	13708	1839696
841821001000-Domestic refrigerating cabinet, table type, compression	201397	4928	386818
841821002000-Domestic refrigerating cabinet, compression	233463	5414	474606
841821009000-Domestic refrigerating cabinet, compression,others	749364	17292	1555026
841830009000-Freezing cabinet, horizontal max 800l, others	816568	14702	1405266
841840009000-Freezing cabinet, vertical max 900l, others	428635	7672	700033
841850001000-Refrigerated counter,cold box	123566	871	505716
841850009000-Refrigerated show case and similar refrigerating units,others	33164	196	77026
841861900000-Heat pumps,compression, others	98775	659	1283664
TOTAL IMPORT	5530345	194562	18105344

IMPORT of components and final products in 2001. Annex V/3

NAME	quantity in Kg	quantity in unit of measurement	quantity in unit of measurement
841430002100-Hermetic Compressors	1217291	108402	3748135
841430002900-Others refrigerating compressors	51055	321	110094
841430009100-Refrigerating compressors , reciprocating,	34529	906	137996
841430009200-Refrigerating compressors , screw,	29942	748	305538
841430009900-Refrigerating compressors , others	72977	2705	317270
841581900000-Air conditioning unit, with valve and compressors , others	1363544	26899	8081975
841582900000-Air conditioning unit, others	238386	4699	1466200
841810900000-Combined refrigerating and freezing cabinet, others	1627962	26204	3626214
841821001000-Domestic refrigerating cabinet, table type, compression	513005	10811	891882
841821002000-Domestic refrigerating cabinet, compression	107027	2457	261604
841821009000-Domestic refrigerating cabinet, compression,others	1076139	26404	2301013
841830009000-Freezing cabinet, horizontal max 800l, others	1648675	27907	3381810
841840009000-Freezing cabinet, vertical max 900l, others	380397	6719	1055031
841850001000-Refrigerated counter,cold box	638922	4982	2294220
841850009000-Refrigerated show case and similar refrigerating units,others	473131	6248	1964111
841861900000-Heat pumps,compression, others	143810	5346	1310140
TOTAL IMPORT	9616792	261758	31253233

IMPORT of components and final products in 2002. Annex V/4

NAME	quantity in Kg	quantity in unit of measurement	quantity in unit of measurement
841430002100-Hermetic Compressors	1015256	7439988	4313693
841430002900-Others refrigerating compressors	25965	1266	110634
841430009100-Refrigerating compressors , reciprocating,	71861	2639	687569
841430009200-Refrigerating compressors , screw,	117054	553	1467999
841430009900-Refrigerating compressors , others	42110	2287	366192
841581900000-Air conditioning unit, with valve and compressors , others	2831654	70823	18145025
841582900000-Air conditioning unit, others	158606	1351	1053123
841810900000-Combined refrigerating and freezing cabinet, others	2868038	50761	8016856
841821001000-Domestic refrigerating cabinet, table type, compression	412032	9225	502268
841821002000-Domestic refrigerating cabinet, compression	71352	1550	225299
841821009000-Domestic refrigerating cabinet, compression,others	2524298	56825	6106600
841830009000-Freezing cabinet, horizontal max 800l, others	3088269	53576	7800647
841840009000-Freezing cabinet, vertical max 900l, others	617943	12862	1740042
841850001000-Refrigerated counter,cold box	1360121	10931	5409062
841850009000-Refrigerated show case and similar refrigerating units,others	404298	4630	1510297
841861900000-Heat pumps,compression, others	275038	1002	3694140
TOTAL IMPORT	15883895	7720269	61149446

Enterprises	Production number cold storage unit and RF unit			Foaming machine		Charging unit		Vacuum pump	
	2000	2001	2002	No.	Model/Year	No.	Type/Year	No.	Type/Year
AS FRIGO	10	13	15			1	Refko RMV 2 1988	2	Refco RD4 1990, RefcoRD6 1995
DUTA	3437	3159	1795	1		5	Fisher, Refko Vigam, 1984-2000	5	Fisher, Vigam, Refco1984
FRIGOTECHNIKA	120	100	100		without data				
FRESHNESS	12	12	16					2	Refco, Rakijas
FRIGO 2000	103	105	68	1	?-2000	5	Robiner	6	Robiner
JUGOKLIMA	126	155	197	2		2	Frigovak 1987	2	Refco1996
FRIGOMEX	294	334	454	0		2	Refco 12505, Refco 10.705 1994	4	Refco RD8 I RL4 1996
FRIGOELEKTRO						7	VIGAM, REFCO	5	Refco
FILTER FRIGO	75	86	88			4	Robinair 95702 1992	3	Refco RD5N 1998
								4	Robinair 15107-8 1992

MIRKOVIC				1	CANON C100	1985			
				1	CANON C3	1983			
				1	CANON C3	1985			

TERMOIZOL Pozega				1	CANON C60	1990			
				1	CANON C3	1990			
							Low pressure		
							Low pressure		