LDRAC Recommendation for the 35th Annual Meeting of the NAFO Convention

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The 35th annual meeting of this regional fisheries organisation will take place in Halifax, Canada, from September 23 to 27, assembling representatives from the 14 contracting parties, among which the European Union, from whom the LDRAC expects a dynamic intervention during the event, in proportion to the historical and current weight that this fishing zone has for the stakes of the Member States represented by the EU. The LDRAC wishes to consolidate and, if possible, delve into the active partnership that has been built with the European Commission in defining the objectives and following up on the management measures that the NAFO Fisheries Commission will adopt, in order to guarantee a sustainable future in the long term for this fishing zone. The LDRAC will be represented at the annual meeting, and will remain at the disposal of the European Commission to share all the information that may be useful to defend the stakes of the Community fishing industry. As an advisory body for fisheries policies in international waters, it is our duty to submit recommendations relative to this annual meeting, focusing on the most relevant issues:

1. INTRODUCTORY NOTES

NAFO is a well structured regional fisheries organisation, respected for the credibility and quality of the work of its constituent bodies that in many aspects sets an example to define the working model of other similar organisations. The European Union must demand that NAFO does not diverge from the aims that presided over its foundation, basically focusing on the assessment of the state of conservation of halieutic resources and the recommendation of measures that enable to increase their productivity, ensuring the conditions for the exercise of professional fishing to be viable and economically profitable. The LDRAC notices that NAFO, especially its Scientific Council, has been investing disproportionate efforts analysing matters that are on the side of the assessment of biological resources in sub-area 3 which are important for catch activities; consuming excessive time and human resources in the theoretical study of conceptual issues, of an ecosystem nature. We recall that in this area of intervention, NAFO adopted in the last 6 years measures with an effective practical effect, complying in a very satisfactory manner with the pertinent resolutions by the Assembly-General of United Nations. This work should obviously continue without compromising the organisation's capacity to make use of more and better knowledge about the conservation of fish stocks, with a view to their sustainable exploration, from both an environmental and an economic standpoint.

The LDRAC observes with concern that there are still some gaps in the identification of the biological limit reference points for most stocks, considering how important they are for management to render fishing opportunities compatible with environmental sustainability, offering the stakeholders planning prospects for longer term activities. It is surprising for the Scientific Council to refer, over and over again, that it needs more time to research into the interaction between the biological parameters of halieutic populations, with the aim to propose priority indicators towards a better management of the stocks, and at the same time to drift away from such an aim, devoting scarce resources in the collection and classification of residual elements of the ecosystem. The European Union must help to refocus the requests for information by the Fisheries Commission addressed to the Scientific Council in matters strictly related to the research and assessment of the biological safety of the stocks, providing Science with the means that may contribute towards a sounder advice for the management of fish stocks.

Along these lines, the LDRAC has not ceased to refer in the recommendation that it adopted in 2012, now returning to that conviction, that NAFO's governance is being pressed and affected by agreements that privilege political objectives to the detriment of purely technical decisions, grounded on the existing scientific knowledge. The European Union must not ignore the role played by the Coastal States in the Convention in distorting the organisation's processes and objectives, justified either by the competition to catch species that straddle the sovereign waters of the aforesaid States, or with the intention to perform prospecting and exploration of energy resources in the high seas, traditional fishing being the sole obstacle for the same to be pursued freely. The LDRAC has recorded that the ecosystem management shows an unacceptable discrepancy between the approach adopted for the NAFO RA and the Convention area, whose biomorphological characteristics cannot be substantially different. Without clashing with the competences that are proper to the Coastal States, the EU must recommend the Fisheries Commission to promote efforts in order to verify the conformity of the measures to prevent impacts to the ecosystem between the 2 areas.

The LDRAC has confirmed, with satisfaction, in the annual report by the Scientific Council, that the population units that are the object of commercial fishing maintain good levels of exploitable biomass, at the expense of stable or diminishing mortality rates, in line with the reduction of the global fishing effort in the regulatory area, regarding both the number of vessels and fishing days, for all production segments. It must be noted that the Community fleet has contributed greatly to the reduction of fishing pressure in the last decade, rationally adjusting catch capacity to the available resources. It is fair to request that the sacrifices made by the companies and crews be compensated with improved fishing opportunities, provided that the increase in size of the fish stocks may allow to do so, and the EU must be sensitive to such a strategy and have no qualms in defending it. The dynamics of such defence, without harming the sustainability criteria that lie at the heart of the common fisheries policy, is based on the fact that the fishing production of the Community fleet accounts for more than 50% of the total catches in the regulatory area in 2012, and close to 70%, if we are to exclude Canada, whose fishing activity on straddling and migratory stocks is carried out exclusively in fisheries located in sovereign waters. The European Union is thus the NAFO contracting party with most to gain or lose, depending on the position that it may adopt and on the less transparent political agreements that it may tolerate.

