RECOVERED PAPER DATA 2001







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RECOVERED PAPER DATA, 2001

INTRODUCTION

This FAO survey on "Recovered Paper Data, 2001" follows the same format as last year but since it is now an annual publication covers only the data year 2001. It was produced, as last year, in cooperation with the Confederation of European Paper Industry (CEPI) which supplied the necessary data relevant to its member countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden, the United Kingdom) and its associate members (Czech Republic, Hungary, Norway, Slovak Republic, Switzerland). FAO collected data for the other countries.

As last year, with the concurrence of the FAO Advisory Committee on Paper and Wood Products the two questions on the use of recovered paper for energy generation and on market deinked pulp were eliminated, as well as the one concerning non recoverable paper and paperboard.

The survey presents data on recovery, trade, and utilization of recovered paper. Historical data for the period 2001 is presented and only a few (thirteen countries provided projections of recovery and use of recovered paper for the years 2002, 2003, 2004 and 2005. The ratios used to analyse the data are the ones recommended by the Sub-group on Waste Paper Terminology, and are defined later in this document.

Appendix 1 contains a sample of the questionnaires, which FAO sent to 46 countries.

In addition to the 19 countries covered by CEPI, 16¹ others answered the questionnaires. All together these 35 countries represent over 80 percent of the world paper and paperboard production, and the data presented can be considered representative of the recovery, use and trade of recovered paper in the world.

DEFINITIONS OF TERMS USED

The FAO Advisory Committee on Pulp and Paper created a Sub-group on Waste Paper Terminology to define the terms to be used by FAO to describe waste paper recovery and utilization. The following rates are used in this survey:

- a) Waste paper net recovery
- b) Adjusted waste paper net recovery
- c) Recovered paper utilization
- d) Recovered paper in fibre use

¹ Australia, Brazil, Canada, Chile, Colombia, Indonesia, Japan, Latvia, Malaysia, Mexico, Morocco, New Zealand, Romania, Slovenia, Thailand, United States of America.

The definitions of the rates are given below:

a) Waste paper net recovery rate: is the amount of waste paper collected for re-use as a percentage of the adjusted paper and paperboard consumption;

(Note: the adjusted paper and paperboard consumption is equal to the apparent consumption of paper and paperboard plus the net trade in converted paper and paperboard products, excluding printed materials.)

- b) Adjusted waste paper net recovery rate: is the amount of waste paper collected as a percentage of the adjusted paper and paperboard consumption from which the non-recoverable paper and paperboard is deducted;
- c) <u>Recovered paper utilization rate</u>: is the amount of recovered paper used for paper and paperboard as a percentage of paper and paperboard production;
- d) Recovered paper in fibre use rate: is the amount of recovered paper used for paper and paperboard as a percentage of the total fibre used for paper and paperboard.

NOTE

The figures reported in this survey are the ones supplied by countries. As is apparent from some figures in the tables (consumption of recovered paper without any relation to paper production, unrealistic percentages, etc.), there is some misunderstanding in the definitions, and readers are urged to use caution when interpreting data for some countries.

RECOVERED PAPER TRADE

Table 1 - Recovered paper trade in relation to recovered paper collection and utilization of recovered paper and Appendices 4 and 5 present the results of the survey.

In 2001, the United States of America was the major exporter with 9.5 million tonnes, followed by Germany with over 4 million tonnes and by the Netherlands and Belgium both with nearly 2 million tonnes.

Main importers of recovered paper were Indonesia and Canada with respectively 2.4 and 1.9 million tonnes.

TABLE 1 - RECOVERED PAPER TRADE IN RELATION TO RECOVERED PAPER COLLECTION AND UTILIZATION OF RECOVERED PAPER

		2001					
	Recovered			01			
	paper collected			Recovered			
	nationally for	Exports	o.t		Imports	o.t	
Country	•			paper used for			
	paper and	recovered p	paper	paper and	recovered	paper	
	paperboard			paperboard			
	production						
	1000 mt	1000 mt	%	1000 mt	1000 mt	%	
Australia	1797	261	15	1634	99	6	
Austria	1274	225	18		841	44	
Belgium	1576	1765	112	605	794	131	
Brazil	2769	1703	0		12	0	
Canada	2861	357	12		1929	40	
Chile	395	11	3		26	40 6	
Colombia	367	1	0	437	70	16	
	425	88	21	392	70 55	14	
Czech Republic	633	361	57	392	105	28	
Denmark							
Finland	717	101	14		82	12	
France	5358	878	16		1086	20	
Germany	13946	4020	29		1600	14	
Greece	380	9	2		9	2	
Hungary	321	26	8		55	16	
Indonesia	1740	0	0		2477	59	
Ireland	134	90	67	47	3	6	
Italy	4679	257	5		667	13	
Japan	19122	1466	8		214	1	
Latvia		26		6	1	10	
Malaysia							
Mexico	3463		0		1210	35	
Morocco ¹	35		0		32	48	
Netherlands	2430	1810	74	2320	1700	73	
New Zealand		87		191	0	0	
Norway	555	192	35		76	17	
Portugal	444	117	26		19	5	
Romania	146		0		11	7	
Slovakia	154	25	16	265	136	51	
Slovenia	115	27	23	258	170	66	
Spain	3496	70	2	4197	771	18	
Sweden	1401	138	10	1834	571	31	
Switzerland	1169	282	24		222	20	
Thailand	819	0	0		947	54	
United Kingdom	5550	958	17	4612	20	0	
United States of America	40871	9476	23		298	1	
1 Maragas figuras have been as							

¹ Morocco: figures have been estimated

RECOVERED PAPER UTILIZATION FOR PURPOSES OTHER THAN PAPER AND PAPERBOARD MAKING

Table 2 – Distribution of the total use of recovered paper between paper/paperboard making and other uses, gives the relevant information. The information collected indicates that in nearly all countries virtually all recovered paper is used for paper and paperboard production.

