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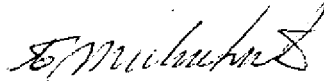
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**UNIDO Project: MP/YUG/04/-074**

**VERIFICATION OF NATIONAL CONSUMPTION TARGETS OF  
MULTI-YEAR AGREEMENTS (MYAS) for CFCs  
IN SERBIA AND MONTENEGRO**

**Report**  
(Final – 24.8.2006)

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**Abstract:**

Having ratified the Montreal Protocol and its Amendments, Serbia and Montenegro agreed on and undertook obligation to control ozone-depleting substances (ODS).

Given is a survey of national legislation, policies and procedures on ODS imports/exports. Main laws concerning the subject are mentioned. The ODS, particularly CFCs trade in Serbia and Montenegro is under the Government control. Administrative procedures and necessary documentation for issuing licenses for CFCs imports/exports are given in details. Although these procedures are similar in Serbia and Montenegro, there are some differences in system of monitoring and reporting on import/export of CFCs in the two countries. But, generally, coordination between Directorate for the Environmental Protection, which is a constituent part of the Serbian Ministry of Science and Environmental Protection and The Republic Ministry of Environmental Protection and Urban Planning of Montenegro, is quite good.

Verification of the data on the national consumption in 2005 is done for the ODS belonging to Annex A, Group I (CFCs) of the Montreal Protocol. Data on import and export of CFCs assumed from the Directorate for Environmental Protection were crosschecked with the data officially obtained from the Statistical bureau of the Republic of Serbia and review of total exports and imports registered by Customs Administration (General customs document - JCI). Verification was based on the internal data obtained from some importers, too.

Total consumption in Serbia and Montenegro in 2005 amounts to 52,6 ODP tons, and is much lower than the value allowed by the Montreal Protocol. In the period 1995 – 1997, the average CFCs consumption in Serbia and Montenegro in ODP tons was 849,2. In 2005 the reduction in consumption has to be 50% of the referent value, i.e. 424,6 ODP t. Maximum allowable total consumption as per Agreement in 2005 is 392 ODP t. CFCs trade in the Republic of Montenegro is much smaller than in Serbia (app. 1% of the total CFCs turnover).

The rapid CFCs consumption cut in Serbia and Montenegro in 2005 (52.6 ODP t) comparing to the one in 2004 (288.2 ODP t) could be explained by two reasons: certain measures for the CFCs substitution for environmentally more friendly substances have already been taken, and the other one – the used methodology of calculation of CFCs consumption. Our impression is that the real CFCs consumption in Serbia in 2005 was higher than the one calculated by applying the proposed simple method for consumption calculation (import minus export) due to the internal CFCs stock changes, both by importers and end users. It is estimated that the "real" consumption in 2005 was approximately 98 ODP t.

Most of the recommendations for diminishing CFCs consumption mentioned in the last year's verification have been applied completely or partially. Some new recommendations for diminishing CFCs consumption and better control of ODS trade (import, export and transit in Serbia and Montenegro) are also given.

## Table of contents

1. Introduction
  2. National legislation, policies and procedures on ODS imports/exports
    - 2.1. Channel of communication between Government (the licensing authority) and Customs
    - 2.2. Authorized list of importers/exporters
    - 2.3. Conditions for issuing licences
    - 2.4. Administrative procedures and documentation
    - 2.5. System of monitoring and reporting on import/export of ODS
    - 2.6. Sanctions or penalties to be imposed on violation of legal regulation
    - 2.7. Mechanisms and capacity for prosecution and enforcement
    - 2.8. National system of harmonized custom codes in order to identify ODSs and ODS mixtures
    - 2.9. Procedures to be applied in case of suspicious shipments
    - 2.10. Sampling or other identification methods used
    - 2.11. Serbian Law on Environmental Protection
    - 2.12. Serbian Law on Air pollution prevention
    - 2.13. Environment Law in The Republic of Montenegro.
  3. Verification of official statistics on imports/exports: compare quotas issued versus actual quotas used
  4. Verification of a representative sample of reports from importers/exporters
  5. Review the follow up on the recommendations from previous verifications
  6. Conclusions and recommendations
- 
- Appendix 1 – Companies which in 2005 imported/exported or transited ODS with the licence of The Ministry for Environmental protection
- Appendix 2 – Companies which in 2005 imported/exported CFCs with the licence of The Ministry for Environmental protection
- Appendix 3 – Import of CFCs in Serbia in 2005 with the licence of The Ministry for Environmental protection
- Appendix 4 – Foreign exporters of CFCs to Serbian importers in 2005 with the licence of The Ministry for Environmental protection
- Appendix 5 – Export of CFCs from Serbia in 2005 with the licence of The Ministry for Environmental protection
- Appendix 6 – Transit of CFCs through Serbia in 2005 with the licence of Ministry for Environmental protection
- Appendix 7 – Foreign Trade Statistics in Serbia in 2005
- Appendix 8 – Customs review of CFCs import in Serbia in 2005
- Appendix 9 – Customs review of CFCs export from Serbia in 2005
- Appendix 10 – Import of CFCs in Montenegro in 2005 with the licence of the Ministry for Environmental protection and urban planning
- Appendix 11 – Correction factors for recalculation CFCs consumption from tons to ODP tons
- Appendix 12 – Sources of information used for the purpose of elaborating the project
- Appendix 13 – List of visits relating CFCs data collection
- Appendix 14 – List of Team members involved in Project MP/YUG/04-074

## **1. Introduction**

Having ratified the Montreal Protocol and its Amendments, Serbia and Montenegro agreed on and undertook obligation to control ozone-depleting substances (ODS). The ODS, particularly CFCs trade in Serbia and Montenegro is under the Government control. There is a precise administrative procedure for issuing licences for CFCs imports/exports. Although these procedures are similar in Serbia and Montenegro, there are some differences in system of monitoring and reporting on import/export of CFCs in these two countries.

For the purpose of elaborating this project many different sources of information were used. Whenever possible, we crosschecked the data obtained from various sources. The survey of the sources used is given in Appendix 12.

The schedule and the main purpose of visiting the institutions and companies mentioned in Appendix 12 are given in Appendix 13.

List of persons involved in the verification process, which this report is based on, given is in Appendix 14.

## **2. National legislation, policies and procedures on ODS imports/exports**

### **2.1. Channel of communication between Government (the licensing authority) and customs**

The procedure of ODS controlling is a little bit different in Serbia from the one in Montenegro.

From the beginning of February 2004 the ODS trade control in Serbia comes within the competence of the Directorate for the Environmental Protection, which is a constituent part of the Ministry of Science and Environmental Protection.

Directorate for the Environmental Protection issues licences for import, export and transit of ODS to importers/exporters. With the original of import licence, an importer, i.e. freight forwarder, arrives at the border crossing, determined in advance, where prior to customs clearance procedure, presents all the required documentation to the Republic inspector for border ecological control. If the presented documentation is regular, the inspector fills the quantity of imported ODS in the original of the import licence, signs it and takes a copy of the licence. Afterwards, importer/freight forwarder brings goods to customs office.

The similar procedure is applied in case of ODS export. Exporters should have the ODS export licence issued by Directorate for the Environmental Protection. The ODS export is controlled both by Customs Administration and inspectors for border ecological control.

For ODS transit through Serbia it is still applied the very same procedure as for ODS import/export. A freight forwarder must have a licence issued by Directorate for the Environmental Protection. The check-up is effected at customs offices both when entering and leaving the country. But there is a reading that Directorate for the Environmental Protection should not control and issue licences for transit of ODS through Serbia any longer, as it is explicitly written in the Serbian Law on Environmental Protection that export and import of ODS are objects of control, while transit of these products is not mentioned. The Customs Administration should establish a system of methods for transit control in a way that the entry of goods would be permitted based on an importing country licence, while the exit of goods would be controlled based on comparison between the border crossings data on goods entries and exits. However, it is still in effect the procedure according to which it is Directorate for the Environmental Protection that issues licences for ODS transit through Serbia. We are of the opinion that this procedure should be retained.

There is a good cooperation between Serbian Directorate for the Environmental Protection and the equivalent authorities in some of surrounding countries. The Directorate informs them when a transit of ODS through Serbia is towards their countries.

The Customs Administration submits a report on the ODS import/export to competent Ministries and to Directorate for the Environmental Protection.

Licences for import, export and transit of ODS in Montenegro are issued by The Republic Ministry of Environmental Protection and Urban Planning. Besides the customs officers, import/export of ODS is controlled also by Republic ecological inspectors with the main office in Podgorica, the capital of the Republic of Montenegro.