2. M.S.E. MANAGEMENT STRATEGIC EVALUATION / GREENLAND HALIBUT SA-2+3

G. HALIBUT		SA 2+3		TAC 2012		**16.326**		TAC 2013		**15.510**		-5%	
C.P.		U.E.	CAN	CUB	FAR	SPM	ISL	JAP	KOR	NOR	RUS	UKR	USA	OTH
2013	Quota	6.738	5.741		199	188		1.178			1.466			
	Share	43%	37%		1%	1%		8%			9%			
2012	Quota	7.093	6.043		210	198		1.240			1.543			
	Catch	7.133	6.014	3	147	198		0		1	1.543			
	Used	101%	100%		70%	100%		0%			100%			

A 15-year recovery plan was adopted in 2003 for this stock, broadly distributed in sub-areas 2 and 3, as it has been verified that the mature component of the population was apparently incapable of replacing the amount of Greenland halibut removed by fishing or by natural or environmental mortality. The stock is assessed by the indices from 4 research surveys that cover the entire distribution area for Greenland halibut. The Canadian autumn survey focused on divisions 2J+3K is the one with the greatest weight in the assessment, being located in the areas for preferential evolution of the spawning stock. After 2004, the indices from the surveys show fluctuations and divergences that are difficult to interpret, despite confirming the stability and a moderate growth for the exploitable biomass 5+.

On the other hand, the exponential increase in catches per unit of effort (CPUE) by commercial fishing, after 2005, was not taken into account by the Scientific Council as an indicator to assess the size of the stock, generating uncertainties on the quality of the XSA assessment model; which was nevertheless not abandoned nor readjusted in order to provide a more realistic perspective of the state of conservation of the stock of Greenland halibut. The establishments of a working group by the Fisheries Commission open to the participation of external scientific experts, enabled to take recourse to an alternative method to assess Greenland halibut, whose results were rather more positive than the perspective brought about by the model used by the Scientific Council. This clash of ideas encouraged the Fisheries Commission to adopt, at the annual meeting of 2010, a management strategic evaluation tool (MSE) that disregards the results of the XSA model.

The harvest control rule for Greenland halibut is depending on the arithmetic mean of the indices from 3 research surveys in the last 5 years, establishing the annual TAC by means of a simple mathematical formula that is influenced by the curve in the above referred surveys. This is a relatively objective process to determine the total catch, which, by operating through the trends of the biomass indices from 3 research surveys, takes recourse to the precautionary principle and prevents the fishery from entering a risk zone for the stock's safety.

The LDRAC does not understand the reason why the Scientific Council did not update the assessment of Greenland halibut, repeating the decision adopted in 2012, that it justified with the constraint of arbitrating catch estimates against NAFO's official landing statistics for Greenland

halibut. It is unfortunate for such an option to have rendered the catch estimate per age in 2011 and 2012 not viable, placing at risk the consistency of the historical data series for this important species and stock. The LDRAC wishes to underline certain aspects that may help to define the orientations for sustainable assessment and management for the stock of Greenland halibut:

- The population of Greenland halibut in sub-areas 2 and 3 is made up of a complex biological stock that includes sub-areas 0 and 1, situated in sovereign waters of the Coastal States. Previous density studies reveal consistent indicators that validate the connection between stocks. The LDRAC observes that the TACs in the North have remained stable or have been revisited upwards.
- The biomass indices from the surveys between 2008 and 2012 reveal stability, whereby the TACs approved are at least compatible with the population's yield level.
- The Scientific Council conducted a study comparing the methods to read the ages of Greenland halibut and concluded that the age classes corresponding to individuals above 60 centimetres may be underestimated. This study assumes that Greenland halibut grows more slowly as from the age class 10+, living up to 35 years. It is worth the while to ask whether this finding may change the perception of the XSA assessment model for the biomass of Greenland halibut 10+, as its contribution to the exploitable biomass was considered to be residual. With the SCAA production model, the biomass of that component of Greenland halibut was more robust.
- Comparing the results from the research surveys with the simulated distributions of the 2 operational models in the MSE process reveals that only 1 survey is above the confidence interval, and there are no reasons of biological conservation to justify that the result be considered as an exceptional circumstance.
- All the contracting parties have 100% utilisation rates of their quotas, which proves the importance of this resource for the economic viability of fishing in NAFO.