TABLE 2 – DISTRIBUTION OF THE TOTAL USE OF RECOVERED PAPER BETWEEN PAPER/PAPERBOARD MAKING AND OTHER USES

			2001		
Country	Total use of	Recovered pa	aper used for	Recovered p	aper used for
Country	recovered paper		paperboard		urposes
	1000 mt	1000 mt	%	1000 mt	%
	100.1	400.4	400		
Australia	1634	1634			0
Austria	1890	1890			
Belgium	605	605			
Brazil	2777	2777			0
Canada	4923	4782		141	3
Chile	410	410			
Colombia	437	437	100		
Czech Republic	392	392			
Denmark	377	377	100		
Finland	698	698			
France	5566	5566	100		
Germany	11526	11526			
Greece	380	380	100		
Hungary	350	350	100		
Indonesia	4217	4217	100		
Ireland	47	47	100		
Italy	5089	5089			
Japan	18155	17966	99	189	1
Latvia	21	6			
Malaysia					
Mexico	3463	3463	100		
Morocco ¹	67	67	100		
Netherlands	2320	2320			
New Zealand	191	191			
Norway	439	439			
Portugal	346	346			
Romania	169	157	93		7
Slovakia	265	265			
Slovenia	258	258			
Spain	4197	4197	100		
Sweden	1834	1834			
Switzerland	1109	1109			
Thailand	1765				
United Kingdom	4612	4612			
United States of America	33689	31693			6
Officed States of Affielica	33009	31093	94	1990	O
1.4					

¹ Morocco: figures have been estimated

RECOVERED PAPER UTILIZATION BY THE PAPER AND PAPERBOARD INDUSTRY

Table 3 – Recovered paper utilization rate, recovered paper in fibre use rate and total fibre used for paper and paperboard production, indicates the amounts of recovered paper being used in the paper furnish.

The recovered paper utilization rate, representing how much recovered paper is used in the production of paper and paperboard, shows low values (around 20 percent) in fibre-rich countries, and high (up to 77 percent in Greece) in fibre-poor regions.

Table 4 – *Composition of recovered paper (in percent)* shows what are the major grades of paper entering in the flow of recovered paper. On average world-wide, corrugated, solid containers and Kraft sack waste account for nearly half of the total recovered paper, while newspaper and magazines grades account for a much lower share of the total.

Table 5 - Use of recovered paper by grades in percent shows what percentage of recovered paper is used in the production of various paper and paperboard grades. The data indicates that the percentage of recovered paper entering the production of paper is much higher for packaging grades (case material, folding boxboard, wrapping and other packaging grades) than cultural grades.

TABLE 3 - RECOVERED PAPER UTILIZATION RATE, RECOVERED PAPER IN FIBRE USE RATE AND TOTAL FIBRE USED FOR PAPER AND PAPERBOARD PRODUCTION

	I		20	01		
			Recovered	Total fibre		
	Paper and	Total fibre	paper used	used /	Recovered	Recovered
Country	paperboard	used for	for paper	paper and	paper in	paper
Country	production	paper and	and	paperboard	fibre use	utilization
	production	paperboard	paperboard		rate	rate
	1000 mt	1000 mt	1000 mt	%	%	%
	1000 mi	1000 mil	1000 mt	%	%	%
Australia	2656	2534	1634	95	64	62
Austria	4385		1890		04	43
Belgium	1728		605			35
Brazil	7437	6552	2777	88	42	37
					42	24
Canada	19655		4782			24
Chile Colombia	770	852	410 437	110	51	57
	772	852			51	
Czech Republic	807		392			49
Denmark	376		377			100
Finland	13509		698			5
France	10006		5566			56
Germany	18182		11526			63
Greece	496		380			77
Hungary	506		350			69
Indonesia	6951		4217			61
Ireland	43		47			109
Italy	9127		5089			56
Japan	30717	30910	17966		58	
Latvia	24	5	6	22	111	25
Malaysia	1113					0
Mexico	3810					91
Morocco ¹	127	60	67	47	112	53
Netherlands	3332		2320			70
New Zealand	838	876		105	22	23
Norway	2301		439			19
Portugal	1290		346			27
Romania	483	379	157	78	41	33
Slovakia	663		265			40
Slovenia	560	490	258	88	53	46
Spain	4765		4197			88
Sweden	10786		1834			17
Switzerland	1780		1109			62
Thailand	2445	2660			66	
United Kingdom	6605		4612			70
United States of America	82468		31693		36	
1 Morogoo: figures have been of	<u> </u>					

¹ Morocco: figures have been estimated

TABLE 4 – COMPOSITION OF RECOVERED PAPER (IN PERCENT)

			2001		
Country	Total recovered paper	Old and over- issue newspapers and magazines, telephone directories, brochures, etc.	Corrugated, solid containers and kraft sack waste (old and new)	qualities	Mixed grades
	%	%	%	%	%
Australia Austria Belgium Brazil	100 100 100 100	23 28 32 7	35 52		1 27 13
Canada Chile Colombia	100 100 100 100	42 5 8	41 60	12 25 29	12 5 9 2 18
Czech Republic Denmark Finland	100 100 100	27 18 45	50 45 32	4 19 13	19 9
France Germany Greece	100 100 100	27 32 8 11	27 68	11 13 11	10 29 13 22
Hungary Indonesia Ireland Italy	100 100 100	0	89		11 22
Japan Latvia Malaysia	100 100	27 17	46 33	11 33	16 17
Mexico Morocco ¹ Netherlands	100 100	22	28	15 9	3 42
New Zealand Norway Portugal	100 100 100	79 36 25	61 53		0 1 14
Romania Slovakia Slovenia	100 100 100	0 27 24	58 35 6	24 30	42 14 40
Spain Sweden Switzerland	100 100 100	12 53 47	31 21	18 5 7	11 25
Thailand United Kingdom United States of America	100 100 100	14 28 17	46	18	

¹ Morocco: figures have been estimated

TABLE 5 - USE OF RECOVERED PAPER BY GRADES IN PERCENT

				2001	01			
Country	Recovered paper used for paper and paper and paperboard	Newsprint	Other graphic paper	Case material	Folding boxboard	Wrapping, other packaging paper	Household and sanitary paper	Other paper and paperboard n.e.s.
	%	%	%	%	%	%	%	%
Australia ¹	100	9						
Austria	100	16						
Belgium	100	22						
Brazil	100	0	_	62	7	o	15	9
Colombia	100	0						
Czech Republic	100	13						
Denmark	100	0						
Finland	100	37						
France	100	18						
Germany	100	20						
Greece	100	0						
Hungary	100	0						
Ireland	100	0		_				
Italy	100	5						
Japan	100	13						
Latvia	100	5						
Malaysia	100	100						
Mexico	100	22				61		
Netherlands	100	16		35				
Norway	100	28						
Portugal	100	0						
Romania	100	0						
Slovakia	100	0						
Slovenia	100	22						
Spain	100	8						
Sweden	100	46		29				
Switzerland	100	28						
Thailand	100	8						
United Kingdom	100	25						
United States of America	100	11		9	10	30		

LOSSES IN REPULPING OF WASTE PAPER

Waste paper has higher losses during pulping than virgin material, due to the amount of fines and filler in the waste paper. As the content of waste paper increases in the raw material, the amount of losses will go up.

Table 6 – Losses in repulping and processing into paper and paperboard, presents the percentage figures for pulping losses. Though data is scarce, in most of the countries reporting the information, pulping losses are between 10 and 20 percent, with some exceptions probably due to antiquated equipment or poor processing control.