With the original of import licence, an importer, i.e. freight forwarder, arrives at the border crossing, where prior to customs clearance procedure, presents all the required documentation to the Republic ecological inspector who is not permanently present at a border crossing, but comes on call. If the presented documentation is regular, the inspector signs it, but does not fill the quantity of imported ODS in the original of the import licence. Afterwards, importer/freight forwarder brings goods to customs office.

Neither the Republic ecological inspector nor the Customs Administration submit a report on the ODS import/export to The Republic Ministry of Environmental Protection and Urban Planning, which issues licences. It is only from an importer/exporter that The Republic Ministry of Environmental Protection and Urban Planning receives return information about actually realized import/export according to the issued licence.

The ODS trade between Serbia and Montenegro is treated theoretically as domestic trade, but practically the procedure is more or less the same as for import/export from/to the surrounding countries.

## 2.2. Authorized list of importers/exporters

There exists no special list of the authorized import/export companies for the ODS trade. It means that any company registered for import/export in Register of Business Entities with Serbian Business Registers Agency is allowed to import/export ODS.

But reviewing the list of importers/exporters in 2005 it can be noticed that there were only 18 companies in Serbia and 6 in Montenegro dealing with ODS, mostly refrigerants. List of these companies is given in Appendix 1.

Focusing on CFCs only, it can be seen that only 10 companies in Serbia and 5 in Montenegro imported/exported CFCs mentioned in Annex A, Group I of the Montreal Protocol. The list of the companies dealing with these CFCs is given in Appendix 2.

The Ministry authorized to issue licences for ODS import requires that the importers submit General customs document (JCI) referring to the previous purchase of ODS; consequently, few new importers/exporters appear.

Some of the importers also act as ODS distributors, thus there practically are no distributors for ODS exclusively.

## 2.3. Conditions for issuing licences

When submitting an application for the ODS import licence to the Directorate for the Environmental Protection an importer is required to enclose the following documents:

- Import application comprising the type of refrigerant, quantity to be imported, name of the country the ODS is produced in, name of the country the import will be effected from and the border crossing at which the goods enter the country,
- Pro forma invoice, specifying the ODS quantity and price,
- Document evidencing that the importer is registered for such transactions,
- Report on previous import of ODS,
- The administrative tax receipt (app 40 EUROS per licence).

Similar documentation is required when applying for the ODS export licence or ODS transit through Serbia.

In Montenegro the procedure for issuing the CFC import licence is almost the same. When submitting an application an importer must enclose the same type of documents as in Serbia. The only difference is that the administrative tax receipt amounts to 150 EUROS per licence.

Licences for ODS transit through Montenegro are not issued. At an entry customs office the Republic ecological inspector only verifies import documents, while it is up to Customs Administration to take care that the same goods leave Montenegro.

On the other hand, The Republic Ministry of Environmental Protection and Urban Planning in Montenegro issues licences for import of refrigeration equipment and any other equipment containing CFC. Without such a licence cooling and air-conditioning units may not be imported. Import of used refrigeration equipment in Montenegro is banned.

#### 2.4. Administrative procedures and documentation

In Serbia, the licence for ODS import, export or transit is issued by the Directorate for the Environmental Protection. The licence is valid for the specified refrigerant, specified quantity and named border crossing where the goods will enter the country.

The ODS import licence is valid quarterly (at 3-month intervals, and not three months counting from the date of the licence granting).

The granted licence can be utilized completely or partially. In the course of the quarter the licence refers to, the ODS import can be effected several times, providing the total imported quantity does not exceed the one allotted by the licence.

In case an importer does not make use of the import licence, i.e. does not perform import within the set time-limit, he is obliged to give the original of import licence back to the Ministry the same was issued by.

Within 5 days beginning with the day of import performance, the importer is obliged to submit to the Directorate for the Environmental Protection the General customs document (JCI), being the evidence of the imported ODS quantity (that is often less than the one the import licence is issued for).

In Montenegro, licences for ODS import, export and transit are issued for the specified ODS and specified quantity; period of the licence validity ranges from 1 to 6 months, but cannot go beyond the end of the calendar year.

#### 2.5. System of monitoring and reporting on import/export of ODS

Systems of monitoring of ODS import, export and transit are very similar, although it should be mentioned that a somewhat greater attention is paid to import of ODS.

On arrival to the border, freight forwarder engaged by importer/exporter has to show to the authorized officer:

- the original of the import/export licence issued by the competent authority (by Directorate for the Environmental Protection in Serbia)
- The original of receipt (invoice) for the ODS purchased
- Certificate of conformity for each of ODS being imported.

Control of import/export (and transit) is carried out by customs officers and inspectors for border ecological control. According to the usual procedure, the inspector



checks the freight forwarder's documentation and ODS (goods) first; if everything is in order, the inspector signs the licence. After that, goods are submitted to the customs clearance.

In case of ODS import, inspector's checking is always carried out at a border crossing, while customs inspection may be effected either at the border crossing or in the place of delivery, if there is a customs branch office; if not, in the nearest customs outpost.

In case of ODS export, the customs inspection may be effected either at the border crossing or in the town (place) of freight loading, if there is a customs branch office. Prior to customs clearance the export licence should be signed by an inspector, confirming the export being legal (in accordance with regulations) i.e. that provided are all the required documents.

Inspectors carrying out the border ecological control possess special skills, received through advanced training.

Inspector's duties are defined by the Law on Environmental Protection (Official Gazette of the Republic of Serbia No. 135/2004), articles No. 110 and 111. The inspector is authorized to:

- ban import/export of ODS, the trade of which is prohibited by ratified international conventions, and order the goods be send back to the consignor
- ban import/export of ODS the trade of which is allowed, in case it is being effected without the proper licence or contrary to the set conditions
- order records are kept according to regulations.

Customs Administration submits the ODS trade report to competent Ministries and to the Republic Statistical bureau.

System of ODS customs and inspection controls are permanently innovated and adjusted to new requirements and experience.

In Montenegro, the Republic ecological inspector controls the required documentation at a border crossing, signs it, but does not fill the quantity of imported ODS in the original of the import licence. Afterwards, importer/freight forwarder brings goods to customs office.

The Republic Ministry of Environmental Protection and Urban Planning does not receive any information about actually realized import/export according to issued licences either from the Republic ecological inspector or from the Customs Administration. It is only from an importer/exporter that The Ministry receives information about the imported CFCs quantity, being obliged to submit a statement on the imported ODSs along with invoice.

## 2.6. Sanctions or penalties to be imposed on violation of legal regulation

As the ODS trade (import, export and transit) is under strict supervision, besides customs and inspection control described in previous chapter, for those who are trying to violate legal procedure, sanctions and penalties are predicted.

According to Article No. 116 of the Law on Environmental Protection (Official Gazette of the Republic of Serbia No. 135/2004), any legal entity is to pay a fine for economic violations if:

- produces ODS,
- exports/imports ODS or goods which contain such substances, as defined by the ratified international convention, from countries not signatory to that agreement,
- imports, produces and puts on sale a new or the used product which depletes ozone layer (contrary to the Article 56, Paragraph 3 of the same Law),
- imports or exports ODS without the appropriate licence issued by the competent Ministry.

According to Article 117 of the same Law, any legal entity is to pay a fine for economic violations if it does not give information on ODS (according to Article 56).

According to Article 120, person in charge of keeping a record on ODS import / export and consumption (according to Article 56) is to pay a fine if fails to do so.

## 2.7. Mechanisms and capacity for prosecution and enforcement

Based on information against physical/legal person given by Customs Administration or inspectors, investigation and judicial proceedings are taken.

Although courts have enough capacity for prosecution and enforcement, it should be pointed out that the number of the registered ODS trade violation is very small. This can be explained by the fact that, last year, ODS import volume (more precisely, CFCs import) was much below the allowed quantity according to Montreal Protocol and its Amendments; consequently, the ODS import licence can relatively easy be obtained.

## 2.8. National system of harmonized custom codes as a means to identify ODSs and ODS mixtures

ODS are subject to special customs tariff codes. As this project refers to CFCs trade in 2005, in table 1 given are their tariff codes according to the nomenclature being valid last year.

Around the middle of the year 2005, Directorate for the Environmental Protection and Customs Administration coordinated their views of tariff codes, aiming at more efficient monitoring the ODS import/export.

