

ANALYSIS AND EVALUATION ON THE CATCH WEIGHTS AND GROWTH FACTORS OF ATLANTIC BLUEFIN TUNA BASED ON BLUEFIN TUNA CATCH DOCUMENTS

S. Ota¹, M. Wada¹, M. Kaneko¹, and M. Iioka¹

SUMMARY

The ICCAT Bluefin Tuna Catch Documentation Scheme, which has been implemented since 2008, can trace movement of bluefin tuna from catch to farm and from farm to trade and is one of the effective tools to monitor compliance of catch allocation for Atlantic bluefin tuna (ABT). Also, analysis on Bluefin Tuna Catch Documents (BCDs) which Japan, as the largest market in the world, has received so far is quite meaningful to grasp the approximate catch weights. It should be noted that previous catch estimates based on trade statistical data had various problems such as: (i) the catch year is not necessarily the same as the import year because it takes more than several months to catch, cage, harvest and export Atlantic bluefin tuna; and (ii) the original catch weight varies, depending on what growth factor is used. The compilation and analysis of data obtained through the BCDs which Japan has received so far could provide a better picture of the relationship among catch weight, caged weight, harvested weight and exported weight. Also, based on these data, the Fisheries Agency of Japan has tried to analyse quota management of each flag country and the validity of growth factors and reports the evaluation to the Species Group.

RÉSUMÉ

Le programme ICCAT de documentation des captures de thon rouge, qui fonctionne depuis 2008, peut suivre la trace du thon rouge de la capture à la ferme et de la ferme à sa commercialisation et il s'agit d'un des outils efficaces pour contrôler l'application de l'allocation de capture du thon rouge de l'Atlantique. Par ailleurs, pour se faire une idée approximative du poids des captures, il s'est avéré utile d'analyser les documents de capture de thon rouge (BCD) que le Japon, en tant que principal marché mondial, a reçus jusqu'à présent. Il conviendrait de noter que les estimations antérieures des captures basées sur les données statistiques commerciales présentaient divers problèmes, à savoir : (i) l'année de la capture n'est pas nécessairement la même que l'année d'importation étant donné que plusieurs mois s'écoulent pour capturer, mettre en cage, mettre à mort et exporter le thon rouge de l'Atlantique ; et (ii) le poids original de la capture varie en fonction du facteur de croissance qui est utilisé. La compilation et l'analyse des données obtenues par les BCD que le Japon a reçus jusqu'à présent pourraient fournir une image améliorée des relations entre le poids de la capture, le poids du thon mis en cage, le poids du thon mis à mort et le poids du thon exporté. De surcroît, sur la base de ces données, l'Agence des Pêches du Japon a tenté d'analyser la gestion des quotas de chaque pays de pavillon et la validité des facteurs de croissance et elle fait un rapport de son évaluation au Groupe d'espèces.

RESUMEN

El programa de documentación de capturas de atún rojo de ICCAT, que se está implementando desde 2008, puede rastrear los movimientos del atún rojo desde la captura hasta la granja y desde la granja hasta su comercialización, y es una de las herramientas más eficaces para realizar un seguimiento del cumplimiento de las asignaciones de cuota de atún rojo del Atlántico (ABT). Además, el análisis de los documentos de capturas de atún rojo (BCD) que Japón, el mayor mercado del mundo, ha recibido hasta la fecha es muy significativo para adquirir un conocimiento aproximado de los pesos de la captura. Cabe señalar que las estimaciones anteriores de la captura basadas en datos estadísticos de comercio planteaban diversos problemas, como: (i) el año de captura no era necesariamente el mismo año que el de la importación ya que se requieren varios meses para capturar, introducir en jaulas, sacrificar y exportar el atún rojo y (ii) el peso original de la captura varía en función del factor de

¹Fisheries Agency of Japan. 1-2-1 Kasumigaseki, Chiyoda-Ku, Tokyo, 100-8907 JAPAN. morio_kaneko@nm.maff.go.jp

crecimiento utilizado. La compilación y análisis de los datos obtenidos de los BCD recibidos por Japón hasta la fecha podría proporcionar una mejor estimación de la relación entre peso de la captura, peso en jaulas, peso en el sacrificio y peso en la exportación. Asimismo, basándose en dichos datos, la Agencia de Pesca de Japón ha tratado de analizar la gestión de cuota de cada país de pabellón y la validez de los factores de crecimiento y presentó su informe de evaluación al Grupo de especies.

KEYWORDS

Atlantic bluefin tuna, Bluefin Tuna Catch Documents, quota, catch weights, farming weights, harvest weights, growth factors, fishery management, compliance

1. Introduction

The Bluefin Catch Documentation (BCD), which was started in 2008, is one of the effective tools for monitoring compliance of catch allocation of ABT since it can trace the movement of the same lot of fish from catch to the final destination. Japan has been the biggest ABT market in the world. Analyzing BCDs coming into the Japanese market can give good estimates on catch amount by each CPC. The past analyses on catch amount based on trade data could not give good estimates because of: (i) it takes several months from catch to export in the case of farming, and thus the year of catch often differs from the year of trade; (ii) the original catch weight is quite different from the traded weight, depending on which growth factor is used. This time, information from each BCD was analyzed, giving more accurate relationship among catch weight, farmed weight, harvested weight and exported weight. Also, based on the information, analysis was conducted on quota management by each CPC by the fishing season and validity of the current growth factor.

2. Analysis Methods

2.1 Comparison-analysis between CPCs' catch and their quota

Based on the data and information from BCDs which had got clearance of the Japanese customs by the end of 2011, catch weight figures of all BCDs were compiled by the catch year and compared with annual quota of each CPC.

2.2 Comparison-analysis of farming weights and harvesting weights

In accordance with the methods of in the "Preliminary analysis on the catch weight of Atlantic bluefin tuna (S. Ota and S. Fukui, 2011), using Catch information, Farming information and Harvesting information of BCD on the date, the number of fish, the weight of fish at the time of catching, farming (i.e., caging) and harvesting as well as growth factors temporarily decided by SCRS, an expected harvesting weight was calculated by multiplying a farming weight by a growth factor depending on the length of farming. The calculated expected harvesting weight was compared with the actual harvesting weight to verify the validity of the current SCRS growth factors.

Also, an expected farming weight was calculated by dividing a harvesting weight by a SCRS growth factor. The calculated expected farming weight was compared with the actual reported farming weight to verify the validity of the current SCRS growth factors.

3. Results of analysis and discussion

3.1 Comparison-analysis between CPCs' catch and their quota

It is possible to monitor how much fish was caught by which country and how much fish was transferred to which farming country by the fishing year by compiling information on BCDs. Using the advantage of BCDs, the data and information of BCDs accompanied fish exported for Japan showed that all CPCs' Catch Weights during 3 year from 2009 to 2011 were managed under their Quotas (**Table 1**).

3.2 Comparison-analysis of farming weights and harvesting weights

3.2.1 Comparison-analysis 1

There are actual cases where many BFTs accompanied by multiple and different BCDs are farmed in the same cage and the origin of a harvested BFT cannot be traced back. In this case, a question arises on whether the farmed fish are not necessarily identical to the harvested fish on the same BCD. In order to overcome the matter, in our analysis, a growth factor was synthetically verified on the basis of a group BCD which has the same document number and farming facility.

Also, it was recognized there was a tendency that bigger fish are farmed in a relatively short period and harvested while smaller fish are farmed in a longer period and harvested when several harvests are made from a group of fish covered by one same BCD. In this case, there was a tendency that growth rates in the initial harvesting stage looked very large relative to the SCRS growth factors while growth rates in the later harvesting stage were getting to diminish because the average farming weight is the average of all the fish (**Table 2**).

Because of these reasons, the proportion of actual harvesting weight to expected harvesting weight ranges widely and the number of cases falling into the classes from 90% to 110% occupies only about 35% on the basis of the number of BCDs and about 20% on the basis of the number of harvested fish (**Table 3** and **Figure 1**).

3.2.2 Comparison-analysis 2

Also, Comparison was made between expected farming weight figures calculated by dividing harvesting weight figures by a SCRS growth factor and the actual reported farming weight figures. The results generally indicate that the actual reported farming weight figures are greater than the expected farming weight figures. This suggests that a growth rate between an actual reported farming weight and an actual harvesting weight was generally smaller than the SCRS growth factor (**Table 4**).

4. Conclusion

The result of comparison-analysis between CPCs' catch and their quota led to the conclusion that CPCs appropriately conducted their quota management of ABF (**Table 1**).

As the result of "Comparison-analysis 1" of farming weights and harvesting weights, rate figures between actual harvesting weight and expected harvesting weight both on the basis of the number of BCDs and on the basis of the number of harvested fish were widely distributed (**Table 3** and **Figure 1**). Further improvement will be required to utilize better data from BCDs to check the validity of reported data.

The result of "Comparison-analysis 2" of farming weights and harvesting weights indicates that there are theoretically two cases, assuming that harvesting weight figures are more reliable than reported farming figures and the SCRS growth factor: (i) an actual farming weight is over-reported or (ii) the SCRS growth factor is greater than actual growth rate (**Table 4**). In reality, there is no possibility of (i), it seems that the SCRS growth factor is greater than real and should be reviewed and modified. Improving the growth factor could verify an actual reported farming weight more accurately.