TABLE 6 - LOSSES IN REPULPING AND PROCESSING INTO PAPER AND PAPERBOARD

	2	001	
Country	Total recovered paper used	Losses ir	n pulping
	1000 mt	1000 mt	%
Australia	1634	196	12
Austria	1890		
Belgium	605		
Brazil	2777	417	15
Canada	4923		
Chile	410		
Colombia	437	80	18
Czech Republic	392		
Denmark .	377		
Finland	698		
France	5566		
Germany	11526		
Greece	380		
Hungary	350		
Indonesia	4217		
Ireland	47		
Italy	5089		
Japan	18155		
Latvia	21	1	3
Malaysia	21	•	J
Mexico	3463	539	16
Morocco ¹	67	6	9
Netherlands	2320	J	J
New Zealand	191	38	20
Norway	439	30	20
Portugal	346		
Romania	169	55	33
Slovakia	265	55	33
Slovenia	203	40	16
	4197	40	10
Spain Sweden	1834		
	1109		
Switzerland			
Thailand	1765		
United Kingdom	4612		
United States of America	33689		
Managara Garaga basa basa basa basa			

^T Morocco: figures have been estimated

PROJECTED FUTURE RECOVERY OF WASTE PAPER

Table 7 – Projected future recovery of waste paper and use of recovered paper for paper and paperboard making, shows projections for the next four years in both waste paper collected for reuse and for recovered paper used for paper and paperboard. They are expressed as a percentage of the 2001 level taken as a base line (100 percent).

TABLE 7 - PROJECTED FUTURE RECOVERY OF WASTE PAPER AND USE OF RECOVERED PAPER FOR PAPER AND PAPERBOARD MAKING

Country	Waste	e paper	collect	ed for re	e-use	Recovered paper used for paper and paperboard				
Country			%					%		
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Australia	100	104	104	104	104	100	101	101	101	102
Brazil	100	103	106	109	113	100	103	106	109	113
Chile	100					100				
Colombia						100	100			
Indonesia	100	115	132	147	161	100	110	120	130	140
Japan	100	105	107	110	112	100	101	102	104	105
Latvia	100	113	125	150	163	100	117	167	200	250
Mexico						100	102	106	116	122
Morocco	100	100	100	100	100	100	100	100	100	100
New Zealand						100	100	100	100	100
Slovenia	100	100	104	104	109	100	101	105	107	110
Thailand	100	105	120	128	128	100	101	112	120	120
United States of America	100					100	107	109	110	

APPENDIX 1 – QUESTIONNAIRES

FAO RECOVERED PAPER SURVEY (2001) Part 1: Main Questionnaire

	(All figures in 000 metric tons)	2001
1.	Production of paper and paperboard	
2.	Net trade in paper and paperboard	
3.	Recovered paper collected nationally for paper and paperboard production	
4.	Exports of recovered paper.*	
5.	Imports of recovered paper.*	
6a.	Recovered paper* used domestically for purposes other than paper and paperboard making.	
6b.	Recovered paper* used domestically for paper and paperboard making	
(i)	Old and over-issue newspapers and magazines, telephone directories, brochures, etc.	
(ii)	Corrugated, solid containers and kraft sack waste (old and new)	
(iii)	Wood-free printing and writing paper, punch cards and other high-grade qualities	
(iv)	Mixed grades	
7.	Losses in repulping and processing into paper and paperboard	
8.	Total fibre used for paper and paperboard	

^{*}including recovered paper market pulp measured in terms of recovered paper.

FAO RECOVERED PAPER SURVEY (2001)

Part 2: Use of the main types of recovered paper in the manufacture of major grades of paper and paperboard

			Types of recove	ered paper (all fig	Types of recovered paper (all figures in 1000 mt)	
		Recovered paper* used domestically for paper and paperboard making. Total recovered paper	Old and over- issue newspapers, magazines, telephone directories, brochures, etc.	Corrugated, solid container and kraft sack waste (old and new)	Wood-free printing and writing papers, punch cards and other high-grade qualities	Mixed grades
Major grades of paper and paperboard	year	** [:d9]	[6b.(i)]**	[6b.(ii)]**	[6b.(iii)]**	[6b.(iv)]**
Paper and paperboard total	2001					
Newsprint	2001					
Other graphic paper	2001					
Case material	2001					
Folding boxboard	2001					
Wrapping, other packaging paper	2001					
Household and sanitary paper	2001					
Other paper and paperboard, n.e.s.	2001					
*		J	-			

^{*} Including recovered paper market pulp measured in terms of recovered paper.
** Same headings as in Part 1: Main Questionnaire.

FAO RECOVERED PAPER SURVEY (2001) Part 3: Projected future consumption and supply of recovered paper

(All figures in 000 metric tons)	2001	2002	2003	2004	2005
Waste paper collected for re-use					
Exports of recovered paper* [4] **					
Imports of recovered paper* [5] **					
Recovered paper* used domestically for purposes					
other than paper and paperboard making [6a.] **					
Recovered paper* used domestically for paper and					
paperboard making [6b.] **					

^{*}including recovered paper market pulp measured in terms of recovered paper.

** same headings as in Part 1: Main Questionnaire

FAO RECOVERED PAPER SURVEY (2001) Part 4: Recovered paper EXPORTS by country of destination

Recovered paper* EXPORTS to: (indicate countries of des (all figures in 000 mt)	tination) 2001
, ,	
	+
Total exports of recovered papers * [4]**	0
Total exports of recovered papers [4]	

^{*} including recovered paper market pulp measured in terms of recovered paper
** same headings as in Part 1: Main Questionnaire

FAO RECOVERED PAPER SURVEY (2001) Part 5: Recovered paper IMPORTS by country of origin

Recovered paper* IMPORTS to: (indicate countries of origin) (all figures in 000 mt)	2001
Total imports of recovered papers * [5]**	0

^{*} including recovered paper market pulp measured in terms of recovered paper
** same headings as in Part 1: Main Questionnaire