Table 1 Customs tariff codes

Code	Name	Customs tariff codes
CFC 11	trichlorofluoromethane	2903 41 00 00 00
CFC 12	dichlorodifluoromethane	2903 42 00 00 00
CFC 113	trichlorotrifluoroethane	2903 43 00 00 00
CFC 114	dichlorotetrafluoroethane	2903 44 10 00 00
CFC 115	chloropentafluoroethane	2903 44 90 00 00
	mixture contains acyclic hydrocarbons perhalogenized only with fluor and chlorine	3824 71 00 00 00
	products belong to tar. No. 3824, other	3824 90 99 00 00

Customs tariff codes for CFCs used in Montenegro in 2005 were published in Official Gazette of the Republic of Montenegro, No. 44, dated July 1, 2004. These codes have been changed (Official Gazette of the Republic of Montenegro, No. 19, dated March 28, 2006) and are the same as in Serbia.

#### 2.9. Procedures to be applied in case of suspicious shipments

Should a customs officer or an inspector find something in transport giving rise to doubt, the inspector for border ecological control takes up checking importer's (freight forwarder's) documentation in detail. The inspector can ask any other inspector or customs officer for assistance. The questionable data may be checked by phone, fax or Internet.

The inspector is authorized to put a temporary stop to the transport of ODS and issue an order to an authorized laboratory to check the content of suspicions transport by sample testing. At the worst, as an extreme measure, inspector is authorized to make a decision imposing a ban on import. Such a decision is final, i.e. freight forwarder has no right of appeal against it.

#### 2.10. Sampling or other identification methods used

Ecological inspectors are not yet equipped with devices for ODS tests sample analyzing. But very soon they will get proper equipment for sampling and quick analyzing of ODS at the very border. According to the plan, each border crossing at which the ODS export/import is allowed to be realized, will be supplied with two such instruments.

According to the experience so far, an inspector having any doubt about the content of vessels, barrels or containers having ODS declaration, puts a temporary stop to the transport of ODS, and issues an order to the nearest authorized laboratory to analyze the product being imported.

## 2.11. Serbian Law on Environmental Protection

The Law was promulgated in December 2004 (Official Gazette of the Republic of Serbia No. 135/2004). Hereinafter given is the survey of regulations which refer to ODS. One chapter of the Law (chapter 3.1) applies to production and trade of ozone depleting substances. On the territory of the Republic of Serbia strictly forbidden is to produce ODS.

Described in Article No. 56 are the procedures to be followed while realizing import, export and use of ODS or products containing ODS. Import/export of ODS is under control of the Ministry of Science and Environmental Protection.

The Parliament enacts National program on environment protection, intended for the forthcoming period of ten years, at least. An Environmental Protection Agency was established according to new Law on Environmental Protection. At this moment the Agency doesn't perform monitoring. Its main role is to collect, process and send such data to European Environmental Agency and vice versa.

Within the framework of monitoring, planned is systematic work on measuring, testing and evaluating factors indicating the environment actual state and pollution degree; the ozone layer included.

The Law provides inspection control for the purpose of environment protection, and gives more detailed information on rights and liabilities of ecological inspectors. Provided by the Law are penalty clauses, too, for those destroying environment by their activities. Some articles and paragraphs pertain to ODS.

With this Law great strides have been made comparing to the former one on environment protection, enacted in 1991, and the amendments made to 1999 inclusive.

## 2.12. Serbian Law on Air pollution prevention

In the Assembly of Serbia it is under way procedure of adopting the new Law on Air pollution prevention, some articles of which refer to ozone depleting substances.

Article 30 – Substances that deplete ozone layer:

Production, import, export and use of substances that deplete ozone layer and products that contain those substances shall be performed in compliance with the law which regulates the environmental protection.

The Government shall prescribe the way of phasing out the use of the substances that deplete ozone layer, handling with those substances, as well as handling with products that contain those substances or that have been produced by using them, handling with substances that deplete ozone layer after the product containing them have ceased to be used, the way of collection, processing, storage and permanent

disposal of ODS, as well as the way of labelling the products which contain substances that deplete ozone layer.

Article 31 – Authorization to perform activities with substances that deplete ozone layer:

The activities on maintaining and/or repairing and excluding from use the products which contain substances that deplete ozone layer may be performed by legal or private entity which fulfill the conditions regarding staff, equipment and space, and which has authorization to perform those activities.

More detailed conditions which must be fulfilled by legal or private entity referred to in paragraph 1 of this Article, as well as the way of keeping records on maintaining and/or repairing and excluding from use those products which contain substances that deplete ozone layer, shall be prescribed by the Minister in charge of environmental protection (hereinafter: the Minister).

Fulfillment of the conditions to perform the activities on maintaining and/or repairing and excluding from use the products which contain substances that deplete ozone layer shall be determined by the Minister.

The authorization to perform the activities on maintaining and/or repairing and excluding from use the products which contain substances that deplete ozone layer shall be withdrawn if legal or private entity has ceased to meet the prescribed conditions or if it has been determined that those activities are not performed in compliance with law.

A complaint may be filed to the ruling issued by the Minister referred to in paragraphs 3 and 4 of this Article.

The list of legal and private entities shall be published in the "Official Gazette of the Republic of Serbia".

### 2.13. Environment Law in The Republic of Montenegro.

The Law was promulgated and published in the Official Gazette of the Republic of Montenegro No. 12/96 and 55/00; amendments were made later on. Generally, the Law pertains to environment protection, atmosphere included; it does not treat the ozone depleting substances separately, except for the part regulating the collection of eco-compensation, is to be paid by both physical persons and legal entities using the ozone depleting substances (Articles 36 and 38).

Provided by the Law are the environment monitoring (Articles 21-23) and the Law - with the belonging regulations – observance control (Articles 43 – 45). Provided by the Law are penalty clauses to be applied to both physical persons and legal entities failing to implement environment protection measures.

### **3. Verification of official statistics on imports/exports: compare quotas issued versus actual quotas used**

Verification of the data on the national consumption in 2005 is done for the ODS belonging to Annex A, Group I (CFCs) of the Montreal Protocol:

- a) R11, R12, R113, R114, R115
- b) mixtures of refrigerants mentioned in a)
- c) mixtures which contain some of the CFCs mentioned in a)

Data on import and export of CFCs assumed from the Directorate for Environmental Protection (quantities allotted according to licences (quotas), and quantities based on data referring to actually realized import/export, which are obtained from importers/exporters) were crosschecked with the data officially obtained from the Statistical bureau of the Republic of Serbia and review of total exports and imports registered by Customs Administration (General customs document - JCI). Verification was based on the internal data obtained from some importers, referring to 2005, too.

In Appendix 3 (tables 3.1 to 3.7) given is a survey of CFCs import in Serbia in 2005. The tables contain name of the importer, quota of CFCs allotted in the import licence by the Directorate for Environmental Protection and the actually realized import according to the same licence, given in natural units.

The data on the imported CFCs in Serbia in 2005 are also presented according to the names of foreign companies, the goods were bought from, i.e. the import in Serbia realized (Appendix 4).

In 2005, it was exported from Serbia only refrigerant R12, but the quantity was relatively huge comparing to R12 import, bearing in mind that there was no domestic production. The company "Metalia-com" exported over 45 tons of R12 from its own stock. According to data obtained from "Metalia-com", their import of refrigerant R12 was 114 398 kg in 2002 and 141 938 kg in 2003. In the same period they exported only 68 988 kg of R12 in 2002 and 37 821 kg in 2003. It means that the company "Metalia-com" made a stock of nearly 150 t of R12 in these two years. Accordingly, their export in 2005 of 45 tons of R12 was performed from their stock and not from the import in 2005, which was a little bit less than 6 tons. The exported quantities of CFCs from Serbia in 2005 are given in Appendix 5.

While values in Appendix 3 to 6 are given according to the reviewed and crosschecked data received from the Directorate for Environmental Protection, values referring to CFCs import and export given in Appendix 7 are official data obtained from the Statistical bureau of the Republic of Serbia. In last column only, in the rows of mixture of hydrocarbons perhalogenized and F and Cl, there can be found our comments on the type of refrigerant.

By comparison of these values, one difference may be noticed. Statistics on CFCs import/export report much greater imported quantity of refrigerant mixtures. Verified is that these quantities refer to refrigerants mixtures that do not contain CFCs

classified in Annex A, Group I of the Montreal Protocol (for example mixture of R 22 and R 142b in tariff code 382471000000, or other chemical substances in tariff code 382490990000).

Values in Appendix 8 (Import in Serbia) and Appendix 9 (Export from Serbia) are given according to General customs document - JCI obtained from Customs Administration. These files are the abridged version of the review of total import/export of chemical substances in Serbia in 2005, which has over 400 pages, thus rather impractical for the purpose of this verification project. From that very large file we have extracted only imports and exports of CFCs. Any single import/export has been checked up with the data obtained from Serbian Directorate for the Environmental Protection and Statistical bureau of the Republic of Serbia. Comparing data from different sources, a couple of mismatching was noticed.