Based on the result of analysis and evaluation on BCDs, compilation and analysis of information from BCDs can be used to monitor how much fish was caught by which country by the fishing year. If we continue to conduct the BCDs work, it is expected that it will be possible to conduct better observation on situation in compliance with fishery management regulations and rules by calculating accurate catch weights from harvested growing ABTs and comparing them with quotas in future.

References

S. Ota and S. Fukui. 2011. Preliminary analysis on the catch weight of Atlantic bluefin tuna.

Table 1. Comparison between Catch Weight and Quota Based on BCDs (2009-2011).

1. East Atlantic and Med

Catch CPCs	2009 fishing season					2010 fishing season				
	Quota (t) (A)	Farming CPCs	Catch Weight (RD) (t) (B)	Comparison between (A) and (B)	Harvest Weight (RD) (t)	Quota (t) (A)	Farming CPCs	Catch Weight (RD) (t) (B)	Comparison between (A) and (B)	Harvest Weight (RD) (t)
EU	11906.62	following EU CPSs sub-total	7829.37	66%	7685.03	7087.38	following EU CPSs sub-total	2695.16	38%	3609.27
CYPRUS	114.37	wild sub-total	0.69	1%		70.18				
FRANCE	3591.11	GREECE	147.26		206.97	2021.93	GREECE	62.96		76.78
		MALTA	1604.08		2226.92		MALTA	662.65		2906.71
GREECE	212.35	SPAIN	1013.04		954.03	130.30	SPAIN	385.83		178.15
		sub-total	2764.38	77%	3387.92		sub-total	1111.44	55%	3161.64
GREECE	212.35	GREECE	197.60		293.38	130.30	GREECE	37.04		55.51
		Wild	10.14				Wild	41.47		
GREECE	212.35	sub-total	207.74	98%	293.38	130.30	sub-total	78.51	60%	55.51
		GREECE	67.70		105.31		1937.50	Wild	103.28	5%
ITALY	3176.10	ITALY	315.85		765.35	1937.50				
		MALTA	1370.42		2051.78					
ITALY	3176.10	TUNISIA	17.71		10.84	1937.50	Wild	103.28	5%	
		TURKEY	10.00		2.29					
ITALY	3176.10	Wild	111.53			1937.50	Wild	103.28	5%	
		sub-total	1893.21	60%	2935.36					
MALTA	262.92	MALTA	52.96		39.62	161.34	Wild	114.33	71%	
		Wild	121.09							
MALTA	262.92	sub-total	174.06	66%	39.62	161.34	Wild	114.33	71%	
		MALTA	256.61		246.43					
SPAIN	4116.53	SPAIN	1504.60		758.37	2526.06	SPAIN	469.65		389.80
		Wild	1011.91				Wild	757.97		
SPAIN	4116.53	sub-total	2773.12	67%	1004.79	2526.06	sub-total	1227.62	49%	389.80
		PORTUGAL	16.18		23.77		237.66	PORTUGAL	3.93	
PORTUGAL	387.30	sub-total	16.18	4%	23.77	237.66		Wild	56.05	
		TURKEY	50.00		65.36		33.83	sub-total	59.98	25%
ALBANIA	50.00	sub-total	50.00	100%	65.36	33.83				
		Wild	41.68				38.48	Wild	38.22	
CHINA	43.76	sub-total	41.68	95%		38.48		sub-total	38.22	99%
		CROATIA	408.46		1510.24		393.50	Wild	0.55	
CROATIA	640.00	sub-total	408.46	64%	1510.24	393.50		sub-total	0.55	0%
		MALTA	102.35		88.72		81.14			
KOREA	132.26	sub-total	102.35	77%	88.72	81.14				
		GREECE	112.29		191.93		725.15	MALTA	527.18	
LIBYA	1091.77	MALTA	736.67		1055.35	725.15				
		TUNISIA	60.29		67.55		725.15	sub-total	571.38	79%
LIBYA	1091.77	Wild	27.76			725.15				
		sub-total	937.02	86%	1314.82					
MOROCCO	2400.00	GREECE	67.59		38.24	1606.96	TURKEY	96.67		127.09
		MALTA	100.00		133.03					
MOROCCO	2400.00	TURKEY	197.60		283.52	1606.96	Wild	1242.35		
		Wild	1758.80				sub-total	1339.03	83%	127.09
MOROCCO	2400.00	sub-total	2123.99	88%	454.79	1606.96	TUNISIA	1010.18		1307.19
		TUNISIA	1588.23		1752.56		1109.51	sub-total	1010.18	91%
TUNISIA	1937.87	TURKEY	232.00		369.45	1109.51				
		Wild	1.99							
TUNISIA	1937.87	sub-total	1822.22	94%	2122.01	1109.51	sub-total	1010.18	91%	1307.19
		TURKEY	667.76		1282.81					
TURKEY	683.11	sub-total	667.76	98%	1282.81	419.06	sub-total	360.61	86%	650.04
		SYRIA	50.00							
sub-total								sub-total	33.83	100%
TOTAL	18889.45		13982.85		14523.78	11526.43		6048.94		6340.58

2. West Atlantic

Catch CPCs	2009 fishing season					2010 fishing season				
	Quota (t) (A)	Farming CPCs	Catch Weight (RD) (t) (B)	Comparison between (A) and (B)	Harvest Weight (RD) (t)	Quota (t) (A)	Farming CPCs	Catch Weight (RD) (t) (B)	Comparison between (A) and (B)	Harvest Weight (RD) (t)
USA	1552.40	WILD	286.94			1257.20	WILD	405.41		
		sub-total	286.94	18%			sub-total	405.41	32%	
CANADA	556.70	WILD	386.87			518.60	WILD	430.87		
		sub-total	386.87	69%			sub-total	430.87	83%	
Total	2109.10		673.81			1775.80		836.28		

1. East Atlantic and Med

Catch CPCs	2011 fishing season				
	Quota (t) (A)	Farming CPCs	Catch Weight (RD) (t) (B)	Comparison between (A) and (B)	Harvest Weight (RD) (t)
EU	5756.41	following EU CPSS sub-total	2197.13	38%	1407.31
CYPRUS	66.98	wild sub-total	6.10 6.10	9%	
FRANCE	958.42	MALTA SPAIN Wild sub-total	263.29 5.33 69.33 337.96	35%	304.76 12.41 317.18
GREECE	124.37	Wild sub-total	38.10 38.10	31%	
ITALY	1787.91	ITALY MALTA Wild sub-total	454.00 79.80 51.75 585.55	33%	217.23 39.93 257.15
MALTA	153.99	Wild sub-total	41.73 41.73	27%	
SPAIN	2411.01	SPAIN Wild sub-total	521.76 495.48 1017.24	42%	832.98 832.98
PORTUGAL	226.84	Wild sub-total	170.46 170.46	75%	
ALBANIA	32.30				
CHINA	36.77				
CROATIA	376.01	Wild sub-total	1.15 1.15	0%	
KOREA	77.53				
LIBYA	902.66				
MOROCCO	1238.33	Wild sub-total	1024.12 1024.12	83%	
TUNISIA	860.18				
TURKEY	535.89	TURKEY Wild sub-total	112.16 1.46 113.62	21%	140.38 140.38
SYRIA	82.05				
TOTAL	9871.24		3336.00		1547.69

2. West Atlantic

Catch CPCs	2011 fishing season				
	Quota (t) (A)	Farming CPCs	Catch Weight (RD) (t) (B)	Comparison between (A) and (B)	Harvest Weight (RD) (t)
USA	1043.60	WILD sub-total	310.56 310.56	30%	
CANADA	491.50	WILD sub-total	363.14 363.14	74%	
Total	1535.10		673.69		

Table 2. Extract version of basic data based on BCDs of BFTs farmed in 2009.