APPENDIX 2 – DEFINITIONS OF THE TERMS USED IN THE FAO RECOVERED PAPER SURVEY QUESTIONNAIRE

APPENDIX 2 – DEFINITIONS OF THE TERMS USED IN THE FAO RECOVERED PAPER SURVEY QUESTIONNAIRE

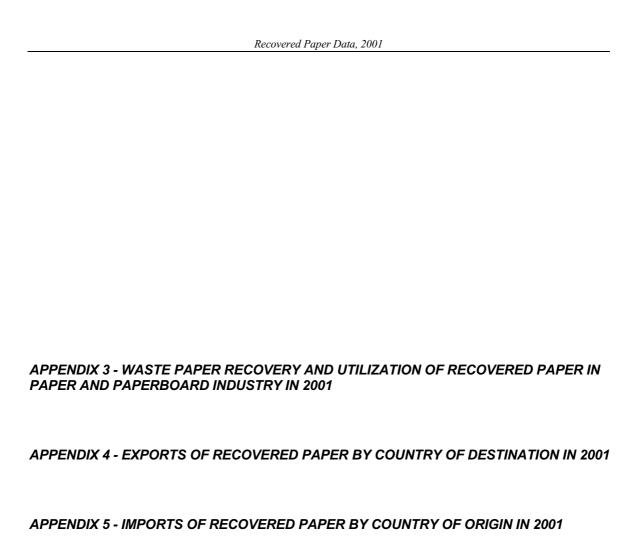
- 1. <u>Paper and paperboard production</u> is the quantity of all paper and paperboard of commercial quality (fibre building boards not included) produced within a country
- 2. <u>Net trade in paper and paperboard (excluding printed material)</u> is the difference between the imports and exports of converted paper and paperboard products (SITC [Rev. 2] 642 and part of BIN 48). In case imports exceed exports, this factor is positive, and in case exports are higher than imports the factor is negative.
- 3. Recovered paper collected nationally for paper and paperboard production is the net quantity of recovered paper collected which is used exclusively in paper and paperboard manufacture including also recovered paper market pulp measured in terms of recovered paper input.
- 4. and 5. Exports and imports of recovered paper are the quantities of all kinds of waste paper exported and imported for any kind of use including waste paper market pulp² measured in terms of waste paper inputs.
- 6a. Recovered paper used domestically for purposes other than paper and paperboard making is the quantity of waste paper used for fibre building boards, moulded products, in bulk as wrapping and packaging material or for any other major industrial or commercial use
- 6b. Recovered paper used domestically for paper and paperboard making is the net quantity of the waste paper intake at the mill (and excluding all sorting losses) of any kind of waste paper -either locally collected or imported which is used exclusively in paper and paperboard manufacture including also recovered paper market pulp measured in terms of recovered paper input. (Whenever possible, the quantities of recovered paper should be expressed at 90 percent dryness and should include the losses in repulping and processing into paper and paperboard.) The details under this heading include the following:
 - i) Old and over-issue newspapers and magazines, telephone directories, brochures, etc., i.e. waste paper containing mainly mechanical pulp.
 - ii) Corrugated, solid container and kraft sack waste (old and new), i.e. recovered paper containing mainly unbleached sulphate pulp.
 - iii) Wood-free printing and writing papers, copy paper, computer printouts, and other high-grade qualities, i.e. recovered paper containing mainly bleached chemical pulp.
 - iv) Mixed grades, all other types of recovered paper

Recovered paper market pulp is the pulp made of recovered paper for sale in the open market and does not include recovered paper pulp used in own plant or shipped to wholly owned or associated companies within the country. All recovered paper pulp moving outside the producing country is considered to be recovered paper market pulp.

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- 7. <u>Losses in repulping and processing into paper and paperboard</u> is the quantity which is lost as broken fibres, fillers, coatings and other additives when the recovered paper is repulped, as well as the fibre losses in processing the derived recovered paper pulp into paper and paperboard.
- 8. <u>Total fibre used for paper and paperboard</u> is the total input quantity of all types of fibres at 90 percent dryness used for paper and paperboard manufacturing. The fibres can originate from wood (round, split, chips, residues, sawdust, etc.), from non-wood fibrous vegetable materials (bagasse, straw, bamboo, esparto, other reeds and grass, cotton linters, flax, hemp, etc.), from rags and other textile wastes and from recovered paper.

PLEASE NOTE: For some of the headings or for some parts of the headings the data might not be readily available. In such cases you are kindly requested to make estimates and to indicate such estimates with, e.g. a footnote.