In the Report of Customs Administration a couple of CFCs imports were not registered, although obviously realized and taken into account both in the Reports of Serbian Directorate for the Environmental Protection and Statistical bureau of the Republic of Serbia:

- a) Realized import of 870 kg of R11 by "Ital Frigo" – JCI No 349
- b) Realized import of 1088 kg of R12 by "Ital Frigo" – JCI No 349
- c) Realized import of 5984 kg of R12 by "Metalia-Com" – JCI No 2784
- d) Realized import of 1088 kg of R502 by "Master Frigo" – JCI No 10961

In the Report of Customs Administration two CFCs imports have been shown twice with the same licence number:

- a) Import of 1088 kg R12 by "Eko elektrofrigo"
- b) Import of 2040 kg R12 by "Eko elektrofrigo"

Two exports shown in the Report of Customs Administration in fact are "internal exports" to the Province of Kosovo and Metohia, which is under the UN protectorate:

- a) Export of 2040 kg R12 by "Forum inzenjering"
- b) Export of 2720 kg R12 by "Forum inzenjering"

CFCs trade in the Republic of Montenegro is much smaller than in Serbia (app. 1% of the total CFCs turnover). The imported CFCs quantities in Montenegro in 2005 (according to data obtained from the Ministry of Environmental Protection and Urban Planning) are given in Appendix 10.

Values given in Appendix 10 could not be crosschecked, since there were not available data about the realized import/export of CFCs from Customs Administration or Statistical bureau of the Republic of Montenegro.

Due to the fact that there is no production of CFCs in Serbia and Montenegro, total consumption in the year 2005 was calculated as difference between CFCs import and export. Total consumption is given in Table 2.

Table 2 Total consumption of CFCs (Annex A, Group I) in Serbia and Montenegro in 2005 in natural units

Substances	Consumption [kg]		
	Serbia	Montenegro	Serbia and Montenegro
CFC-11	23 998 15 288	355	39 641
CFC-12	55 042 -48 751 3 822	729	10 842
CFC-113	110		110
CFC-114	72	35	107
CFC-115	3 273		3 273
<b>Total</b>	<b>52 854</b>	<b>1 119</b>	<b>53 973</b>

As the aim of this project is to quantify the equivalent consumption of substances with great ODP (Ozone Depleting Potential), the consumption in natural units (table 2) is recalculated using multiplying factors given in Appendix 11. These values in ODP kg are given in Table 3.

Table 3 Total consumption of CFCs (Annex A, Group I) in Serbia and Montenegro in 2005 in ODP kg

Substances	Consumption in ODP kg		
	Serbia	Montenegro	Serbia and Montenegro
CFC-11	39 286	355	39 641
CFC-12	10 113	729	10 842
CFC-113	88		88
CFC-114	72	35	107
CFC-115	1 964		1 964
<b>CFC Total</b>	<b>51 523</b>	<b>1 119</b>	<b>52 642</b>

Recapitulation of CFCs import, export and consumption in Serbia and Montenegro in 2005 is given in Table 4. As there is no CFC production in Serbia and Montenegro, the consumption is calculated as the difference between the realized import and export.



Table 4 Review of CFCs import, export and consumption in Serbia and Montenegro in 2005 in ODP kg

Substances	Import	Export	Consumption
CFC-11	39 641	0	39 641
CFC-12	59 593	48 751	10 842
CFC-113	88	0	88
CFC-114	107	0	107
CFC-115	1 964	0	1 964
<b>CFC Total</b>	<b>101 393</b>	<b>48 751</b>	<b>52 642</b>

Total consumption in 2005 amounts to 52,6 ODP tons, and is lower than the value allowed by the Montreal Protocol, and even much lower than in 2004 (288,2 ODP t). In the period 1995 – 1997 the average CFCs consumption in Serbia and Montenegro in ODP tons was 849,2. In 2005 the reduction in consumption has to be 50% of the referent value, i.e. 424,6 ODP t. Maximum allowable total consumption as per Agreement in 2005 is 392 ODP t.

The reason for the CFCs consumption in Serbia and Montenegro in 2005 being lower than the allowed one, should be searched in a fact that certain measures for the CFCs substitution for environmentally more friendly substances have already been taken and in the fact that many factories are out of operation or work with significantly smaller production, consequently decreased is the CFCs demand.

There is a great discrepancy in CFCs consumption in 2005 between data reported to Ozone Secretariat (Annex D: UNIDO Terms of Reference) and data verified by our Team (approximately 48 ODP t, i.e. 48% of total CFCs consumption in Serbia and Montenegro). The difference is caused by overlooking a relatively large export of refrigerant R12 from Serbia (48.7 t). For the most part this export (over 45 tons) was not an "immediate re-export" from imports in 2005, but an export from the stock made in 2003, or earlier, by the company "Metalia-com" (as already explained, see page 13).

The rapid CFCs consumption cut in Serbia and Montenegro in 2005 comparing to the one in 2004 could be explained by two reasons: substituting old refrigeration and air-conditioning equipment using CFCs with the one using environmentally more friendly refrigerants, and the other one – the used methodology of calculation of CFCs consumption. Our impression is that the real CFCs consumption in Serbia in 2005 was higher than the one calculated by applying the proposed simple method for consumption calculation (import minus export) due to the internal CFCs stock changes. In the Auditor's opinion, although differing from the methodology proposed by UNIDO, the quantity of R12 exported by the company "Metalia-com" in 2005 (45 351 kg) should not be subtracted from the quantity exported in the same year. Thus, we believe that the consumption of refrigerant R12 in Serbia and Montenegro in 2005 is more real to amount to 56 193 kg, which is still over 4 times less than in the previous year (257 291 kg of R12 according to our Report for the year 2004). Taking this assumption into

account, our estimation is that the total CFCs consumption in Serbia and Montenegro in 2005 was approximately 98 ODP t (instead of 52,6 t, as listed in Tables 3 & 4).

We also tried to determine the CFCs consumption by purpose. It was a difficult task since there are not enough available relevant data on the purpose and quantity of CFCs use. Using official and internal data from some big importers and end users as a reference, we collected some data and summarized them in Table 5. It should be pointed out that these figures are a rough estimation only.

Table 5 Use of CFCs in Serbia and Montenegro in 2005 per sectors

CFC, MT	Aero	Foam	Ref. Mfg	Ref. Service	Laboratory purpose	Total
CFC-11	32	1,1	1	5,6		39,7
CFC-12	8		2,5	46		56,5
CFC-113					0,1	0,1
CFC-114				0,1		0,1
CFC-115			0,5	2,8		3,3
<b>Total</b>	<b>40</b>	<b>1,1</b>	<b>4</b>	<b>54,5</b>	<b>0,1</b>	<b>99,7</b>

CFC, ODP t	Aero	Foam	Ref. Mfg	Ref. Service	Laboratory purpose	Total
CFC-11	32	1,1	1	5,6		39,7
CFC-12	8		2,5	46		56,5
CFC-113					0,1	0,1
CFC-114				0,1		0,1
CFC-115			0,3	1,7		2
<b>Total</b>	<b>40</b>	<b>1,1</b>	<b>3,8</b>	<b>53,4</b>	<b>0,1</b>	<b>98,4</b>

#### 4. Verification of a representative sample of reports from importers/exporters

Insight into the internal records of some importers, which refer to their import licences and the actually realized import/export, has proved that there is no deviation from data obtained from the Directorate for Environmental Protection, Statistical Office of the Republic of Serbia and Report from Customs Administration.

#### 5. Review the follow up on the recommendations from previous verifications

Taken actions and achieved results concerning last year's defined goals:

- a) Substitute as many refrigerating devices as possible with the new once using environmental friendly refrigerants (ODP = 0), or at least replace CFCs in the existing chillers with environmental more friendly refrigerants, along with necessary repairing and changes.

Result: Thanks to the kindness of Multilateral fund, substitution of 5 chillers using CFCs (R11, R12 or R114) with the new ones using R134a is being under way. Substitution is effected by users themselves, too, but without any organized government support.

Import of used refrigeration and air-conditioning equipment in Serbia and Montenegro is banned.

There has been formed an Environmental Protection Fund in Serbia. With the purpose of providing funds necessary for its work, as well as discouraging the CFCs use, it has been imposed a tax on import of ozone depleting substances (ODS) to the amount of app. 1.2 Euro/kg of imported CFCs.

- b) Organize advanced training of customs officers and inspectors in preventing illegal (not permitted) CFCs import.

Result: It was organized a training of customs officers and ecological inspectors on July 14, 2006. Some ninety people engaged at large border crossings attended it.