Recommendation: The LDRAC recommends that the TAC for Greenland halibut, in 2014, be calculated using the HCR (Harvest Control Rule) formula, taking into consideration the average decline of -0.0022 in the 3 research surveys, which translates into a TAC of 15,441 tonnes.

3. ASSESSMENTS REQUESTED BY THE FISHERIES COMMISSION IN 2013

3.1 - COD 3M

COD			3M		TAC 2012		**9.280**		TAC 2013		**14.113**			52%
C.P.		U.E.	CAN	CUB	FAR	SPM	ISL	JAP	KOR	NOR	RUS	UKR	USA	OTH
2013	Quota	8.049	113	522	3.154					1.305	913			56
	Share	57%	1%	4%	22%					9%	6%			0%
2012	Quota	5.292	74	343	2.074					858	600			37
	Catch	5.215	0	172	2.045	131				826	745			0
	Used	99%	0%	50%	99%					96%	124%			0%

The cod fishery in division 3M has been historically exercised by vessels from the European Union and the Faroe Islands, thus guaranteeing a share of 80% of the TAC for this species and stock. Given that this population unit is totally confined to off-shore waters, the 2 contracting parties must lead, in active partnership, management and exploitation measures for the resource that may ensure its biological safety in the long term and at the same time maximise the economic returns that the fishery may provide to the stakeholders. The LDRAC anticipates some obstructions by the Coastal States to management decisions that may enhance catches of cod in division 3M, despite its excellent state of biological conservation, in order to weaken the conditions of profitability and the presence of the European fleet in the regulatory area. Norway, for commercial reasons and in order to dominate the market, may align with such behaviour.

The LDRAC has analysed the updated scientific assessment of the resource, as was requested by the Fisheries Commission, and wishes to highlight some aspects that must be taken into account, especially in the analysis and choice of the stochastic projections developed according to 4 scenarios:

- The biomass indices in the EU research survey at Flemish Cap are increasing, significantly and uninterruptedly, since 2006, and the index for 2012 has been the highest of the entire historical series started in 1985, and is only comparable to that of 1989.
- Good recruitments have been verified since 2005, much higher than the average in the EU survey, strengthening the size of the stock in year classes 1 and 2, whose survival is enabling a surprising growth for both the total and spawning biomasses.
- The spawning biomass of the stock is the largest of the historical series, started in the 1970s, the weight being almost 3 times that of the limit biomass of 14,000 t. Despite the fact that the Scientific Council has not indicated a proxy for Bmsy, it must be reminded that for demersal stocks it is assumed as a rule that the limit biomass is 30% of the above figure. Admitting that such ratio is applicable to this cod stock, even though some adjustments should be made, we may deduce that the stock has already reached a stable size, within the margins of Bmsy.
- It is a positive fact that this cod stock has returned to normal sexual maturity age classes after 1 year of early sexual maturity, considering that the fertility rate at a later age contributes towards improving the stock's health.
- The LDRAC still has some doubts as to the consistency of the yield-per-recruit curve, from which F0.1 and Fmax mortalities are drawn. The design may be lacking data about the length per age for commercial fishing between 2002 and 2005. Changing exploitation and mortality patterns by age classes since 2010 are factors to be considered in the revision of this curve and in the subsequent values for F0.1 and Fmax. The value assumed for natural mortality as a rule is close to F0.1 and for cod in 3M there is a very strong discrepancy in the 2 indicators. The LDRAC records that such an approximation exists for the stock 3 NO, with F0.1=0.19 which is more than double that of the F0.1 for the stock 3M. There being an updated indicator for F0.1 to a value close to that of cod 3 NO, the value for Fmax ought to be revisited upwards, probably to a value identical to the current exploitation rate for cod stocks (*Gadus morua*) in the North Atlantic. The LDRAC recommends the EU to request the Scientific Council to provide clarifications to the NAFO Fisheries Commission on this issue at the annual meeting.