Production of paper Production of paper	APPENDIX 3 - WASTE PAPER REC	STE PAPER REC		LIZATION OF RE	OVERY AND UTILIZATION OF RECOVERED PAPER IN PAPER AND PAPERBOARD INDUSTRY	ER IN PAPER AN	D PAPERBOAR) INDUSTRY
Country					2001			
1000 mt 1000	Country	Production of paper and paperboard	Net trade in converted paper and paperboard products	Apparent consumption of paper and paperboard	Recovered paper collected nationally for paper and paperboard production	Recovered paper collection rate	Exports of recovered paper	Imports of recovered paper
a 2666 880 3336 1797 a 4366 -2406 1380 1797 ta 1728 1762 3490 1576 ta 1728 1763 8092 276 ta 1728 1763 8092 2861 ta 1728 1728 305 425 ta 1730 1710 1396 777 ta 1730 1710 1396 777 ta 1730 1710 1396 777 ta 1730 1736 1740 380 ta 1730 1740 380 380 ta 496 773 1740 467 ta 496 773 1740 467 ta 496 773 1740 467 ta 402 174 467 467 ta 402 174 467 ta 428 <th< td=""><td></td><td></td><td></td><td>1000 mt</td><td>١</td><td>%</td><td>1000 mt</td><td>1000 mt</td></th<>				1000 mt	١	%	1000 mt	1000 mt
tepublic 807 1728 1762 3490 1576 1576 1576 1576 1576 1576 1576 1576	Australia	2656		3536		51		
1728 1762 3490 1576 1569 1576 1569 1576 1569 1576 1569 1576 1569 1576 1569 1576 1569 1576 1569 1576 1569 1576 1580	Austria	4385		1980				841
kepublic 877 1437 776 8092 2861 8092 8861 8092 8861 8092 8861 861 872 46 726 8092 8861 8092 8861 8092 8861 8092 8861 8092 8861 8092 8861 8092 8861 8092 8861 8092 8861 8092 8861 8092 8861 8092 8092 8092 8092 8092 8092 8092 8092	Belgium	1728		3490			1765	
tage 1965 -11563 8092 2861 tage 772 46 726 367 kepublic 807 123 930 425 kepublic 376 11019 1395 633 10006 1376 11382 538 633 10006 1376 11382 538 777 10006 1376 11382 538 777 10006 1378 11382 538 777 10006 2911 2103 1346 1740 1000 291 172 402 134 100 291 170 469 174 100 291 170 469 172 101 352 402 140 469 101 374 104 3082 1912 111 2266 3379 3463 192 111 127 148 567 144	Brazil	7437		7437			4	12
tepublic 772 -46 726 395 k 123 930 425 k 1550 -11510 1999 717 h 10006 1974 11382 5358 y 16182 2911 21093 1734 y 16182 2911 21093 1746 y 16182 2911 21093 1746 y 16182 2911 21093 1746 y 496 713 1209 321 y 496 713 1209 321 y 496 713 1209 321 y 437 4679 321 4679 y 3077 105 30822 19122 y 127 106 3379 3463 y 127 144 444 y 1296 106 444 y 4679 3463 3496 </td <td>Canada</td> <td>19655</td> <td></td> <td>8092</td> <td></td> <td></td> <td>357</td> <td>1929</td>	Canada	19655		8092			357	1929
lea 772 46 726 367 kepublic 376 1019 1395 425 kepublic 376 1019 1395 633 10006 1376 11382 6358 18182 2911 21093 13946 18182 219 773 13946 18182 219 773 13946 18182 219 773 13946 18182 219 773 13946 18182 219 773 13946 18182 219 772 321 18183 367 4679 321 18184 367 1474 1474 18184 3810 3810 3810 3463 18184 3810 3810 3810 3463 18184 3810 3810 3810 3463 18184 3810 3810 3810 3463 18184 3810 3	Chile				395		11	26
kepublic 807 123 930 425 kepublic 13509 -11510 1996 717 13509 -11510 1999 717 10006 1376 1182 5386 10006 2911 21093 13946 1182 2911 21093 13946 1182 2912 1209 380 120 219 1209 321 120 219 14679 380 120 30717 105 3810 134 120 30717 105 3810 14679 120 3810 3463 3463 1113 2266 3379 3463 1113 425 3463 3463 1114 2266 3379 3463 11 1290 -1353 348 3463 11 1290 -177 111 444 11 1786 257 146	Colombia	772		726				02
k 376 1019 1399 633 y 1850 -11510 1399 777 y 18182 -1358 777 y 18182 -1358 777 y 18182 2914 1382 5358 y 506 219 725 321 506 219 725 321 6951 713 1209 381 43 359 402 1740 30717 105 362 1945 30822 1407 4679 30717 105 381 174 30717 105 381 3463 31 3810 381 3463 31 127 1113 444 31 1280 -177 1113 444 32 406 -177 1113 4166 31 560 -278 527 1146 32	Czech Republic	807		930			88	
y 13509 -11510 1999 717 y 18182 2588 717 y 486 713 1382 5588 y 486 713 1382 5588 y 486 713 12093 3896 y 506 219 725 321 y 506 219 725 321 y 43 359 402 134 y 43 359 402 134 y 123 362 402 447 y 123 362 402 447 y 123 362 402 447 y 123 382 423 424 y 1290 -134 424 424 y 1290 -177 414 424 y 446 627 146 424 y 446 627 146	Denmark	376	-	1395			361	105
y 19006 1376 11382 5358 y 18182 2911 21093 13946 y 496 713 2109 380 y 506 219 725 321 ia 6951 369 402 134 ia 6951 369 402 4134 3077 1945 11072 4679 30717 105 3082 19122 a 317 24 224 317 36 4679 3463 318 3810 3813 3463 3463 a 1173 248 3817 2430 3463 a 127 136 3463 3463 3463 3463 a 483 184 567 144 444 a 663 -297 366 154 444 a 663 -267 3466 3496 <	Finland	13509		1999		36		82
my 18182 2911 21093 13946 sia 506 219 725 380 sia 6951 73 1209 380 sia 6951 73 1209 380 sia 9127 1945 1072 4679 30717 105 3082 1134 sia 111 2266 3379 4679 sia 111 2266 3379 4679 sol 127 190 317 3463 sol 127 190 347 3463 sol 127 148 3463 3463 sol 127 148 3463 3463 sol 127 148 3463 3463 sol 128 148 555 444 sol 1290 -177 1113 444 sia 560 -297 567 146 sia 560 </td <td>France</td> <td>10006</td> <td></td> <td>11382</td> <td></td> <td></td> <td></td> <td>1086</td>	France	10006		11382				1086
9 496 713 1209 380 ry 506 219 725 321 ssia 6951 775 321 ssia 43 359 402 1740 sia 9127 1945 11072 4679 sia 3810 3822 19122 4679 sia 1113 2266 3379 4679 sia 127 190 317 3463 sia 128 485 3810 3463 sia 128 485 3810 3463 sia 128 485 3817 444 sia 662 297 146 154 ia 663 -297 6829 3496 n 10786 -8268 2518 1401 rand 2445 -374 2071 819 rand 2445 -374 2071 40871 states of America	Germany	18182		21093			4020	
ry 506 219 725 321 sia 6951 1740 478 321 isia 9127 1945 11072 4679 sia 1113 2266 3379 4679 sia 1113 2266 3379 4679 sia 1113 2266 3379 4679 sol 1113 2266 3379 3463 sol 127 190 317 35 seland 2301 -1353 948 555 y 1290 -1353 948 556 is 663 -297 366 154 in 663 -297 366 154 in 663 -297 366 154 in 663 -297 366 1401 in 4766 2204 6829 3496 in 4766 2204 6829 3496 in<	Greece	496		1209		31	<u></u>	6