Another several similar trainings are planned to be organized at all border areas in Serbia and Montenegro.

- c) Instruct technicians and maintenance personnel to save as much refrigerant as possible, trying to discharge refrigerant in atmosphere the minimum possible.

Result: There are some articles in technical literature (our Journal for Heating, Refrigeration and Air-conditioning). Refrigeration management plan is still being drafted.

- d) Start establishing the CFCs bank in Serbia and Montenegro as soon as possible.

Result: Some private companies have been interested in and have given the initiative in CFCs bank to be organized in Serbia, but little progress has been made.

- e) Harmonize laws and regulations in Serbia and Montenegro pertaining to Environmental protection, with special regard to the ozone depleting substances, and perform joint control over licences granting and import/export realization (through intensified and more close cooperation of authorized Ministries).

Result: Customs tariff codes referring to ODS are finished up.

Procedure of adopting the new Law on Air pollution prevention is under way.

- f) Promote control and monitoring system of the CFCs import and its distribution to end users

Result: Passed the new Law on Air pollution prevention there will be created all necessary preconditions for passing the appropriate sub legal enactments, which will regulate this field, too.

- g) Introduce control of CFCs consumed by end users, maintenance personnel in particular, given that their share in CFCs consumption in Serbia and Montenegro is great and is expected to relatively be even greater.

Result: Planned is imposing of compulsory licensing to each company dealing with the ODS trade or use, CFC especially.

## 6. Conclusions and recommendations

The methodology of controlling the CFCs imports in Serbia and Montenegro is fairly good but still can significantly be improved.

There is mutual communication between authorities in Serbia (The Ministry of Science and Environmental Protection) and Montenegro (The Ministry of Environmental Protection and Urban Planning) concerning the CFCs import/export and natural consumption targets of a multi-year agreement.

Having in mind that total CFCs consumption in Serbia and Montenegro in 2005 is much lower than the allowed value by Montreal Protocol, and the fact that it is relatively easy to get licence for CFC import, one can get a strong impression that the ODS trade (and CFCs trade, too) was not encouraged for illegal trade.

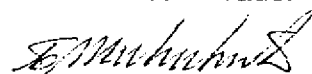
Recommendations for diminishing CFCs consumption and better control of ODS trade (import, export and transit):

- a) Substitute as many refrigerating devices as possible with the new ones using environmental friendly refrigerants (ODP = 0).
- b) Organize advanced training of customs officers and inspectors in preventing illegal (not permitted) CFCs import.
- c) Instruct technicians and maintenance personnel to save as much refrigerant as possible, trying to discharge the minimum refrigerant in atmosphere.
- d) Start establishing the CFCs bank in Serbia and Montenegro as soon as possible.
- e) The much-used CFCs should be assigned special customs tariff codes. For example: for refrigerant R502 it should be used tariff number 382490990001 instead of 382471000000 or 382490990000.
- f) Introduce better control of CFCs trade inside the country. For each single trade, at the end of a year, each CFC importer should be obliged to submit a report on

the quantity of CFCs and the name of a company it was sold to. Imposed by law should be that end users, maintenance personnel in particular, should possess licence rights for purchasing CFCs at the domestic market. An importer may sell CFC only to a licensed organization, or to use it himself at equipment servicing, record on which should be kept.

- g) In Montenegro CFCs import, export and transit should be brought under more strict control. It should be applied procedure similar to the one in Serbia. For each single CFCs import, the Republic Ecological inspector at a border crossing should fill the quantity of ODS being imported at the moment in the original of the import licence. The certified import licence copy should be submitted then to the Republic Ministry of Environmental Protection and Urban Planning. It is up to customs officer to submit a report on CFCs import/export to competent Ministry and to the Republic Statistical bureau. When submitting an application for the new CFCs import licence, an importer is required to enclose, along with other necessary documents, report on previous import of CFC and the General customs document (JCI), being the evidence of the imported quantity.

Verification team leader



Branislav Zivkovic, Ph.D.

## Appendix 1

Companies which in 2005 imported/exported or transited ODS  
with the licence of The Ministry for Environmental protection

### **SERBIA**

1. DELTA MATIC
2. EKO ELEKTROFRIGO
3. FORUM INŽENJERING BEOGRAD
4. FRIGO 2000 MLADENOVAC
5. INTERJUG AS
6. ITAL FRIGO
7. JUGOREMEDIJA
8. LEDO GAS
9. MASTER FRIGO .
10. METALIA-COM
11. MP AUSTROTHERM
12. NINI
13. PROANALYTICA
14. RAJVEKS
15. SARA-KOM D.O.O.
16. TEHNOOPREMA
17. TRANSPED
18. VATROSPREM

### **MONTENEGRO**

19. FAB LIVE, PODGORICA
20. FRIGO ELEKTRO D.O.O. PODGORICA
21. MIDLAND STEEL TRADING, NIKSIC
22. MONTRI D.O.O. IGALO
23. PETROHOTEL, BUDVA
24. RADIO TELEVIZIJA CRNE GORE

## Appendix 2

Companies which in 2005 imported/exported CFCs  
with the licence of The Ministry for Environmental protection

No	<u>Company name</u>	<u>R11</u>	<u>R12</u>	<u>R13</u>	<u>R113</u>	<u>R114</u>	<u>R11</u> <u>R12</u>	<u>R502</u>
2.	EKO ELEKTROFRIGO	+	+	+				+
3.	FORUM INŽENJERING		+					
4.	FRIGO 2000 MLADENOVAC		+					+
6.	ITAL FRIGO	+	+					+
8.	LEDO GAS						+	
9.	MASTER FRIGO	+	+					+
10.	METALIA-COM	+	+			+	+	
13.	PROANALYTICA				+			
15.	SARA-KOM D.O.O		+					
16.	TEHNOOPREMA						+	
20.	FRIGO ELEKTRO D.O.O. PODGORICA		+					+
21.	MIDLAND STEEL TRADING, NIKSIC					+		
22.	MONTRI D.O.O. IGALO		+					
23.	PETROHOTEL, BUDVA	+	+					
24.	RADIO TELEVIZIJA CRNE GORE	+						

### Appendix 3

#### Import of CFCs in Serbia in 2005 with the licence of The Ministry for Environmental protection

**Table 3.1. Import of refrigerant R11 in Serbia in 2005**

No	<u>Company name</u>	<u>Realised import [kg]</u>	<u>Issued licence [kg]</u>
		0	408
		0	408
2.	EKO ELEKTROFRIGO	0	1 000
		0	1 000
		$\Sigma$ 0	$\Sigma$ 2 816
6.	ITAL FRIGO	870	1 000
9.	MASTER FRIGO	1 088	1 088
		10 440	10 440
10.	METALIA-COM	11 600	11 600
		$\Sigma$ 22 040	$\Sigma$ 22 040
$\Sigma$ 4		$\Sigma$ 23 998	$\Sigma$ 26 944



**Table 3.2. Import of refrigerant R12 in Serbia in 2005**

No	Company name	Realised import [kg]	Issued licence [kg]
2.	EKO ELEKTROFRIGO	0	15 000
		6 090	15 000
		0	10 000
		<u>2 168</u>	<u>10 000</u>
		$\Sigma$ 8 258	$\Sigma$ 50 000
3.	FORUM INŽENJERING	0	10 800
		10 744	10 800
		0	6 800
		6 528	6 800
		<u>0</u>	<u>4 352</u>
		$\Sigma$ 17 272	$\Sigma$ 39 552
4.	FRIGO 2000 MLADENOVAC	0	18 000
		<u>136</u>	<u>680</u>
		$\Sigma$ 136	$\Sigma$ 18 680
6.	ITAL FRIGO	1 088	10 000
9.	MASTER FRIGO	4 352	4 352
10.	METALIA-COM	5 984	9 248
		<u>0</u>	<u>3 264</u>
		$\Sigma$ 5 984	$\Sigma$ 12 512
15.	SARA-KOM D.O.O.	17 952	17 952
$\Sigma$ 7		$\Sigma$ 55 042	$\Sigma$ 153 048

**Table 3.3. Import of refrigerant R113 in Serbia in 2005**

No	Company name	Realised import [kg]	Issued licence [kg]
13.	PROANALYTICA D.O.O.	110	110
$\Sigma$ 1		$\Sigma$ 110	$\Sigma$ 110

**Table 3.4. Import of refrigerant R114 in Serbia in 2005**

No	Company name	Realised import [kg]	Issued licence [kg]
10.	METALIA-COM	72	72
$\Sigma$ 1		$\Sigma$ 72	$\Sigma$ 72