Farming State	Catch Information					Farming Information							Accumulated harvest Information					
	Catch CPC's	BCD NO.	Catch weight (kg)	No. of fish	Average weight (kg)	No. of caged fish	Farming Total Weight(kg)	Farming AVG Weight(kg)	from Farming Date	to Harvest Date	Duration of farming (month)	expected growth rate (%)	No. of Harvested fish	Actual harvest weight (kg)	Actual average weight (kg)	Expected harvest weight (kg)	Actual/Expected harvest weight (%)	No. of Harvested Fish / Caged Fish (%)
CROATIA	CROATIA	HRV-09-134-008	1600	160	10	160	1600	10	2009/6/18	2009/11/20	6	114	158	6004	38	3381	178	99
CROATIA	CROATIA	HRV-09-160-003	1190	70	17	70	1190	17	2009/5/15	2009/11/20	7	125	68	2992	44	2601	115	97
CROATIA	CROATIA	HRV-09-058-002	600	60	10	60	600	10	2009/6/25	2010/1/9	7	125	53	1802	34	1193	151	88
GREECE	GREECE	GR 09003200003-1	34000	850	40	841	33730	40	2009/7/23	2010/1/25	7	88	541	40661	75	40785	100	64
GREECE	GREECE	GR 09014551001-01	26950	539	50	534	26775	50	2009/7/23	2010/2/7	7	81	204	26174	128	18514	141	38
GREECE	GREECE	GR 09014551002-01	34650	711	49	704	34405	49	2009/7/23	2010/2/9	7	81	207	31867	154	18310	174	29
GREECE	ITALY	IT-09-000433-01	5240	104	51	100	5060	51	2009/7/28	2010/2/5	7	81	33	7431	225	3022	246	33
GREECE	ITALY	IT-09-000595-01	7898	175	45	168	7583	45	2009/7/28	2010/2/5	7	81	50	11259	225	4084	276	30
GREECE	ITALY	IT-09-000597-01	7560	175	43	168	7245	43	2009/7/28	2010/2/8	7	81	30	3618	121	2342	155	18
GREECE	ITALY	IT-09-000430-01	7664	171	45	165	7394	45	2009/7/28	2010/2/8	7	81	30	3618	121	2433	149	18
GREECE	ITALY	IT-09-000432-01	7336	170	43	164	7066	43	2009/7/28	2010/2/8	7	81	30	3618	121	2339	155	18
GREECE	LIBYA	LY-09-000138	2340	47	50	45	2250	50	2009/7/28	2010/2/5	7	81	44	3960	90	3982	99	98
GREECE	LIBYA	LY-09-000128	2340	47	50	45	2250	50	2009/7/28	2010/2/5	7	81	44	3960	90	3982	99	98
GREECE	LIBYA	LY-09-000133	2340	47	50	45	2250	50	2009/7/28	2010/2/5	7	81	44	3960	90	3982	99	98
GREECE	LIBYA	LY-09-000060-01	3422	76	45	73	3287	45	2009/7/28	2010/2/8	7	81	30	3618	121	2445	148	41
GREECE	LIBYA	LY-09-000153-01	2340	47	50	45	2250	50	2009/7/28	2010/2/8	7	81	18	2174	121	1629	133	40
GREECE	LIBYA	LY-09-000101-01	3422	76	45	73	3287	45	2009/7/28	2010/2/8	7	81	30	3618	121	2445	148	41
GREECE	LIBYA	LY-09-000055-01	3422	76	45	73	3287	45	2009/7/28	2010/2/8	7	81	30	3618	121	2445	148	41
GREECE	LIBYA	LY-09-000057-01	3422	76	45	73	3287	45	2009/7/28	2010/2/8	7	81	30	3618	121	2445	148	41
GREECE	LIBYA	LY-09-000132-01	3276	76	43	73	3141	43	2009/7/28	2010/2/8	7	81	30	3618	121	2336	155	41
GREECE	LIBYA	LY-09-000152-01	3276	76	43	73	3141	43	2009/7/28	2010/2/8	7	81	30	3618	121	2336	155	41
GREECE	LIBYA	LY-09-000127-01	3276	76	43	73	3141	43	2009/7/28	2010/2/8	7	81	30	3618	121	2336	155	41
GREECE	LIBYA	LY-09-000137-01	3276	76	43	73	3141	43	2009/7/28	2010/2/8	7	81	30	3618	121	2336	155	41
ITALY	ITALY	IT-09-000571-2	124000	2000	62	2000	124000	62	2009/7/3	2009/12/31	6	66	487	40933	84	50122	82	24
		IT-09-000571-3							2009/7/3	2010/1/24	7	74	1940	212325	109	206872	103	97
ITALY	ITALY	IT-09-000062-1	20000	500	40	500	20000	40	2009/6/9	2009/12/23	7	88	39	2369	61	2933	81	8
		IT-09-000062-2							2009/6/9	2009/12/23	7	88	50	2937	59	3760	78	10
		IT-09-000062-4							2009/6/9	2009/12/25	7	88	62	3689	60	4662	79	12
		IT-09-000062-3							2009/6/9	2009/12/25	7	88	117	4054	35	8798	46	23
		IT-09-000062-5							2009/6/9	2009/12/27	7	88	185	7607	41	13912	55	37
		IT-09-000062-6							2009/6/9	2010/1/1	7	88	190	7847	41	14288	55	38
		IT-09-000062-7							2009/6/9	2010/2/19	9	109	202	8871	44	15291	58	40
ITALY	ITALY	IT-09-000032-1	18000	450	40	450	18000	40	2009/6/9	2010/2/26	9	109	30	2077	69	2508	83	7
		IT-09-000032-2							2009/6/9	2010/2/26	9	109	40	2894	72	3344	87	9
ITALY	ITALY	IT-09-000111-1	67500	675	100	675	67500	100	2009/6/17	2010/3/8	9	80	7	2226	318	1260	177	1
		IT-09-000111-2							2009/6/17	2010/3/8	9	80	9	2662	296	1620	164	1
MALTA	FRANCE	FR-09-005494	17230	146	118	146	17230	118	2009/6/26	2009/12/23	6	57	80	20060	251	14821	135	55
		FR-09-005494-1							2009/6/26	2009/12/26	7	63	139	22916	165	26169	88	95
MALTA	FRANCE	FR-09-005519	17230	146	118	146	17230	118	2009/6/26	2009/12/23	6	57	100	20845	208	18526	113	68
		FR-09-005519-1							2009/6/26	2009/12/26	7	63	141	22744	161	26412	86	97
MALTA	FRANCE	FR-09-005486	26796	268	100	268	26796	100	2009/6/27	2009/12/23	6	60	140	29450	210	22400	131	52
		FR-09-005486-1							2009/6/27	2010/1/2	7	67	247	35371	143	40269	88	92
MALTA	FRANCE	FR-09-005511	26796	268	100	268	26796	100	2009/6/27	2009/12/23	6	60	138	29351	213	22080	133	51