sia 6951 6951 1740 sia 43 359 402 134 9127 1945 11072 4679 30717 105 30822 19122 24 2266 3379 4679 501 127 190 317 35 seland 3832 485 3817 2430 seland 2301 -1353 948 555 y 1290 -177 1113 444 al 1290 -177 1113 444 ia 663 -297 366 156 ia 560 -33 527 115 ia 4765 -297 366 1771 1169 nn 10786 -8268 2518 1169 nn 10786 -8268 551 1401 kinddom 6605 6334 76113 40871 Kinddom 6605 6334 </td <td>Hungary</td> <td>206</td> <td></td> <td>725</td> <td></td> <td>44</td> <td>26</td> <td></td>	Hungary	206		725		44	26	
1 43 359 402 134 9127 1945 11072 4679 30717 105 30822 19122 24 3810 3463 501 127 190 317 35 127 190 317 35 128 128 168 3817 2430 127 190 317 35 128 128 168 3817 2430 129 -1353 948 555 129 -177 1113 444 11a 483 84 567 146 11a 483 84 567 115 129 -297 366 154 120 -863 2518 1401 120 -868 2518 1401 120 -860 634 1293 5550 120 -826 76113 40871	Indonesia	6951		6951	1740	25	0	2477
sia 9127 1945 11072 4679 sia 24 226 3379 19122 sia 1113 2266 3379 19122 sol 127 190 3810 3463 sol 127 190 3817 2430 solands 838 168 3817 2430 sol 2301 -1353 948 555 y 1290 -177 1113 444 sia 663 -297 366 154 ia 560 -297 366 146 ia 560 -297 368 146 in 4765 204 6829 3496 n 1786 -297 366 154 in 4765 204 6829 3496 n 4765 204 6829 3496 n 4765 204 6829 3496 n	Ireland	43		402	134	33	06	3
sia 30717 105 30822 19122 sia 24 2266 3379 19122 sol 3810 3810 3463 sol 127 190 317 35 seland 838 168 1006 555 y 2301 -1353 948 555 y 1290 -177 1113 444 iia 663 -297 366 154 iia 663 -297 366 154 iia 663 -297 366 154 in 10786 -8268 257 1401 nn 17780 -9 1771 819 right 6605 6334 12939 5550 Kingdom 6605 6334 76113 40871	Italy	9127	•	11072			257	299
sia 24 24 24 sia 1113 2266 3379 so¹¹ 3810 3463 so¹¹ 127 190 317 35 lands 332 485 3817 2430 ealand 838 168 1006 555 y 2301 -1353 948 555 al 1290 -177 1113 444 sia 663 -297 366 154 ia 560 -33 527 115 in 10786 -8268 2518 1401 n 10786 -8268 2518 1401 riand 2445 -374 2071 819 Kingdom 6605 6334 12939 5550 States of America 82468 76113 76113 40871	Japan	30717		30822	•	62	1466	
sia 1113 2266 3379 3463 col 3810 386 3873 3463 col 127 190 317 35 lands 332 485 3817 2430 seland 838 168 1006 555 y 2301 -1353 948 555 al 1290 -177 1113 444 sia 663 -297 366 154 ia 560 -33 527 115 in 1778 -248 527 146 in 1778 -8268 2518 1401 in 1778 -9 1771 1169 in 2445 -374 2071 819 Kingdom 6605 6334 12939 5550 States of America 82468 -6356 76113 40871	Latvia	24		24		0	26	1
so 1 3810 3463 so 1 127 190 317 35 lands 332 485 3817 2430 ealand 838 168 1006 2430 y 2301 -1353 948 555 y -177 1113 444 ai 483 84 567 146 ia 663 -297 366 154 ia 560 -33 527 115 in 10786 -8268 2518 1401 in 1778 -9 1771 1169 in 2445 -9 1771 819 Kingdom 6605 6334 12939 5550 States of America 82468 -6356 76113 40871	Malaysia	1113		3379				
Solution 127 190 317 35 lands 332 485 3817 2430 ealand 838 168 1006 2430 y 2301 -1353 948 555 y -177 1113 444 al 483 84 567 146 ia 663 -297 366 154 ia 560 -33 527 115 in 10786 -8268 2518 1401 n 1778 -9 1771 1169 riand 1780 -9 1771 1169 nd 2445 -374 2071 819 Kingdom 6605 6334 12939 5550 States of America 82468 -6356 76113 40871	Mexico	3810		3810				1210
lands 3332 485 3817 2430 ealand 838 168 1006 2430 y -1353 948 555 al 11290 -177 1113 444 nia 483 297 366 146 ia 560 -297 366 115 ia 560 -33 527 115 in 10786 -8268 2518 1401 in 1778 -9 1771 1169 in 2445 -374 2071 819 Kingdom 6605 6334 12939 5550 States of America 82468 -6356 76113 40871	Morocco ¹	127		317				
ealand 838 168 1006 y 2301 -1353 948 555 al 1290 -177 1113 444 nia 483 237 146 144 ia 663 -297 366 154 ia 560 -33 527 115 in 10786 -8268 2518 1401 n 1778 -9 1771 1169 riand 2445 -374 2071 819 Kingdom 6605 6334 12939 5550 States of America 82468 -6356 76113 40871	Netherlands	3332		3817			18	1700
y 2301 -1353 948 555 al 1290 -177 1113 444 lia 483 84 567 146 ia 663 -297 366 154 ia 560 -33 527 115 in 4765 2064 6829 3496 in 10786 -8268 2518 1401 rland 1780 -9 1771 1169 ind 2445 -374 2071 819 Kingdom 6605 6334 12939 5550 States of America 82468 -6356 76113 40871	New Zealand	838		1006				
al 1290 -177 1113 444 iia 483 84 567 146 ia 663 -297 366 154 ia 560 -33 527 115 ia 4765 2064 6829 3496 in 10786 -8268 2518 1401 rland 1780 -9 1771 1169 id 2445 -374 2071 819 Kingdom 6605 6334 12939 5550 States of America 82468 -6356 76113 40871	Norway	2301		948				92
lia 483 84 567 146 lia 663 -297 366 154 lia 560 -33 527 115 n 4765 2064 6829 3496 n 10786 -8268 2518 1401 rland 1780 -9 1771 1169 nd 2445 -374 2071 819 Kingdom 6605 6334 12939 5550 States of America 82468 -6356 76113 40871	Portugal	1290	``	1113			117	19
ia 663 -297 366 154 ia 560 -33 527 115 ia 4765 2064 6829 3496 in 10786 -8268 2518 1401 rland 1780 -9 1771 1169 nd 2445 -374 2071 819 Kingdom 6605 6334 12939 5550 States of America 82468 -6356 76113 40871	Romania	483		292				11
ia 560 -33 527 115 n 4765 2064 6829 3496 n 10786 -8268 2518 1401 rland 1780 -9 1771 1169 nd 2445 -374 2071 819 Kingdom 6605 6334 12939 5550 States of America 82468 -6356 76113 40871	Slovakia	663		366			25	136
n 10786 2064 6829 3496 1401 1401 1401 1408 1908 1401 1401 1401 1401 1408 1908 1408 1401 1401 1401 1408 1908 1908 1908 1908 1908 1908 1908 19	Slovenia	260		527				
10786 -8268 2518 1401 1780 -9 1771 1169 2445 -374 2071 819 6605 6334 12939 5550 82468 -6356 76113 40871	Spain	4765		6859				
1780 -9 1771 1169 2445 -374 2071 819 6605 6334 12939 5550 82468 -6356 76113 40871	Sweden	10786		2518				
2445 -374 2071 819 6605 6334 12939 5550 82468 -6356 76113 40871	Switzerland	1780		1771	1169		282	
6605 6334 12939 5550 82468 -6356 76113 40871	Thailand	2445		2071		40		947
82468 -6356 76113 40871 :	United Kingdom	9099		12939		43		
	United States of America	82468		76113		54	9476	