**Table 3.5. Import of refrigerant mixture R11 and R12 in Serbia in 2005**

No	<u>Company name</u>	<u>Realised import [kg]</u>	<u>Issued licence [kg]</u>
8.	LEDO GAS	6 510	6 510
10.	METALIA-COM	6 600	6 600
16.	TEHNOOPREMA	6 000	6 000
<b>Σ 3</b>		<b>Σ 19 110</b>	<b>Σ 19 110</b>

As the mixture is 80:20%, the share of refrigerant R11 is 15 288 kg and the share of refrigerant R12 is 3 822 kg

**Table 3.6. Import of refrigerant R13 in Serbia in 2005**

No	<u>Company name</u>	<u>Realised import [kg]</u>	<u>Issued licence [kg]</u>
2.	EKO ELEKTROFRIGO	0	200
		0	200
		Σ 0	Σ 400
<b>Σ 1</b>		<b>Σ 0</b>	<b>Σ 400</b>

**Table 3.7. Import of refrigerant R502 in Serbia in 2005  
(mixture of refrigerants R22 and R115)**

No	<u>Company name</u>	<u>Realised import [kg]</u>	<u>Issued licence [kg]</u>
		544	1 700
2.	EKO ELEKTROFRIGO	544	1 700
		0	1 700
		<u>952</u>	<u>1 100</u>
		Σ 2 040	Σ 6 200
4.	FRIGO 2000 MLADENOVAC	0	2 000
6.	ITAL FRIGO	0	300
		1 088	1 088
9.	MASTER FRIGO	1 632	2 176
		<u>1 632</u>	<u>1 632</u>
		Σ 4 352	Σ 4 896
<b>Σ 4</b>		<b>Σ 6 392</b>	<b>Σ 13 396</b>

As R502 is the mixture 48.8:51.2%, the share of refrigerant R 22 is 3 119 kg and the share of refrigerant R 115 is 3 273 kg

## Appendix 4

Foreign exporters of CTC & CFCs to Serbian importers in 2005  
with the licence of The Ministry for Environmental protection

**Table 4.1. Export of refrigerant R11 to Serbia in 2005**

No	Company name	Realised export [kg]
2.	ARKEMA EU, Spain	11 600
3.	COOL STAR, DELAVARE, Spain	870
6.	GLOBAL REFRIGERANTS, England	1 088
8.	MINGOS TRADE, Cyprus	10 440
9.	SIMAT-PROM d.o.o. Zagreb, Croatia	0 0 0 0 Σ 0
<b>Σ5</b>		<b>Σ 23 998</b>

**Table 4.2. Export of refrigerant R12 to Serbia in 2005**

No	<u>Company name</u>	Realised export [kg]
1.	ARKEMA, France	17 952
2.	ARKEMA EU, Spain	6 528 0 0 Σ 6 528
3.	COOL STAR, DELAVARE, Spain	1 088
6.	GLOBAL REFRIGERANTS, England	4 352
8.	MINGOS TRADE, Cyprus	5 984
9.	SIMAT-PROM d.o.o. Zagreb, Croatia	0 6 090 0 2 168 0 10 744 0 0 136 Σ 19 138
<b>Σ 6</b>		<b>Σ 55 042</b>

**Table 4.3. Export of refrigerant R113 to Serbia in 2005**

No	<u>Company name</u>	Realised export [kg]
7.	MALLICKRODT BAKER, The Netherlands.	110
<b>Σ 1</b>		<b>Σ 110</b>

**Table 4.4. Export of refrigerant R114 to Serbia in 2005**

No	<u>Company name</u>	Realised export [kg]
4.	CREDICOM, Italia	72
<b>Σ 1</b>		<b>Σ 72</b>

**Table 4.5. Export of refrigerant mixture R11 and R 2 to Serbia in 2005**

No	<u>Company name</u>	Realised export [kg]
5.	GALCO, Belgium	6 510
8.	MINGOS TRADE, Cyprus	6 600 <u>6 000</u> Σ 12 600
<b>Σ2</b>		<b>Σ 19 110</b>

**Table 4.6. Export of refrigerant R13 to Serbia in 2005**

No	<u>Company name</u>	Realised export [kg]
9.	SIMAT-PROM d.o.o. Zagreb, Croatia	0 <u>0</u> Σ 0
<b>Σ1</b>		<b>Σ 0</b>

**Table 4.7. Export of refrigerant R502 (mixture of refrigerants R22 and R115) to Serbia in 2005**

No	<u>Company name</u>	Realised export [kg]
3.	COOL STAR, DELAVARE, Spain	0
6.	GLOBAL REFRIGERANTS, England	1 088 1 632 <u>1 632</u> Σ 4 352
9.	SIMAT-PROM d.o.o. Zagreb, Croatia	544 544 0 952 <u>0</u> Σ 2 040
<b>Σ3</b>		<b>Σ 6 392</b>

## Appendix 5

### Export of CFCs from Serbia in 2005 with the licence of The Ministry for Environmental protection

**Table 5.1. Export of refrigerant R12 from Serbia in 2005**

No	Company name	Foreign partner	Realised export [kg]	Issued licence [kg]
2.	EKO ELEKTROFRIGO	Bosna & Hercegovina	0	10 000
		Bosna & Hercegovina	0	5 000
		Macedonia	<u>0</u>	<u>4 080</u>
			$\Sigma$ 0	$\Sigma$ 19 080
3.	FORUM INŽENJERING	Macedonia	0	10 800
		Macedonia	<u>3 400</u>	<u>10 800</u>
			$\Sigma$ 3 400	$\Sigma$ 21 600
10.	METALIA-COM	Italy	14 438.5	16 478.6
		Italy	14 320.8	16 279.2
		Macedonia	13 600.0	13 600.0
		Moldavia	<u>2 992.0</u>	<u>2 992.0</u>
			$\Sigma$ 45 351.3	$\Sigma$ 49 349.8
<b><math>\Sigma</math> 3</b>			<b><math>\Sigma</math> 48 751.3</b>	<b><math>\Sigma</math> 90 029.8</b>

**Table 5.2. Export of refrigerant R502 from Serbia in 2005**

No	Company name	Foreign partner	Realised export [kg]	Issued licence [kg]
2.	EKO ELEKTROFRIGO	Bosna & Hercegovina	0	5 000
		Bosna & Hercegovina	<u>0</u>	<u>1 500</u>
			$\Sigma$ 0	$\Sigma$ 6 500
<b><math>\Sigma</math> 1</b>			<b><math>\Sigma</math> 0</b>	<b><math>\Sigma</math> 6 500</b>

## Appendix 6

### Transit of CFCs through Serbia in 2005 with the licence of Ministry for Environmental protection

**Table 6.1. Transit of refrigerant R 12 through Serbia in 2004**

No	<u>Company name</u>	<u>Realised transit [kg]</u>	<u>Issued licence [kg]</u>
1.	From: SIMAT-PROM d.o.o. Zagreb, Croatia To: TEHNODOM d.o.o. Skoplje, Macedonia Through: TRANSPED, Novi Sad, Serbia	2 720 <u>0</u> 2 720	20 000 <u>20 000</u> 40 000
<b>Σ 1</b>		<b>Σ 2 720</b>	<b>Σ 40 000</b>

## Appendix 7

Republic of Serbia  
 Republic Bureau of Statistics    Republic of Serbia  
 Belgrade, Milana Rakića 5        January - December 2005.  
 Foreign Trade Statistics

	Quantity in kg	Value in USD	comment
<b>Export</b>	<b>107836</b>	<b>498002</b>	
<b>290342000000-Dichlorodifluoromethane</b>	<b>48751</b>	<b>137566</b>	
LB-Lebanon	28759	84202	
MK-Republic Macedonia	17000	45529	
MD-Moldavia	2992	7835	
<b>382490990000-Products belong to tarr. No. 38.24, other</b>	<b>57670</b>	<b>352163</b>	
LY-Lybia	6775	224149	
BA-Bosnia & Hercegovina	41160	79816	
RU-Russia	2744	10700	
NL-The Netherlands	105	9680	
BY-Belorussia	3500	7662	
<b>Import</b>	<b>3343660</b>	<b>9972349</b>	
<b>290341000000-Trichlorofluoromethane</b>	<b>23998</b>	<b>91079</b>	
ES-Spain	22910	88471	
SG-Singapore	1088	2608	
<b>290342000000-Dichlorodifluoromethane</b>	<b>55042</b>	<b>184829</b>	
ES-Spain	39712	131790	
CN-China	12610	44720	
EU-European Community	2584	7633	
FR-France	136	686	
<b>290343000000-Trichlorotrifluoroethane</b>	<b>110</b>	<b>8642</b>	
NL-The Netherlands	110	8642	
<b>290344100000-Dichlorotetrafluoroethane</b>	<b>72</b>	<b>1592</b>	
EU-European Community	72	1592	
<b>382471000000-Mixture of hydrocarbons perhalogenized with F i Cl</b>	<b>106130</b>	<b>354399</b>	
DE-Germany	82260	248005	
AR-Argentina	12600	49518 R11/R12	
CN-China	3672	30982 R502	