		FR-09-005511-1							2009/6/27	2010/1/2	7	67	249	35371	142	40617	87	93
MALTA	FRANCE	FR-09-005488	11484	147	78	147	11484	78	2009/6/27	2009/12/23	6	63	84	12743	152	10680	119	57
		FR-09-005488-1							2009/6/27	2010/1/2	7	71	131	15523	118	16949	92	89
MALTA	FRANCE	FR-09-005512	11484	147	78	147	11484	78	2009/6/27	2009/12/23	6	63	105	13684	130	13350	103	71
		FR-09-005512-1							2009/6/27	2010/1/2	7	71	141	15503	110	18151	85	96
MALTA	FRANCE	FR-09-005487	22968	189	121	189	22968	121	2009/6/27	2009/12/23	6	57	92	24577	267	17477	141	49
		FR-09-005487-1							2009/6/27	2010/1/2	7	63	182	30318	167	35228	86	96
MALTA	FRANCE	FR-09-005513	22968	189	121	189	22968	121	2009/6/27	2009/12/23	6	57	128	27757	217	24316	114	68
		FR-09-005513-1							2009/6/27	2010/1/2	7	63	183	30318	166	35164	86	97
MALTA	FRANCE	FR-09-005521	41534	377	110	377	41534	110	2009/6/26	2009/12/23	6	57	143	44968	314	24696	182	38
		FR-09-005521-1							2009/6/26	2009/12/31	7	63	369	54825	149	65218	84	98
MALTA	FRANCE	FR-09-005493-1	3445	35	98	35	3445	98	2009/6/27	2010/2/1	8	73	34	4651	137	5706	82	97
MALTA	FRANCE	FR-09-005479	20709	278	74	278	20709	74	2009/6/23	2009/12/31	7	71	50	18172	363	6327	287	18
		FR-09-005479-1							2009/6/23	2010/2/1	8	78	255	27957	110	33330	84	92
MALTA	FRANCE	FR-09-005481	8510	161	53	161	8510	53	2009/6/23	2009/12/31	7	81	24	5744	239	2302	249	15
		FR-09-005481-1							2009/6/23	2010/2/1	8	90	146	11488	79	14588	79	91
MALTA	FRANCE	FR-09-005482	13957	255	55	255	13957	55	2009/6/23	2009/12/31	7	81	29	9609	331	2887	333	11
		FR-09-005482-1							2009/6/23	2010/2/1	8	90	243	18842	78	25250	75	95
MALTA	FRANCE	FR-09-005490	5740	116	50	116	5740	50	2009/6/27	2009/12/31	7	81	21	3875	185	1901	204	18
		FR-09-005490-1							2009/6/27	2010/2/1	8	90	113	7750	69	10641	73	97
MALTA	FRANCE	FR-09-005491	3830	38	100	38	3830	100	2009/6/27	2009/12/31	7	67	10	3619	362	1670	217	26
		FR-09-005491-1							2009/6/27	2010/2/1	8	73	37	5170	140	6341	82	97
MALTA	FRANCE	FR-09-005492	4400	46	95	46	4400	95	2009/6/27	2009/12/31	7	67	12	4185	349	1904	220	26
		FR-09-005492-1							2009/6/27	2010/2/1	8	73	45	5967	133	7327	81	98
MALTA	FRANCE	FR-09-005506	8510	161	53	161	8510	53	2009/6/23	2009/12/31	7	81	24	5744	239	2302	249	15
		FR-09-005506-1							2009/6/23	2010/2/1	8	90	149	11488	77	14890	77	93
MALTA	FRANCE	FR-09-005507	13957	255	54	255	13957	54	2009/6/23	2009/12/31	7	81	29	9609	331	2834	339	11
		FR-09-005507-1							2009/6/23	2010/2/1	8	90	244	18842	77	24893	76	96
MALTA	FRANCE	FR-09-005515	5740	116	50	116	5740	50	2009/6/27	2009/12/31	7	81	21	3875	185	1901	204	18
		FR-09-005515-1							2009/6/27	2010/2/1	8	90	113	7750	69	10641	73	97
MALTA	FRANCE	FR-09-005516	3830	38	100	38	3830	100	2009/6/27	2009/12/31	7	67	10	3619	362	1670	217	26
		FR-09-005516-1							2009/6/27	2010/2/1	8	73	34	5170	152	5822	89	89
MALTA	FRANCE	FR-09-005517	4400	46	95	46	4400	95	2009/6/27	2009/12/31	7	67	12	4158	347	1904	218	26
		FR-09-005517-1							2009/6/27	2010/2/1	8	73	44	5940	135	7163	83	96
MALTA	FRANCE	FR-09-005518	3445	35	98	35	3445	98	2009/6/27	2009/12/31	7	67	10	3256	326	1637	199	29
		FR-09-005518-1							2009/6/27	2010/2/1	8	73	33	4651	141	5536	84	94
MALTA	FRANCE	FR-09-005504	20709	278	74	278	20709	74	2009/6/23	2009/12/31	7	71	50	18172	363	6327	287	18
		FR-09-005504-1							2009/6/23	2010/2/1	8	78	245	27957	114	32012	87	88
MALTA	FRANCE	FR-09-005351	5760	35	165	35	5760	165	2009/6/15	2009/12/26	7	56	26	7223	278	6692	108	74
MALTA	FRANCE	FR-09-005352	81000	1700	48	1696	80820	48	2009/6/19	2010/1/2	7	81	216	40643	188	18766	217	13
MALTA	FRANCE	FR-09-005489	7656	154	50	154	7656	50	2009/6/27	2010/1/2	7	81	135	10336	77	12218	85	88
MALTA	FRANCE	FR-09-005514	7656	154	50	154	7656	50	2009/6/27	2010/1/2	7	81	132	10336	78	11946	87	86
MALTA	FRANCE	FR-09-005496	41534	377	110	377	41534	110	2009/6/26	2009/12/31	7	63	371	54825	148	66520	82	98
MALTA	ITALY	IT-09-000349	3941	41	96	41	3941	96	2009/6/15	2009/10/13	4	45	4	928	232	557	167	10
		IT-09-000349-1							2009/6/15	2009/10/16	5	54	9	1990	221	1296	154	22
		IT-09-000349-2							2009/6/15	2009/11/2	5	54	15	3310	221	2183	152	37
		IT-09-000349-3							2009/6/15	2009/11/16	6	60	22	4364	198	3258	134	54
MALTA	ITALY	IT-09-000697-1	6412	57	112	57	6412	112	2009/6/23	2009/10/20	4	43	6	1561	260	965	162	11
		IT-09-000697							2009/6/23	2009/10/20	4	43	11	2586	235	1769	146	19
		IT-09-000697-2							2009/6/23	2009/10/23	5	51	16	3766	235	2619	144	28

		IT-09-000697-3							2009/6/23	2009/10/26	5	51	18	4151	231	2958	140	32
		IT-09-000697-4							2009/6/23	2009/10/26	5	51	21	4795	228	3468	138	37
		IT-09-000697-5							2009/6/23	2009/10/29	5	51	26	6011	231	4317	139	46
		IT-09-000697-6							2009/6/23	2009/11/9	5	51	31	6984	225	5167	135	54
		IT-09-000697-7							2009/6/23	2009/11/28	6	57	38	8028	211	6403	125	67
		IT-09-000697-8							2009/6/23	2010/1/6	7	63	38	8028	211	6403	125	67
		IT-09-000697-9							2009/6/23	2010/2/22	8	69	44	8742	199	7544	116	77
MALTA	ITALY	IT-09-000369	11595	103	113	103	11595	113	2009/6/23	2009/11/28	6	57	5	678	136	884	77	5
		IT-09-000369-2							2009/6/23	2009/12/5	6	57	11	1959	178	1944	101	11
		IT-09-000369-1							2009/6/23	2009/12/5	6	57	17	3055	180	3004	102	17
		IT-09-000369-4							2009/6/23	2009/12/7	6	57	22	4053	184	3888	104	21
		IT-09-000369-3							2009/6/23	2009/12/7	6	57	27	4939	183	4772	104	26
		IT-09-000369-5							2009/6/23	2009/12/11	6	57	39	7822	201	6893	113	38
		IT-09-000369-6							2009/6/23	2009/12/14	6	57	55	10069	183	9720	104	53
		IT-09-000369-7							2009/6/23	2009/12/18	6	57	76	13308	175	13432	99	74
		IT-09-000369-8							2009/6/23	2009/12/21	6	57	86	14779	172	15199	97	83
IT-09-000369-9	2009/6/23	2010/2/19	8	69	97	16510	170	17292	95	94								
MALTA	ITALY	IT-09-000172	4137	43	96	43	4137	96	2009/6/15	2009/12/1	6	60	6	1171	195	924	127	14
		IT-09-000172-1							2009/6/15	2009/12/1	6	60	12	2309	192	1847	125	28
		IT-09-000172-2							2009/6/15	2009/12/4	6	60	18	3625	201	2771	131	42
		IT-09-000172-3							2009/6/15	2009/12/12	6	60	24	4856	202	3694	131	56
		IT-09-000172-4							2009/6/15	2010/2/25	9	80	30	5505	184	4734	116	70
MALTA	ITALY	IT-09-000079	6437	68	95	68	6437	95	2009/6/15	2009/12/19	7	67	15	3379	225	2380	142	22
MALTA	ITALY	IT-09-000098-1	25306	253	100	253	25306	100	2009/6/23	2009/12/26	7	67	23	5120	223	3841	133	9
		IT-09-000098-2							2009/6/23	2009/12/27	7	67	37	7679	208	6179	124	15
MALTA	ITALY	IT-09-000081	16172	144	112	144	16172	112	2009/6/23	2010/1/2	7	63	43	17174	399	7850	219	30
MALTA	ITALY	IT-09-000094	6042	63	96	63	6042	96	2009/6/15	2009/12/26	7	67	44	7178	163	7047	102	70
MALTA	ITALY	IT-09-000096	15184	135	112	135	15184	112	2009/6/23	2009/12/26	7	63	86	18020	210	15700	115	64
MALTA	ITALY	IT-09-000153	7589	164	46	164	7589	46	2009/6/6	2009/12/31	7	81	158	10093	64	13232	76	96
MALTA	ITALY	IT-09-000155	6399	67	96	67	6399	96	2009/6/15	2009/12/26	7	67	47	7602	162	7497	101	70
MALTA	ITALY	IT-09-000159	26794	268	100	268	26794	100	2009/6/23	2009/12/26	7	67	66	12659	192	11020	115	25
MALTA	ITALY	IT-09-000169	3459	71	49	71	3459	49	2009/6/6	2009/12/31	7	81	70	4670	67	6173	76	99
MALTA	ITALY	IT-09-000170	4096	88	47	88	4096	47	2009/6/6	2009/12/31	7	81	84	5489	65	7076	78	95
MALTA	ITALY	IT-09-000171	2298	69	33	69	2298	33	2009/6/19	2009/12/31	7	88	28	1396	50	1753	80	41
MALTA	ITALY	IT-09-000174	10391	92	113	92	10391	113	2009/6/23	2009/12/23	7	63	56	11712	209	10310	114	61
		IT-09-000174-1							2009/6/23	2009/12/31	7	63	70	12814	183	12888	99	76
MALTA	ITALY	IT-09-000259	5620	59	95	59	5620	95	2009/6/15	2009/12/26	7	67	41	6677	163	6522	102	69
MALTA	ITALY	IT-09-000367	4614	48	96	48	4614	96	2009/6/15	2009/12/26	7	67	34	5481	161	5458	100	71
MALTA	ITALY	IT-09-000371	19324	193	100	193	19324	100	2009/6/23	2009/12/26	7	67	170	24545	144	28424	86	88
MALTA	ITALY	IT-09-000662	4480	97	46	97	4480	46	2009/6/6	2009/12/31	7	81	94	5958	63	7859	76	97
MALTA	ITALY	IT-09-000695	2170	23	94	23	2170	94	2009/6/15	2009/12/26	7	67	14	2492	178	2198	113	61
MALTA	ITALY	IT-09-000696	6048	75	81	75	6048	81	2009/6/16	2009/12/26	7	71	35	6532	187	4826	135	47
MALTA	ITALY	IT-09-000661	2850	59	48	59	2860	48	2009/6/6	2009/12/23	7	81	43	3861	90	3772	102	73
MALTA	ITALY	IT-09-000364	3900	80	49	80	3900	49	2009/6/6	2009/12/23	7	81	63	5265	84	5559	95	79
MALTA	ITALY	IT-09-000152	5406	111	49	111	5406	49	2009/6/6	2009/12/23	7	81	78	7298	94	6875	106	70
MALTA	ITALY	IT-09-000692	2650	55	48	55	2650	48	2009/6/6	2009/12/23	7	81	39	3578	92	3388	106	71
MALTA	ITALY	IT-09-000076	5523	113	49	113	5523	49	2009/6/6	2009/12/23	7	81	82	7456	91	7255	103	73
MALTA	ITALY	IT-09-000091	5180	106	49	106	5180	49	2009/6/6	2009/12/23	7	81	76	6993	92	6723	104	72
MALTA	ITALY	IT-09-000346	3203	66	49	66	3203	49	2009/6/6	2009/12/23	7	81	49	4324	88	4304	100	74
MALTA	ITALY	IT-09-000256	4819	99	49	99	4819	49	2009/6/6	2009/12/23	7	81	84	6506	77	7401	88	85