¹ Morocco: figures have been estimated

APPENDIX 3 - WASTE PAPER RECO	E PAPER RECOV	FRY AND UTILIZ	VERY AND UTILIZATION OF RECOVERED PAPER IN PAPER AND PAPERBOARD INDUSTRY (cont.)	VERED PAPER I	N PAPER AND P.	APERBOARD IN	DUSTRY (cont.)
				2001			
Country	Recovered paper used for other purpose than paper and paperboard	Recovered paper used for paper and paperboard	Losses in repulping and processing into paper and paperboard	Total fibre used for paper and paperboard	Recovered paper in fibre use rate	Total fibre / paper and paperboard production	Recovered paper utilization rate
	1000 mt	1000 mt	1000 mt	1000 mt	%	%	%
Australia	0	1634	196	2534	64	96	62
Austria		1890					43
Belgium		909					35
Brazil	0		417	6552	42	88	37
Canada	141						24
Chile							
Colombia		437	80	852	51	110	57
Czech Republic		392					49
Denmark		377					100
Finland		869					5
France		5566					56
Germany		11526					63
Greece		380					77
Hungary		350					69
Indonesia		4217					61
Ireland		47					109
Italy		5089					56
Japan	189	17966		30910	58	101	
Latvia	15	9	-	5			
Malaysia							0
Mexico		3463	539	4349	80	114	
Morocco ¹		29	9	09		47	
Netherlands		2320					20
New Zealand		191	38	876	22	105	
Norway		439					19
Portugal		346					27
Romania	12	157	55	379	41	78	
Slovakia		265					40
Slovenia		258	40	490	53	88	
Spain		4197					88
Sweden		1834					17
Switzerland		1109					
Thailand		1765		2660	99	109	72
United Kingdom							
United States of America	1996	31693		86937	36	105	

¹ Morocco: figures have been estimated

APPENDIX 4 - EXPORTS OF RECOVERED PAPER BY COUNTRY OF DESTINATION IN 2001 (1000 t)

						(100	00 t)									
То	From	Australia	Austria	Belgium	Brazil	Canada	Chile	Czech Rep.	Denmark	Finland	France	Germany	Greece	Hungary	Ireland	Italy
Argentina																
Australia																
Austria				7				9	3		1	541		7		23
Belgium									2	1	38	231				1
Brazil																
Canada																
Chile																
China		62		328						1	23	372			2	22
Czech Republic			12									50				
Denmark												39				
Finland																
France				219								244				1
Germany			121	118				15	167	43	124			1		64
Greece												2				1
Hong Kong		11		25								3			1	
Hungary			3					2				42				1
India		15	_	203					2	6	40	94			10	
Indonesia		113		222						3	16	289			4	11
Ireland																
Italy			11	2					1	1	76	246	9			
Japan				0							1					
Korea Rep. of		1		19							15	49			1	
Latvia																
Malaysia		28		5							9					2
Mexico																
Netherl.			1	511				1	4	11	51	990		1	16	
New Zealand		10														
Norway									10	3		2				
Philippines		8		17								18				
Poland												1				
Portugal												4				
Romania																
Singapore		1														
Slovak Republic			10					57				48		6		
Slovenia			24					1				65		2		37
Spain				1						1	383	25			21	2
Sweden									170	12	1	150				
Switzerland			1	1					1	1	53	109				8
Taiwan		3		41							19	284			8	2
Thailand		1		24							3	35			1	
Turkey																22
Ukraine								3		1				9		2
United Kingdom				3						2	4	5			25	1
USA		2		2		357						1				
Venezuela											1					
Vietnam		2		1												
Total Others		4	42	16	4	0	11	0	1	15	20	81	0	0	1	57
TOTAL		261	225	1.765	4	357	11	88	361	101	878	4.020	9	26	90	257

Notes : Denmark, Greece and Ireland: figures have been estimated

APPENDIX 4 (cont.) (1000 t)

To						(1000	t)								
Australia Austria 5			Latvia	Netherlands	New Zealand	Norway	Portugal	Slovak Rep.	Slovenia	Spain	Sweden	Switzerland	N N	USA	TOTAL
Austria	Argentina													4	4
Belgium Farzill Canada Damark Canada Sas	Australia				16									3	19
Brazil	Austria			5				3	30		7	56	15	1	708
Canada	Belgium			110									24	2	409
Chile Chile Chile S88 74 77 77 80 80 82 Czech Republic Denmark S18 81 81 84 Firance S67 Firance S67 81 81 81 81 83 81 84 84 Firance S67 640 85 860 87 87 87 87 88 80 81 81 81 83 81 81 83 81 83 81 81 83 83 83 83 83 83 83 83 83 83 83 83 83	Brazil													10	10
China	Canada													1.932	1.932
Czech Republic	Chile													12	12
Czech Republic	China	588		74	7					2			71	3.302	4.854
Denmark	Czech Republic														62
France	Denmark			5		22					18				84
Germany	Finland					1					23				24
Greece Hong Kong Hungary Hunga	France			185		2				8		81	163	7	910
Hong Kong	Germany			465		4			70	5	32	66	70	3	1.368
Hong Kong	Greece													3	6
Hungary	Hong Kong	6		10									43	16	115
India								2							50
Ireland	India			275	3						3		43	516	1.210
Ireland	Indonesia	60		495	27								80	351	1.671
Japan	Ireland												5		5
Korea Rep. of 115	Italy								40	20	18	75	43	130	672
Latvia	Japan				1									181	183
Latvia	Korea Rep. of	115			1								26	901	1.128
Mexico 2 1 0 1 2 800 804 New Zealand 1 0 1 2 111 59 1.760 Norway 2 32 6 55 55 Polinippines 78 15 1 32 6 55 Poland 1 1 2 28 237 19 Romania 1<	Latvia														0
Mexico 2 1 0 1 2 800 804 New Zealand 1 0 1 2 111 59 1.760 Norway 2 32 6 55 55 Polinippines 78 15 1 32 6 55 Poland 1 1 2 28 237 19 Romania 1<	Malaysia	4			26								18	8	100
New Zealand	Mexico			2									2	800	804
Norway	Netherl.					1				0	1	2	111	59	1.760
Philippines 78	New Zealand														10
Poland Portugal Romania Singapore 5 S S S S S S S S S S S S S S S S S S	Norway			2							32		6		55
Portugal Romania	Philippines	78		15	1								2	98	237
Romania	Poland							1							2
Singapore 5 2 8 Slovak Republic 7 128 Slovenia 1 130 Spain 117 2 22 40 614 Sweden 5 109 138 1 586 Switzerland 5 109 111 6 196 Taiwan 237 12 257 863 Thailand 351 30 4 2 341 792 Turkey 10 19 2 341 792 Ukraine 10 19 26 156 USA 35 1 3 40 Venezuela 2 90 93 Vietnam 20 1 1 33 755 Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755	Portugal									8				7	19
Slovata Republic	Romania											1			1
Solvenia	Singapore	5												2	8
Spain 117 2 22 40 614 Sweden 5 109 138 1 586 Switzerland 5 109 11 6 196 Taiwan 237 12 257 863 Thailand 351 30 4 2 341 792 Turkey 10 19 0 15 37 Ukraine 10 19 44	Slovak Republic												7		128
Spain 117 2 22 40 614 Sweden 5 109 138 1 586 Switzerland 5 109 11 6 196 Taiwan 237 12 257 863 Thailand 351 30 4 2 341 792 Turkey 10 19 0 15 37 Ukraine 10 19 44	Slovenia											1			130
Sweden 5 109 138 1 586 Switzerland 5 109 111 6 196 Taiwan 237 12 257 863 Thailand 351 30 4 2 341 792 Turkey 0 15 37 Ukraine 10 19 44 United Kingdom 90 26 156 USA 35 1 3 401 Venezuela 2 90 93 Vietnam 20 1 90 93 Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755	Spain						117				2		22	40	
Switzerland 5 11 6 196 Taiwan 237 12 257 863 Thailand 351 30 4 2 341 792 Turkey 0 15 37 Ukraine 10 19 44 United Kingdom 90 26 156 USA 35 1 3 401 Venezuela 2 90 93 Vietnam 20 1 1 33 401 Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755	Sweden			5		109							138	1	586
Taiwan 237 12 257 863 Thailand 351 30 4 2 341 792 Turkey 0 15 37 Ukraine 10 19 44 United Kingdom 90 26 156 USA 35 1 3 401 Venezuela 2 90 93 Vietnam 20 1 90 30 26 2 0 41 333 755 Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755	Switzerland												11	6	196
Turkey 0 10 15 37 Ukraine 10 19 19 44 United Kingdom 90 26 156 USA 35 1 1 3 3 401 Venezuela 2 90 90 93 Vietnam 20 1 1 9 90 93 Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755	Taiwan	237													863
Turkey 0 10 15 37 Ukraine 10 19 19 44 United Kingdom 90 26 156 USA 35 1 1 3 3 401 Venezuela 2 90 90 93 Vietnam 20 1 1 9 90 93 Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755	Thailand	351		30	4								2	341	792
Ukraine 10 19 44 United Kingdom 90 26 156 USA 35 1 3 401 Venezuela 2 90 93 Vietnam 20 1 1 19 43 Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755	Turkey														37
United Kingdom 90 26 156 USA 35 1 3 401 Venezuela 2 90 93 Vietnam 20 1 90 93 Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755	Ukraine		10					19							44
USA 35 1 3 401 Venezuela 2 90 93 Vietnam 20 1 90 93 Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755	United Kingdom			90										26	
Venezuela 2 90 93 Vietnam 20 1 19 43 Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755	USA									1			3		
Vietnam 20 1 9 43 Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755														90	
Total Others 2 16 0 0 53 0 0 30 26 2 0 41 333 755		20			1										43
			16	0		53	0	n	30	26	2	0	41		
	TOTAL	1.466	26	1.810	87	192	117	25	170	70	138	282	958	9.476	