BE-Belgium	6510	18672 R11/R12
SG-Singapore	1088	7222 R502
<b>382490990000-Products belong to tarr. No. 38.24, other</b>	<b>3012783</b>	<b>8388848</b>
DE-Germany	448091	1950962
CH-Switzerland	208573	1108926
GB-Great Britain	290660	1027275
IT-Italy	233996	886885
EU-European Community	250614	878246
...		
<b>382490990001-Mixture of hydrocarbons belong to ODS</b>	<b>1632</b>	<b>10544</b>
CN-China	1632	10544 R502

PREGLED UVOZA (C4-C9) NAZNAČENE ROBE  
U PERIODU OD 01.01.2005. DO 31.12.2005. GODINE

Appendix 8 IMPORT

ISP/PIB UVOZNIKA NAZIV UVOZNIKA	SIFCI	JCI	DATUM	TARSTAV	NAZIV ROBE	ZEM. PO R	JM	KOLIČINA U JM	NETO MASA U KG	ISPRAVE	ISPRAVA
C4 100119495 TEHNOOPREMA, BEOGRAD, DVA	11568	10030	20050520	3824710000	FREON R11/R 12	AR	KG	6.000,00	6.000,00	F01	04MI/CY/2005
						AR				U67	353-03-42- 9/05-04/05
						AR				U76	457/21/2005
						AR				U38	532-02-01442/ 2005-02/2005 **
	11029	7487	20050413	2903420000	FREON R12 (A 13,6KG X 600)	ES	KG	8.160,00	8.160,00	F01	50117/05
FORUM - INŽENJERING, BEOG						ES				U67	353-03-42-4/05-04
						ES				U31	180-07-335-00- 00784/2005
						ES				U38	532-02-01011/ 2005-02
	11029	8375	20050421	2903420000	FREON R12 (A 13,6KG X 190)	EU	KG	2.584,00	2.584,00	U38	532-02-01011-02
						EU				U67	353-03-42-5/05-04
						EU				U31	180-07-335-00- 00784/2005
						EU				F01	50127/05
	25038	13877	20050727	2903420000	RASHLADNI GAS FREON R 12	ES	KG	6.528,00	6.528,00	U67	532 02/02382/ 02/2005
						ES				F01	0110S2061075 /2005
						ES				U31	180 07 335 00 01379 /2005

PROANALYTICA, BEOGRAD, VI	21083	353	200505252903430000	delta (R113)	NL	KD	44,00	110,00	F01	268592, 268595/05
					NL				U38	532-02-01093/05, 353-03-47-0/05 **
MASTER FRIGO, BEOGRAD-BOR	11568	10961	200505302903410000	FREON R 11	SG	KG	1.088,00	1.088,00	O06	862261/05
					SG				U34	5320200824/04 /02/05
					SG				O99	
					SG				F01	1293/05
					SG				U76	08/05 *
	42072	8459	200508173824710000	GAS FREON ZA RASHLADNE UR (R502)	CN	KG	1.632,00	1.632,00	U67	353-03-42/19/05-04
	42072	15536	200512313824909900	GAS U FREON U BOCAMA ZA R (R502)	CN	KD	120,00	1.632,00	U34	532-02-02749/ 2005-02
	42072	15536	200512312903420000	GAS U FREON ZA RASHLADNE (R12)	CN	KD	320,00	4.352,00	U34	532-02-04541/2005-02 *
EKO ELEKTROFRIGO, NOVI BE	11029	6169	200503303824710000	FREON R 502	CN	KG	544,00	544,00	U38	532-02-00574/ 2005-02/05
					CN				U65	353-03-42-2/05-04/05
					CN				U76	180/05
					CN				F01	50076/05 *
		11568	8603	200505053824710000	FREON R502	CN	KG	544,00	544,00	U38
	11568	8603	200505052903420000	FREON R12	CN	KG	4.050,00	4.050,00	U38	532-02-01240/ 2005-02/2005 *
	11568	10305	200505242903420000	FREON R12 (DOUBLE)	CN	KG	2.040,00	2.040,00	U67	353-03-42-10- 05-04-05 *
	11568	10305	200505242903420000	FREON R12	CN	KG	2.040,00	2.040,00	U38	532-02-1240- 2005-02-05 *

101019588	EKO ELEKTROFRIGO, NOVI BE	21130	9175	200510263824710000	FREON R502 13,6KG	CN	KG	408,00	408,00	U67	3530342/22/05-04/05
						CN				U38	5320203762/05
		21130	9175	200510262903420000	FREON R12 13,6KG (DOUBLE)	CN	KG	1.088,00	1.088,00	U67	3530342/22/ 05-04/05
101511332	EKO ELEKTROFRIGO BEOGRAD	21130	9175	200510262903420000	FREON R12 13,6KG	CN	KG	1.088,00	1.088,00	U38	5320203762/05
		42072	15085	200512222903420000	FREON R12	CN	KG	1.080,00	1.080,00	U37	353-03-42-26/2005
		42072	15085	200512223824710000	FREON R502	CN	KG	544,00	544,00	U37	353-03-42-26/2005
101019588	LEDO-GAS, BEOGRAD, VISOKA	25038	12209	200507063824710000	ME&AVINE KOJE (R11/R12)	BE	KG	6.510,00	6.510,00	U67	353-03-8/2/05-04/05
						BE				V81	
						BE				F01	50340/05
				BE					U38	532-02-02151/ 2005-02	
				BE					V31		
				BE					O01		
				BE					O99	EX/BE	
101511332	FRIGO 2000 EKSPORT IMPORT	11215	987	200510192903420000	FREON R-12 ( 10 BOGA X 13	FR	KG	136,00	136,00	F01	50471/2005
						FR				O06	697430
						FR				U38	532-02-03253/ 2005-02/2005
101511332	METALIA-COM, BEOGRAD, KAR	11118	11459	200508102903441000	FREON R-114	EU	KG	72,00	72,00	F01	65/05
						EU				U76	BB/05
						EU				U67	532-02-02647/ 2005-02
				EU					V81		
				EU					V31		
101511332	FRIGO 2000 EKSPORT IMPORT	11568	9996	200505203824710000	FREON R 11/R 12 (80% ,20%)	AR	KG	6.600,00	6.600,00	U67	353-03-39-373/ 05-04-/05
						AR				U76	26/05

532-02-1442/05  
-02/05  
03MI7CY/2005  
\*  
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U38  
F01

AR  
AR

101511332

METALIA COM ZEMUN,  
KARLOV

11568 27840 200511032903410000 REFRIGERANT  
GAS FORANE 11

ES ES ES ES  
KG KG  
10.440,00 10.440,00  
U76  
F01  
U67  
U37  
61/05  
09/05  
353034223/0504  
5320203853/200502  
\*

11568 34090 200512262903410000 SREDSTVO ZA  
FARMACEUTSKU  
(R11)

ES ES ES ES ES ES ES  
KG KG  
11.600,00 11.600,00  
V81  
V31  
V64  
U76  
F01  
U67  
U38  
65/05  
0110S2062562/05  
353-03-42-27/  
05-04/05  
532-02-04570/  
2005-02/05  
\*  
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SARA - KOM, PRNJAVOR,  
MAR

42056 720 200502192903420000 N  
DIHLORODIFLUOROMETA  
(FREO (R12))

ES ES  
KG KG  
17.952,00 17.952,00  
F01  
U67  
V81  
V31  
0110S2059290/05  
353-03-42-1/  
05-04/05  
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PREGLED IZVOZA (C1-C3) NAZNAČENE ROBE  
U PERIODU OD 01.01.2005. DO 31.12.2005. GO DINE

### Appendix 9 EXPORT

ISP PIB IZVOZNIKA	NAZIV IZVOZNIKA	SIFCI	JCI	DATUM	TARSTAV	NAZIV ROBE	ZEM ODR	JM KOLIČINA U JM U KG	NETO MASA	ISPRAVE	ISPRAVA
100119972	FORUM - INŽENJERING, BEOG	11029	870	20050418	2903420000	FREON R-12	MK	KG 3.400,00	3.400,00	U31	180-07-335-00-00783/2005
										U38	532-02-01010/05
										O06	061809/05
										F01	42/27/05
										V31	
										*	
										F01	58/27/2005
										*	
										F01	120/27/2005.
										*	
										**	
101511332	METALIA-COM, BEOGRAD, KAR	11568	10038	20050714	2903420000	ALGOFRENE R 12/13.6	MK	KG 13.600,00	13.600,00	V31	
										U38	532-02-02396/2005-02/2005
										F01	420/2005
										*	
										V31	
										O06	872357
										U67	532-02-02292/2005-02
										V31	
										LB	
										KG 14.320,80	
										14.320,80	