MALTA	ITALY	IT-09-000693	3050	66	46	66	3050	46	2009/6/6	2009/12/23	7	81	42	4118	98	3497	118	64
MALTA	ITALY	IT-09-000077	7635	165	46	165	7635	46	2009/6/6	2009/12/23	7	81	106	10307	97	8826	117	64
MALTA	ITALY	IT-09-000092	7166	154	47	154	7166	47	2009/6/6	2009/12/23	7	81	102	9674	95	8590	113	66
MALTA	ITALY	IT-09-000257	6666	144	46	144	6666	46	2009/6/6	2009/12/23	7	81	119	8999	76	9970	90	83
MALTA	ITALY	IT-09-000243	22452	398	56	398	22462	56	2009/6/7	2009/12/23	7	74	374	30324	81	36729	83	94
MALTA	ITALY	IT-09-000467	12441	220	57	220	12441	57	2009/6/7	2009/12/23	7	74	209	16795	80	20565	82	95
MALTA	ITALY	IT-09-000046	17547	311	56	311	17547	56	2009/6/7	2009/12/23	7	74	302	23688	78	29648	80	97
MALTA	ITALY	IT-09-000451	15350	272	56	272	15350	56	2009/6/7	2009/12/23	7	74	254	20723	82	24940	83	93
MALTA	ITALY	IT-09-000262	7844	63	125	63	7844	125	2009/6/22	2009/12/23	7	59	60	10433	174	11878	88	95
MALTA	ITALY	IT-09-000097	8435	67	126	67	8435	126	2009/6/22	2009/12/23	7	59	54	11219	208	10818	104	81
MALTA	ITALY	IT-09-000082	8984	72	125	72	8984	125	2009/6/22	2009/12/23	7	59	61	11949	196	12124	99	85
MALTA	ITALY	IT-09-000698	3591	29	124	29	3591	124	2009/6/22	2009/12/23	7	63	22	4776	217	4441	108	76
MALTA	ITALY	IT-09-000158	8931	71	128	71	8931	128	2009/6/22	2009/12/23	7	59	62	11878	192	12598	94	87
MALTA	ITALY	IT-09-000370	6442	52	124	52	6442	124	2009/6/22	2009/12/23	7	63	40	8568	214	8077	106	77
MALTA	ITALY	IT-09-000664	3640	38	96	38	3640	96	2009/6/15	2009/12/23	7	67	20	3876	194	3199	121	53
MALTA	ITALY	IT-09-000154	4637	140	33	140	4637	33	2009/6/19	2009/12/23	7	88	138	6260	45	8593	73	99
MALTA	ITALY	IT-09-000078	4665	141	33	141	4665	33	2009/6/19	2009/12/23	7	88	139	6298	45	8624	73	99
MALTA	ITALY	IT-09-000157	16076	143	112	143	16076	112	2009/6/23	2009/12/23	7	63	134	20843	156	24555	85	94
MALTA	ITALY	IT-09-000176	17318	173	100	173	17318	100	2009/6/23	2009/12/23	7	67	129	20987	163	21565	97	75
MALTA	ITALY	IT-09-000083	26953	270	100	270	26953	100	2009/6/23	2009/12/23	7	67	51	13739	269	8517	161	19
MALTA	ITALY	IT-09-000177	6350	81	78	81	6350	78	2009/6/23	2010/2/1	8	78	52	7325	141	7257	101	64
MALTA	ITALY	IT-09-000372	7086	90	90	90	7086	79	2009/6/23	2010/2/1	8	78	42	746	18	5886	13	47
MALTA	ITALY	IT-09-000260	12550	157	80	157	12550	80	2009/6/16	2010/2/1	8	78	104	14724	142	14798	99	66
MALTA	ITALY	IT-09-000080	14374	180	80	180	14374	80	2009/6/16	2010/2/1	8	78	130	17257	133	18512	93	72
MALTA	ITALY	IT-09-000095	13196	165	80	165	13196	80	2009/6/16	2010/2/1	8	78	80	14258	178	11392	125	48
MALTA	ITALY	IT-09-000048	41796	621	67	621	41796	67	2009/6/26	2010/2/1	8	83	294	42387	144	36209	117	47
MALTA	ITALY	IT-09-000173	9236	115	80	115	9236	80	2009/6/16	2010/2/1	8	78	30	8765	292	4289	204	26
MALTA	ITALY	IT-09-000368	10306	129	80	129	10306	80	2009/6/16	2010/2/1	8	78	56	10742	192	7963	135	43
MALTA	ITALY	IT-09-000156	14290	179	80	179	14290	80	2009/6/16	2010/2/1	8	78	58	13875	239	8242	168	32
MALTA	ITALY	IT-09-000084	9883	126	78	126	9883	78	2009/6/23	2010/2/1	8	78	59	10560	179	8237	128	47
MALTA	ITALY	IT-09-000099	9279	118	79	118	9279	79	2009/6/23	2010/2/1	8	78	87	11247	129	12178	92	74
MALTA	ITALY	IT-09-000453	36564	544	67	544	36564	67	2009/6/26	2010/2/1	8	83	80	25031	313	9840	254	15
MALTA	ITALY	IT-09-000699	10772	108	100	108	10772	100	2009/6/23	2009/11/2	5	54	108	18769	174	16632	113	100
MALTA	LIBYA	LY-09-0000175	4102	41	100	41	4102	100	2009/6/27	2010/1/2	7	67	37	5456	147	6179	88	90
MALTA	LIBYA	LY-09-0000155	4102	41	100	41	4102	100	2009/6/27	2010/1/2	7	67	36	5456	152	6012	91	88
MALTA	LIBYA	LY-09-0000038	4102	41	100	41	4102	100	2009/6/27	2010/1/2	7	67	35	5497	157	5845	94	85
MALTA	LIBYA	LY-09-000070	4102	41	100	41	4102	100	2009/6/27	2010/1/2	7	67	38	5456	144	6346	86	93
MALTA	LIBYA	LY-09-0000157	1758	23	76	23	1758	76	2009/6/27	2010/1/2	7	71	19	2373	125	2469	96	83
MALTA	LIBYA	LY-09-000039	1758	23	76	23	1758	76	2009/6/27	2010/1/2	7	71	22	2373	108	2859	83	96
MALTA	LIBYA	LY-09-000071	1758	23	76	23	1758	76	2009/6/27	2010/1/2	7	71	20	2373	119	2599	91	87
MALTA	LIBYA	LY-09-000047	6358	58	110	58	6358	110	2009/6/26	2010/1/3	7	63	48	8393	175	8606	98	83
MALTA	LIBYA	LY-09-0000135	6358	58	110	58	6358	110	2009/6/26	2010/1/3	7	63	52	8393	161	9324	90	90
MALTA	LIBYA	LY-09-0000169	6358	58	110	58	6358	110	2009/6/26	2010/1/3	7	63	49	8393	171	8786	96	84
MALTA	LIBYA	LY-09-0000184	6358	58	110	58	6358	110	2009/6/26	2010/1/4	7	63	51	8393	165	9144	92	88
MALTA	LIBYA	LY-09-000046	2635	22	120	22	2635	120	2009/6/26	2010/1/3	7	63	16	3478	217	3130	111	73
MALTA	LIBYA	LY-09-0000130	2635	22	120	22	2635	120	2009/6/26	2010/1/3	7	63	14	3478	248	2738	127	64
MALTA	LIBYA	LY-09-0000165	2635	22	120	22	2635	120	2009/6/26	2010/1/3	7	63	18	3478	193	3521	99	82
MALTA	LIBYA	LY-09-0000183	2635	22	120	22	2635	120	2009/6/26	2010/1/4	7	63	17	3478	205	3325	105	77
MALTA	LIBYA	LY-09-0000178	1172	23	51	23	1172	51	2009/6/27	2009/12/31	7	81	21	1582	75	1939	82	91
MALTA	LIBYA	LY-09-0000159	1172	23	51	23	1172	51	2009/6/27	2009/12/31	7	81	22	1582	72	2031	78	96