Notes: Denmark, Greece and Ireland: figures have been estimated

APPENDIX 5 - IMPORTS OF RECOVERED PAPER BY COUNTRY OF ORIGIN IN 2001 (1000 t)

-						(1000	t)								
To From	Austria	Belgium	Brazil	Canada	Colombia	Czech Rep.	Denmark	Finland	France	Germany	Greece	Hungary	Indonesia	Italy	Japan
Argentina															
Australia															
Austria						11			1	116		3		8	
Belgium	7							1	293	183	1			2	
Brazil															
Canada		1			1					1				13	1
Chile		-			2										
China					_										
Czech Republic	11									17		2			
Denmark	4	2								145				3	
Finland	20	_							1	45		1		1	
France	2	96								153				104	
Germany	679	215				37	53	46	376	100		44		248	
Greece	0.0	210				01	- 00	10	010					13	
Hungary	7													10	
Hong Kong															
India															
Indonesia															
Ireland		1													
Italy	27	'							2	39	1	1			
Japan										00					
Korea Rep. of															
Latvia															
Malaysia															
Mexico															9
Netherlands	14	448				2	3		115	697	1			36	
Norway	17	770					25	1	110	7				- 00	
Philippines							20			•					
Poland	3					4				18					
Portugal	-					•				1					
Romania												1			
Singapore															
Slovak Republic	4					1						3			
Slovenia	·					•				1	1	J		1	
Spain									9	7				25	
Sweden	7						24	26	1	40				19	
Switzerland	36						24	20	81	78				62	
Taiwan	30								01	10				02	
Thailand															
Turkey															
United Kingdom	20	22							202	45				33	
USA	20	7		1.929	28			3	4	2	3			91	203
Ukraine				1.523	20			1	4		3			91	203
Venezuela					6										
Vietnam					б										
			40	_	00					_	,	^	2.477	^	
Others	0	2	12	0	33	0	0	4	1 000	5	2	0		8	
Notes : Denmark Greece	841	794	12	1.929	70	55	105	. 82	1.086	1.600	9	55	2.477	667	214

Notes : Denmark, Greece, Ireland and Morocco: figures have been estimated

APPENDIX 5 (cont.) (1000 t)

-	-1				-	(1000	t)								1
T	Mexico	Morocco	Netherlands	Norway	Portugal	Romania	Slovak Rep.	Slovenia	Spain	Sweden	Switzerland	Thailand	UK	USA	TOTAL
Argentina															0
Australia														2	
Austria							10	2	1		4				156
Belgium			350						4	4	2	21			868
Brazil															0
Canada									2				2	279	300
Chile															2
China															0
Czech Republic							61								91
Denmark				17						162	1				334
Finland				3					1	10	1		1		84
France			75	3	1				526	1	40	7	2		1.010
Germany			1.085	3	5	7	52	3	41	119	149	35	1		3.198
Greece			1.000			•							•		13
Hungary						4	6								17
Hong Kong															0
India															0
Indonesia															0
Ireland			7						19				5		32
Italy			4						2		9				85
Japan			7								3	312			312
Korea Rep. of												012			0
Latvia															0
Malaysia												3			3
Mexico												-		15	
Netherlands				6					7	26	7	30	4	10	1.396
Norway			5	U						135	,	3	7		176
Philippines			3							100		J			0
Poland							7			1					33
Portugal							,		108						109
Romania									100						103
Singapore												75,0			75
Slovak Republic												73,0			8
Slovenia															3
Spain		32			2										75
Sweden		32	2	41					5			3			168
Switzerland				41					3			J			257
Taiwan															0
Thailand															0
Turkey United Kingdom			150	3					8	104	9	3			0 599
USA			22	3	11				40	104	9	434	4		
Ukraine					11				40			434	4		2.781
Venezuela															1
															6
Vietnam	4.040	_	_		^		^	20	-		^	24			
Others	1.210			0		0	0	22	7	9	0	21	1	207	
TOTAL	1.210	32	1.700	76	19	11	136	27	771	571	222	947	20	297	16.035

Notes : Denmark, Greece, Ireland and Morocco: figures have been estimated