F01 427/05  
 \*

11568 10673 20050726 2903420000 ALGOFRENE R\_12/22,7; R\_12 LB KG 14.438,50 V31 14.438,50  
 O06 174416  
 U38 532\_02\_02296/2005\_02/05  
 F01 440/05

\*

11568 14761 20051014 2903420000 FREON R-12 MD KG 2.992,00 U25 2.992,00  
 V31  
 O06 BB/2005  
 U38 532-02-03487/2005-02/2005  
 F01 602/05

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## Appendix 10

Import of CFCs in Montenegro in 2005  
with the licence of The Ministry for Environmental protection and urban planning

**Table 10.1. Import of refrigerant R11 in Montenegro in 2005**

No	<u>Company name</u>	<u>Realised import [kg]</u>	Issued licence [kg]	Licence number
23.	PETROHOTEL, BUDVA	75	75	04-1792/05-2
24	RADIO TELEVIZIJA CRNE GORE	280	280	04-1956/05-2
<b>Σ 2</b>		<b>Σ 355</b>	<b>Σ 355</b>	

**Table 10.2. Import of refrigerant R12 in Montenegro in 2005**

No	<u>Company name</u>	<u>Realised import [kg]</u>	Issued licence [kg]	Licence number
20.	FRIGO ELEKTRO,. PODGORICA	0	2 720	04-73/05-2
22.	MONTRI D.O.O. IGALO	675	675	04-2381/05-2
23.	PETROHOTEL, BUDVA	54	54	04-1956/05-2
<b>Σ 3</b>		<b>Σ 729</b>	<b>Σ 3 449</b>	

**Table 10.3. Import of refrigerant R114 in Montenegro in 2005**

No	<u>Company name</u>	<u>Realised import [kg]</u>	Issued licence [kg]	Licence number
21	MIDLAND STEEL TRADING, NIKSIC	35	35	04-4328/05-2
<b>Σ 1</b>		<b>Σ 35</b>	<b>Σ 35</b>	

**Table 10.4. Import of refrigerant R502 in Montenegro in 2005  
(mixture of refrigerants R 22 and R 115)**

No	<u>Company name</u>	<u>Realised import [kg]</u>	Issued licence [kg]	Licence number
20.	FRIGO ELEKTRO,. PODGORICA	0	640	04-73/05-2
<b>Σ 1</b>		<b>Σ 0</b>	<b>Σ 640</b>	



## Appendix 11

### Correction factors for recalculation CFC consumption from tons to ODP tons

No	Code	Formula	Name	Correction factor
1.	CFC 11	$\text{CFCl}_3$	Trichlorofluoromethane	1
2.	CFC 12	$\text{CF}_2\text{Cl}_2$	Dichlorodifluoromethane	1
3.	CFC 113	$\text{C}_2\text{F}_3\text{Cl}_3$	Trichlorotrifluoroethane	0.8
4.	CFC 114	$\text{C}_2\text{F}_4\text{Cl}_2$	Dichlorotetrafluoroethane	1
5.	CFC 115	$\text{C}_2\text{F}_5\text{Cl}$	Chloropentafluoroethane	0.6

## Appendix 12

Sources of information used for the purpose of elaborating the project:

- Republic of Serbia, The Ministry of Science and Environmental Protection, Directorate for the Environmental Protection (Republika Srbija, Ministarstvo nauke i zaštite životne sredine, Uprava za zaštitu životne sredine)
- Republic of Serbia, Statistical bureau of the Republic of Serbia (Republika Srbija, Republički zavod za statistiku)
- The Republic of Montenegro, The Ministry of Environmental Protection and Urban Planning (Republika Crna Gora, Ministarstvo zaštite životne sredine i uređenja prostora)
- Customs Administration
- CFCs Importers / Exporters
- End users of CFCs
- Laws of Serbia and Montenegro
- Official Gazette of the Republic of Serbia
- Official Gazette of the Republic of Montenegro
- Official enactments
- Web sites
- Companies' records

## Appendix 13

### List of visits relating CFCs data collection

No	Date	<u>Institution / company name and name of responsible person</u>	PURPOSE OF VISIT
1.	17.7.2006	The Republic of Serbia, The Ministry of Science and Environmental Protection, Directorate for the Environmental Protection, Mr. Miroslav Spasojevic, deputy director	National legislation, policies and procedures on ODS imports/exports
2.	19.7.2006	The Republic of Serbia, The Ministry of Science and Environmental Protection, Directorate for the Environmental Protection, Department for Chemicals, Miss Dunja Dobric, expert-associate	Data about issued licences (and quotas) and realized CFCs import, export and transit in Serbia in 2005
3	20.7.2006	The Republic of Serbia, Statistical Bureau of the Republic of Serbia, Department for Foreign Trade, Slobodan Vuckovic, chief of the Dept.	Statistical data on CTC and CFCs import/export in Serbia in 2005
4.	24.7.2006	LEDO-GAS, Belgrade, CFCs export/import Company, Mrs. Nedeljka Kalinic, director	Cross-checking data of realized CFCs import in Serbia in 2005 and selling to end users
5.	26.7.2006	The Republic of Serbia, The Ministry of Science and Environmental Protection, Directorate for the Environmental Protection, Department for Chemicals, Miss Dunja Dobric, expert-associate	Data about realized CFCs import and export in Serbia in 2005
6.	27.7.2006	The Republic of Montenegro, The Ministry of Environmental Protection and Urban Planning, Mrs. Jelena Knezevic	National legislation and policies concerning ODS in Montenegro

7.	27.7.2006	The Republic of Montenegro, The Ministry of Environmental Protection and Urban Planning, Mrs. Tatjana Djurkovic, expert-associate	Procedures at ODS imports and exports; data about issued licences, and realized CFCs import and export in Montenegro in 2005
8.	28.7.2006	RT CG (Radio TV Montenegro), Podgorica, Mr Dragan Kazic, chief of the maintenance groupe	How end user buy CFC refrigerant
9.	31.7.2006	The Republic of Serbia, The Ministry of Science and Environmental Protection, Directorate for the Environmental Protection, Department for Chemicals, Mr. Miroslav Spasojevic, deputy director and Mrs. Tatjana Markov Milinkovic, expert-associate	Cross-checking data (from the various sources) about realized CFCs import and export in Serbia in 2005
10	3.8.2006	Customs Administration, Miss Nadica Spasovic, customs officer	Procedures at border crossing on CFCs transport arrival; cooperation between a customs officer and an ecological inspector
11	4.8.2006	Tehnooprema inzenjering, A.D., commercial sector, CFCs export/import company, Belgrade Mr Milosav Obradovic, ecc., sector manager	Experience in CFCs import and export; cross-checking data of realized CFCs import in Serbia in 2005
12.	7.8.2006	The Republic of Serbia, The Ministry of Science and Environmental Protection, Directorate for the Environmental Protection, Mr. Miroslav Spasojevic, deputy director	Measures for diminishing CFC consumptions in Serbia
13.	8.8.2006	Ministry of Finance, Customs Administration, Supervisory Department, Belgrade, Bul. AVNOJ-a 155, Mr Tomislav Radonjic, senior adviser	Procedures at border crossing in the case of CFCs transit; violation of legal procedure
14.	9.8.2006	Ministry of Finance, Customs Administration, Belgrade's Port, Ms Angelina Velickovic, Chief of Customs outpost	Procedures at customs outpost on CFCs transport arrival; experience from recent period

## Appendix 14

### List of Team members involved in Project MP/YUG/04/-074

1. Prof Branislav Zivkovic, Ph.D., Team leader – coordinating the project, reviewing national legislation, policies and documentation, collecting and analyzing data, making interviews, making conclusions and recommendations, writing the report.
2. Branislav Dzinic, dipl.ing. – Collecting and analyzing data on CFCs trade in Serbia and Montenegro, making interviews, consultant for conclusions and recommendations.
3. Prof Franc Kosi, Ph.D. – Reviewing national legislation, policies and documentation, analyzing the collected data, consultant for conclusions and recommendations.
4. Maja Todorovic, M.Sc. - Reviewing national legislation, collecting and analyzing data on CFCs import and export.
5. Jelena Lazarevic, B.A. - translating, typing and correcting the report.