MALTA	LIBYA	LY-09-000091	1172	23	51	23	1172	51	2009/6/27	2009/12/31	7	81	20	1582	79	1846	86	87
MALTA	LIBYA	LY-09-000041	1172	23	51	23	1172	51	2009/6/27	2009/12/31	7	81	17	1582	93	1569	101	74
MALTA	LIBYA	LY-09-00001176	1758	23	76	23	1758	76	2009/6/27	2009/12/31	7	71	18	2373	132	2339	101	78
MALTA	LIBYA	LY-09-0000177	3516	28	125	28	3516	125	2009/6/27	2010/1/2	7	59	23	4641	202	4571	102	82
MALTA	LIBYA	LY-09-000090	3516	28	125	28	3516	125	2009/6/27	2010/1/3	7	59	24	4641	193	4770	97	86
MALTA	LIBYA	LY-09-0000158	3516	28	125	28	3516	125	2009/6/27	2010/1/2	7	59	26	4641	179	5168	90	93
MALTA	LIBYA	LY-09-000040	3516	28	125	28	3516	125	2009/6/27	2010/1/2	7	59	25	4641	186	4969	93	89
MALTA	LIBYA	LY-09-000017	3170	42	75	42	3170	75	2009/6/23	2010/1/2	7	71	9	2867	319	1154	248	21
MALTA	LIBYA	LY-09-000017-1							2009/6/23	2010/2/1	8	78	40	4279	107	5293	81	95
MALTA	LIBYA	LY-09-000012	3170	42	75	42	3170	75	2009/6/23	2010/1/2	7	71	9	2867	319	1154	248	21
MALTA	LIBYA	LY-09-000012-1							2009/6/23	2010/2/1	8	78	41	4279	104	5426	79	98
MALTA	LIBYA	LY-09-000027	3170	42	75	42	3170	75	2009/6/23	2010/1/2	7	71	9	2867	319	1154	248	21
MALTA	LIBYA	LY-09-000027-1							2009/6/23	2010/2/1	8	78	40	4279	107	5293	81	95
MALTA	LIBYA	LY-09-00007	3170	42	75	42	3170	75	2009/6/23	2010/1/2	7	71	9	2867	319	1154	248	21
MALTA	LIBYA	LY-09-00007-1							2009/6/23	2010/2/1	8	78	39	4279	110	5159	83	93
MALTA	LIBYA	LY-09-0000170	1303	24	54	24	1303	54	2009/6/23	2010/1/2	7	81	3	880	293	293	300	13
MALTA	LIBYA	LY-09-0000170-1							2009/6/23	2010/2/1	8	90	23	1760	77	2345	75	96
MALTA	LIBYA	LY-09-000051	1303	24	54	24	1303	54	2009/6/23	2010/1/2	7	81	3	880	293	293	300	13
MALTA	LIBYA	LY-09-000051-1							2009/6/23	2010/2/1	8	90	20	1760	88	2037	86	83
MALTA	LIBYA	LY-09-0000140	1303	24	54	24	1303	54	2009/6/23	2010/1/2	7	81	3	880	293	293	300	13
MALTA	LIBYA	LY-09-0000140-1							2009/6/23	2010/2/1	8	90	22	1760	80	2243	78	92
MALTA	LIBYA	LY-09-000020	1303	24	54	24	1303	54	2009/6/23	2010/1/2	7	81	3	880	293	293	300	13
MALTA	LIBYA	LY-09-000020-1							2009/6/23	2010/2/1	8	90	22	1760	80	2243	78	92
MALTA	LIBYA	LY-09-000021	2136	40	53	40	2136	53	2009/6/23	2010/1/2	7	81	5	1442	288	480	301	13
MALTA	LIBYA	LY-09-000021-1							2009/6/23	2010/2/1	8	90	39	2884	74	3903	74	98
MALTA	LIBYA	LY-09-0000143	2136	40	53	40	2136	53	2009/6/23	2010/1/2	7	81	5	1442	288	480	301	13
MALTA	LIBYA	LY-09-0000143-1							2009/6/23	2010/2/1	8	90	38	2884	76	3803	76	95
MALTA	LIBYA	LY-09-0000171	2136	40	53	40	2136	53	2009/6/23	2010/1/2	7	81	5	1442	288	480	301	13
MALTA	LIBYA	LY-09-0000171-1							2009/6/23	2010/2/1	8	90	38	2884	76	3803	76	95
MALTA	LIBYA	LY-09-000052	2136	40	53	40	2136	53	2009/6/23	2010/1/2	7	81	5	1442	288	480	301	13
MALTA	LIBYA	LY-09-000052-1							2009/6/23	2010/2/1	8	90	37	2884	78	3702	78	93
MALTA	LIBYA	LY-09-000043	585	6	97	6	585	97	2009/6/27	2010/1/2	7	67	1	395	395	162	244	17
MALTA	LIBYA	LY-09-000043-1							2009/6/27	2010/2/1	8	73	4	790	198	665	119	67
MALTA	LIBYA	LY-09-0000180	585	6	97	6	585	97	2009/6/27	2010/1/2	7	67	1	395	395	162	244	17
MALTA	LIBYA	LY-09-0000180-1							2009/6/27	2010/2/1	8	73	3	790	263	498	159	50
MALTA	LIBYA	LY-09-0000162	585	6	97	6	585	97	2009/6/27	2010/1/2	7	67	1	395	395	162	244	17
MALTA	LIBYA	LY-09-0000162-1							2009/6/27	2010/2/1	8	73	5	790	158	833	95	83
MALTA	LIBYA	LY-09-0000118	585	6	97	6	585	97	2009/6/27	2010/1/2	7	67	1	395	395	162	244	17
MALTA	LIBYA	LY-09-0000118-1							2009/6/27	2010/2/1	8	73	4	790	198	665	119	67
MALTA	LIBYA	LY-09-000042	880	17	52	17	880	52	2009/6/27	2010/1/2	7	81	3	594	198	282	210	18
MALTA	LIBYA	LY-09-000042-1							2009/6/27	2010/2/1	8	90	14	1188	85	1369	87	82
MALTA	LIBYA	LY-09-0000160	880	17	52	17	880	52	2009/6/27	2010/1/2	7	81	3	594	198	282	210	18
MALTA	LIBYA	LY-09-0000160-1							2009/6/27	2010/2/1	8	90	15	1188	79	1468	81	88
MALTA	LIBYA	LY-09-000094	880	17	52	17	880	52	2009/6/27	2010/1/2	7	81	3	594	198	282	210	18
MALTA	LIBYA	LY-09-000094-1							2009/6/27	2010/2/1	8	90	16	1188	74	1567	76	94
MALTA	LIBYA	LY-09-0000179	880	17	52	17	880	52	2009/6/27	2010/1/2	7	81	3	594	198	282	210	18
MALTA	LIBYA	LY-09-0000179-1							2009/6/27	2010/2/1	8	90	13	1188	91	1270	94	76
MALTA	LIBYA	LY-09-0000182	527	5	105	5	527	105	2009/6/27	2010/1/2	7	67	1	383	383	175	218	20
MALTA	LIBYA	LY-09-0000182-1							2009/6/27	2010/2/1	8	73	4	696	174	720	97	80
MALTA	LIBYA	LY-09-000045	527	5	105	5	527	105	2009/6/27	2010/1/2	7	67	1	383	383	175	218	20

		LY-09-000045-1							2009/6/27	2010/2/1	8	73	3	696	232	539	129	60
MALTA	LIBYA	LY-09-0000164	527	5	105	5	527	105	2009/6/27	2010/1/2	7	67	1	383	383	175	218	20
		LY-09-0000164-1							2009/6/27	2010/2/1	8	73	4	696	174	720	97	80
		LY-09-0000120							2009/6/27	2010/1/2	7	67	1	383	383	175	218	20
MALTA	LIBYA	LY-09-0000120-1	527	5	105	5	527	105	2009/6/27	2010/2/1	8	73	3	696	232	539	129	60
		LY-09-0000163							2009/6/27	2010/1/2	7	67	2	683	342	321	213	29
MALTA	LIBYA	LY-09-0000163-1	675	7	96	7	675	96	2009/6/27	2010/2/1	8	73	6	911	152	985	92	86
		LY-09-000044							2009/6/27	2010/1/2	7	67	2	683	342	321	213	29
MALTA	LIBYA	LY-09-000044-1	675	7	96	7	675	96	2009/6/27	2010/2/1	8	73	6	911	152	985	92	86
		LY-09-0000181							2009/6/27	2010/1/2	7	67	2	683	342	321	213	29
MALTA	LIBYA	LY-09-0000181-1	675	7	96	7	675	96	2009/6/27	2010/2/1	8	73	6	911	152	985	92	86
		LY-09-0000119							2009/6/27	2010/1/2	7	67	2	683	342	321	213	29
MALTA	LIBYA	LY-09-0000119-1	675	7	96	7	675	96	2009/6/27	2010/2/1	8	73	5	911	182	819	111	71
		FR-09-005655-1							2009/6/25	2009/11/26	6	51	58	15602	269	16640	94	77
MALTA	FRANCE	FR-09-005655-2	14266	75	190	75	14266	190	2009/6/25	2009/12/17	6	51	69	18297	265	19796	92	92
		FR-09-005655-3							2009/6/25	2010/1/14	7	54	75	19262	257	21552	89	100
		FR-09-005380-1							2009/6/25	2009/11/26	6	51	58	15606	269	16640	94	76
MALTA	FRANCE	FR-09-005380-2	14426	76	190	76	14426	190	2009/6/25	2009/12/17	6	51	70	18546	265	20083	92	92
		FR-09-005380-3							2009/6/25	2010/1/14	7	54	76	19547	257	21839	90	100
		FR-09-003487-1							2009/7/23	2009/12/5	5	45	33	9075	275	9570	95	20
MALTA	FRANCE	FR-09-003487-2	33200	166	200	166	33200	200	2009/7/23	2009/12/9	5	45	62	14991	242	17980	83	37
		FR-09-003487-3							2009/7/23	2009/12/17	5	45	95	22581	238	27550	82	57
		FR-09-003488-1							2009/7/16	2009/12/17	6	60	20	4500	225	3200	141	29
MALTA	FRANCE	FR-09-003489-1	11600	58	200	58	11600	200	2009/7/16	2009/12/17	6	50	41	10889	266	12300	89	71
MALTA	FRANCE	FR-09-013452-1	64800	324	200	324	64800	200	2009/7/23	2009/12/5	5	45	64	17628	275	18560	95	20
		FR-09-013452-2							2009/7/23	2009/12/9	5	45	120	29088	242	34800	84	37
		FR-09-013452-3							2009/7/23	2009/12/17	5	45	185	44036	238	53650	82	57
MALTA	FRANCE	FR-09-013453-1	13220	132	100	132	13220	100	2009/7/16	2009/12/17	6	60	40	9000	225	6400	141	30
MALTA	FRANCE	FR-09-013454-1	22400	112	200	112	22400	200	2009/7/16	2009/12/17	6	50	78	20732	266	23400	89	70
MALTA	FRANCE	FR-09-013454-1	22400	112	200	112	22400	200	2009/7/16	2009/12/17	6	50	78	20732	266	23400	89	70
MALTA	FRANCE	FR-09-005430-1	14750	78	190	78	14750	190	2009/6/25	2009/11/26	6	51	60	16140	269	17214	94	77
		FR-09-005430-2							2009/6/25	2009/12/17	6	51	72	19080	265	20657	92	92
		FR-09-005430-04							2009/6/25	2010/1/14	7	54	78	19705	253	22412	88	100
MALTA	FRANCE	FR-09-005651-1	8221	97	85	97	8221	85	2009/6/25	2009/12/17	6	63	26	6370	245	3602	177	27
		FR-09-005651-2							2009/6/25	2010/1/2	7	71	62	10482	169	8835	119	64
		FR-09-005651-04							2009/6/25	2010/1/14	7	71	97	12395	128	13922	89	100
MALTA	FRANCE	FR-09-005426-1	8500	100	85	100	8500	85	2009/6/25	2009/12/17	6	63	27	6615	245	3741	177	27
		FR-09-005426-03							2009/6/25	2010/1/14	7	71	100	10619	106	14351	74	100
MALTA	FRANCE	FR-09-005381-1	8313	98	85	98	8313	85	2009/6/25	2009/12/17	6	63	27	6615	245	3741	177	28
		FR-09-005381-03							2009/6/25	2010/1/14	7	71	98	10541	108	14061	75	100
MALTA	FRANCE	FR-09-005382-1	9780	110	89	110	9780	89	2009/6/25	2009/12/17	6	63	35	8566	245	5077	169	32
		FR-09-005382-04							2009/6/25	2010/1/14	7	71	105	11687	111	15731	74	95
MALTA	FRANCE	FR-09-005653-1	9672	109	89	109	9672	89	2009/6/25	2009/12/17	6	63	34	8321	245	4932	169	31
		FR-09-005653-03							2009/6/25	2010/1/14	7	71	109	11885	109	16347	73	100
MALTA	FRANCE	FR-09-003486-1	27950	559	50	559	27950	50	2009/7/23	2009/12/9	5	65	108	5853	54	8910	66	19
		FR-09-003486-2							2009/7/23	2010/1/14	6	72	503	24070	48	42880	56	90
MALTA	FRANCE	FR-09-003486-1	27950	559	50	559	27950	50	2009/7/23	2009/12/9	5	65	108	5853	54	8910	66	19
		FR-09-003486-2							2009/7/23	2010/1/14	6	72	503	24070	48	42880	56	90
MALTA	FRANCE	FR-09-013451-1	54500	1091	50	1091	54500	50	2009/7/23	2009/12/9	5	65	212	11490	54	17490	66	19
		FR-09-013451-2							2009/7/23	2010/1/14	6	72	982	47006	48	83710	56	90

MALTA	FRANCE	FR-09-013451-1	54500	1091	50	1091	54500	50	2009/7/23	2009/12/9	5	65	212	11490	54	17490	66	19
		FR-09-013451-2							2009/7/23	2010/1/14	6	72	982	47006	48	83710	56	90
MALTA	ITALY	IT-09-000592-1	10800	60	180	60	10800	180	2009/6/27	2009/11/26	5	46	32	8502	266	8410	101	53
		IT-09-000592-2							2009/6/27	2009/12/5	6	51	50	13272	265	13302	100	83
		IT-09-000592-3							2009/6/27	2010/1/14	7	54	60	15339	256	16074	95	100
MALTA	ITALY	IT-09-000427-1	10480	58	180	58	10480	180	2009/6/27	2009/11/26	5	46	30	8252	275	7884	105	52
		IT-09-000427-2							2009/6/27	2009/12/5	6	51	47	12757	271	12505	102	81
		IT-09-000427-3							2009/6/27	2010/1/14	7	54	58	15031	259	15554	97	100
MALTA	ITALY	IT-09-000593-1	18900	135	140	135	18900	140	2009/6/10	2009/11/26	6	54	71	18814	265	15308	123	53
		IT-09-000593-2							2009/6/10	2009/12/5	6	54	78	20669	265	16817	123	58
		IT-09-000593-05							2009/6/10	2010/1/14	8	65	132	22629	171	29291	77	98
MALTA	ITALY	IT-09-000593-1	18900	135	140	135	18900	140	2009/6/10	2009/11/26	6	54	71	18814	265	15308	123	53
		IT-09-000593-2							2009/6/10	2009/12/5	6	54	78	20669	265	16817	123	58
		IT-09-000593-05							2009/6/10	2010/1/14	8	65	132	22629	171	29291	77	98
MALTA	ITALY	IT-09-000593-1	18900	135	140	135	18900	140	2009/6/10	2009/11/26	6	54	71	18814	265	15308	123	53
		IT-09-000593-2							2009/6/10	2009/12/5	6	54	78	20669	265	16817	123	58
		IT-09-000593-05							2009/6/10	2010/1/14	8	65	132	22629	171	29291	77	98
MALTA	ITALY	IT-09-000429-1	18340	131	140	131	18340	140	2009/6/10	2009/11/26	6	54	69	18254	265	14876	123	53
		IT-09-000429-2							2009/6/10	2009/12/5	6	54	77	20382	265	16601	123	59
		IT-09-000429-05							2009/6/10	2010/1/14	8	65	125	21908	175	27689	79	95
MALTA	ITALY	IT-09-000708-1	31000	280	111	280	31000	111	2009/6/30	2009/12/5	6	57	113	28174	249	19693	143	40
MALTA	ITALY	IT-09-000428-02	8384	183	46	173	7881	46	2009/6/27	2010/1/2	7	81	173	9562	55	14404	66	100
MALTA	ITALY	IT-09-000428-02	8384	183	46	173	7881	46	2009/6/27	2010/1/2	7	81	173	9562	55	14404	66	100
MALTA	LIBYA	LY-09-000048-1	2988	35	85	35	2988	85	2009/6/25	2010/1/14	7	71	20	1069	53	2907	37	57
		LY-09-000048-3							2009/6/25	2010/4/9	10	93	24	1875	78	3563	53	69
		LY-09-000048-4							2009/6/25	2010/4/9	10	93	28	2895	103	4219	69	80
MALTA	LIBYA	LY-09-000063-1	2988	35	85	35	2988	85	2009/6/25	2010/1/14	7	71	20	1069	53	2907	37	57
MALTA	LIBYA	LY-09-000063-1	2988	35	85	35	2988	85	2009/6/25	2010/1/14	7	71	20	1069	53	2907	37	57
MALTA	LIBYA	LY-09-000100-1	2988	35	85	35	2988	85	2009/6/25	2010/1/14	7	71	20	1069	53	2907	37	57
MALTA	LIBYA	LY-09-000100-1	2988	35	85	35	2988	85	2009/6/25	2010/1/14	7	71	20	1069	53	2907	37	57
MALTA	MOROCCO	MA-09-008001(BIS)-1	100000	800	125	800	100000	125	2009/6/30	2009/12/5	6	54	248	61467	248	47740	129	31
		MA-09-008001(BIS)-2							2009/6/30	2009/12/9	6	54	611	116392	190	117618	99	76
		MA-09-008001(BIS)-3							2009/6/30	2010/1/2	7	59	793	133029	168	153790	87	99
MALTA	MOROCCO	MA-09-008001(BIS)-1	100000	800	125	800	100000	125	2009/6/30	2009/12/5	6	54	248	61467	248	47740	129	31
		MA-09-008001(BIS)-2							2009/6/30	2009/12/9	6	54	611	116392	190	117618	99	76
		MA-09-008001(BIS)-3							2009/6/30	2010/1/2	7	59	793	133029	168	153790	87	99
MALTA	FRANCE	FR-09-004493-1	3480	87	40	87	3480	40	2009/6/27	2010/1/23	7	88	70	4721	67	5264	90	80
MALTA	FRANCE	FR-09-004537-1	3480	87	40	87	3480	40	2009/6/27	2010/1/23	7	88	70	4721	67	5264	90	80
MALTA	FRANCE	FR-09-004495-01	10213	262	39	262	10213	39	2009/6/27	2010/1/23	7	88	254	17253	68	18623	93	97
MALTA	FRANCE	FR-09-004539-01	10104	260	39	260	10104	39	2009/6/27	2010/1/23	7	88	252	17602	70	18477	95	97
MALTA	KOREA	KR-09-008217-02	7987	249	32	249	7987	32	2009/6/27	2009/12/6	6	78	20	954	48	1139	84	8
		KR-09-008217-01							2009/6/27	2009/12/6	6	78	39	1789	46	2221	81	16
		KR-09-008217-05							2009/6/27	2009/12/7	6	78	69	3330	48	3930	85	28
		KR-09-008217-08							2009/6/27	2009/12/13	6	78	99	4764	48	5639	84	40
		KR-09-008217-09							2009/6/27	2009/12/13	6	78	118	5705	48	6721	85	47
		KR-09-008217-11							2009/6/27	2009/12/14	6	78	148	7254	49	8430	86	59
		KR-09-008217-10							2009/6/27	2009/12/14	6	78	150	7409	49	8544	87	60
MALTA	KOREA	KR-09-008219-01	17864	403	44	403	17864	44	2009/6/27	2009/12/17	6	72	12	595	50	908	66	3
		KR-09-008219-02							2009/6/27	2009/12/17	6	72	35	1660	47	2649	63	9
		KR-09-008219-03							2009/6/27	2009/12/17	6	72	59	2770	47	4465	62	15
		KR-09-008219-04							2009/6/27	2010/1/23	7	81	393	30430	77	31065	98	98

Table 3. Class table of the number of BCDs and the number of harvested fish on basis of the proportion of actual harvest weight to expected harvest weight.

<i>Actual/Expected harvest weight (%)</i>	<i>Number of BCDs</i>	<i>Number of harvested fish</i>
≥ 10	0	0
10 ~ 20	3	64
20 ~ 30	12	737
30 ~ 40	25	985
40 ~ 50	17	2311
50 ~ 60	38	8885
60 ~ 70	39	6390
70 ~ 80	141	29682
80 ~ 90	155	26410
90 ~ 100	308	35239
100 ~ 110	103	20613
110 ~ 120	62	9317
120 ~ 130	35	2331
130 ~ 140	31	1330
140 ~ 150	54	2550
150 ~ 160	24	647
160 ~ 170	19	1352
170 ~ 180	12	831
180 ~ 190	8	307
190 ~ 200	3	96
200 ~ 250	26	1900
250 ~ 300	8	580
300 ~ 350	3	144
350 ~ 400	4	193
400 ~ 450	2	12
450 ~ 500	2	8
500 ~ 550	0	0
550 ~ 600	0	0
600 <	0	0
Total	1134	152914

Note: Both the number of BCDs and the number of harvested fish are counted on basis of a group BCD which has the same document number and farming facility. And, all BCDs were farmed in from 2009 to 2011.

Table 4. Comparison table on rate between reported farming weight and expected farming weight.

Catch CPCs	Farming CPCs	Farming in 2009			Farming in 2010			Farming in 2011		
		Reported Farming Weight (t) *	Expected Farming Weight (t) **	Reported/Expected Farming Weight (%)	Reported Farming Weight (t) *	Expected Farming Weight (t) **	Reported/Expected Farming Weight (%)	Reported Farming Weight (t) *	Expected Farming Weight (t) **	Reported/Expected Farming Weight (%)
EU	following EU CPSs sub-total	3992.19	3513.96	114%	684.85	726.74	94%	818.86	904.87	90%
FRANCE	GREECE	119.76	127.86	94%	38.50	47.39	81%			
	MALTA	1281.31	1098.31	117%	387.77	350.52	111%	227.31	197.94	115%
	SPAIN	648.37	518.91	125%	68.22	77.09	88%	2.78	6.97	40%
	sub-total	2049.44	1745.08	117%	494.48	475.00	104%	230.09	204.91	112%
GREECE	GREECE	130.79	151.69	86%	24.81	32.16	77%			
	sub-total	130.79	151.69	86%	24.81	32.16	77%			
ITALY	GREECE	35.30	45.12	78%						
	ITALY	160.50	171.68	93%				131.12	134.07	98%
	MALTA	888.59	819.87	108%				30.33	24.20	125%
	TUNISIA	6.65	5.79	115%						
	TURKEY	2.57	1.86	138%						
sub-total	1093.60	1044.32	105%				161.44	158.26	102%	
MALTA	MALTA	26.95	26.18	103%						
	sub-total	26.95	26.18	103%						
SPAIN	MALTA	231.32	141.27	164%						
	SPAIN	450.49	398.26	113%	163.03	217.43	75%	427.34	541.70	79%
	sub-total	681.81	539.53	126%	163.03	217.43	75%	427.34	541.70	79%
PORTUGAL	PORTUGAL	9.60	7.16	134%	2.52	2.14	118%			
	sub-total	9.60	7.16	134%	2.52	2.14	118%			
ALBANIA	TURKEY	47.02	39.71	118%						
	sub-total	47.02	39.71	118%						
KOREA	MALTA	45.42	42.25	108%						
	sub-total	45.42	42.25	108%						
LIBYA	GREECE	93.31	91.79	102%						
	MALTA	486.11	414.74	117%	432.79	436.75	99%			
	TUNISIA	9.24	6.25	148%	40.92	23.53	174%			
	sub-total	588.66	512.77	115%	437.71	460.28	103%			
MOROCCO	GREECE				4.03	2.35	172%			
	MALTA	198.25	167.33	118%						
	TURKEY	163.46	164.22	100%	85.39	73.97	115%			
	sub-total	361.71	331.55	109%	89.42	76.32	117%			
TUNISIA	TUNISIA	1165.31	1069.15	109%	970.42	703.71	138%			
	TURKEY	170.11	123.05	138%						
	sub-total	1335.43	1192.20	112%	970.42	703.71	138%			
TURKEY	TURKEY	504.19	474.77	106%	251.12	243.22	103%	99.46	94.42	105%
	sub-total	504.19	474.77	106%	251.12	243.22	103%	99.46	94.42	105%
SYRIA	TURKEY				33.83	31.14	109%			
	sub-total				33.83	31.14	109%			
TOTAL		6874.62	6107.21	113%	2503.35	2241.40	112%	918.33	999.29	92%

Note:

*Total Farming weight× (Harvested Fish Number/ Farmed Fish Number)

**Total figures of Harvest weight / (1+growth rate)

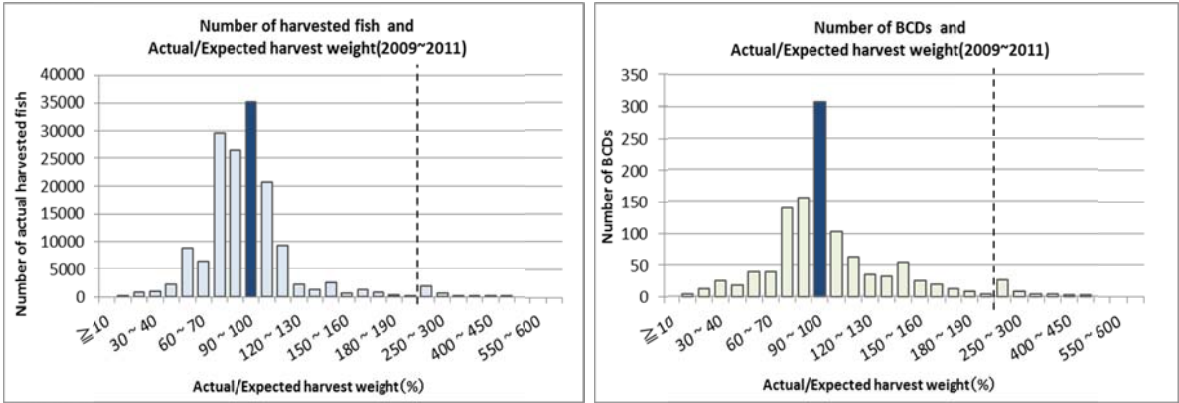


Figure 1. Distribution figure of the Table 3.