- The results of the retrospective analysis of the assessment model show that the fishing mortality rate has been overestimated. Such verification raises some doubts as to the correction of the value for Fsq assumed by the Scientific Council, which is twice that of Fmax. Apparently, this issue ought to be investigated, because any error in the calculation of the real mortality rate may eventually penalise the image of the fishing sector.

The LDRAC would like the chart with projections for biomasses and yield (TAC) to have considered the *status quo* mortality (Fbar) and offer no doubts. It would be useful if the projection could have included F=0.19/0.20, which the Scientific Council considers to be sustainable for cod 3NO when the fisheries were reopened. Nevertheless, the LDRAC accepts a management decision based on Fmax, warning that this is a conservative value.

Recommendation: The Scientific Council must be questioned about the reliability of the mortality parameters assumed in the yield-per-recruit curve. The LDRAC recommends the EU to propose the mortality rate Fmax in order to determine the TAC for 2014 = 14,521 tonnes.

3.2 - REDFISH 3M

REDFISH			3M		TAC 2012		**6.500**		TAC 2013		**6.500**		0%	
C.P.		U.E.	CAN	CUB	FAR	SPM	ISL	JAP	KOR	NOR	RUS	UKR	USA	OTH
2013	Quota	7.813	500	1.750	69	69		400	69		9.137		69	124
	Share	39%	3%	9%	0,3%	0,3%		2%	0,3%		46%		0,3%	1%
2012	Quota	7.813	500	1.750	69	69		400	69		9.137		69	124
	Catch	5.001	0	600	149	69		0	0		1.711		0	0
	Used	64%	0%	34%	216%	100%		0%	0%		19%		0%	0%

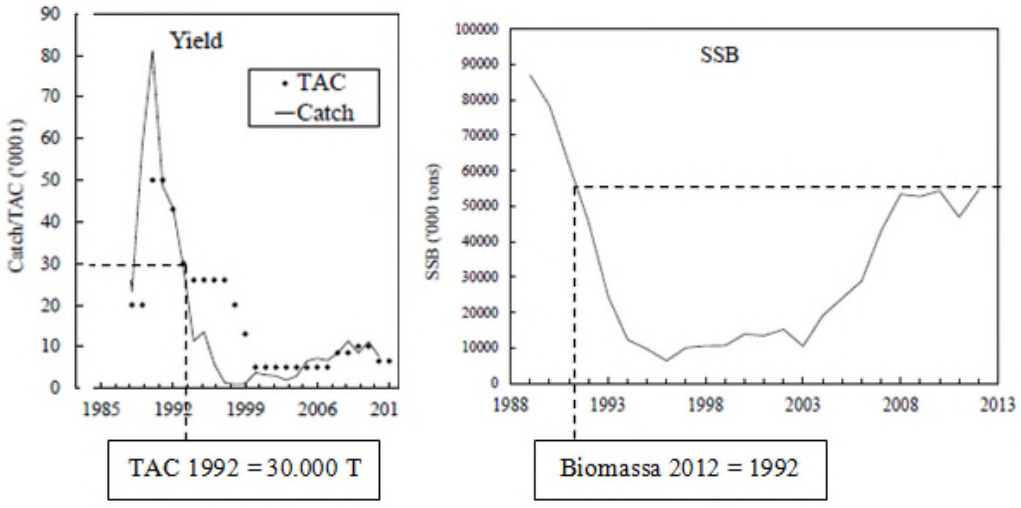
We are facing a species and stock with atypical management, as the quotas of the contracting parties derive from a fixed value at 20,000 tonnes, having remained unchanged in time, although the total allowed catch has always been lower in recent years. With the current management model, those who fish earlier in the year take a better advantage of their quota. The Community fleet has had high rates of utilisation of this resource, having to plan fishing earlier than Russia, whose quota is larger. In the last 2 years the TAC was exhausted a few months before the end of the year as a result of having been reduced from 10,000 to 6,500 tonnes, which measure does not correspond to the abundance of redfish verified in the fishing zone.

For the global assessment of this stock made this year, the LDRAC wishes to underline the following:

- This population unit is made up of 3 different types of redfish, despite the fact that the assessment is focused only on 2 of the 3 components of this stock. Since 2005, golden redfish, which is not included in the scientific assessment, prevails in commercial catches. The perception of the biomass may be underestimated, as this dimension of the stock is being ignored.

- Between 2003 and 2006 the exploitable biomass 4+ has had continuous growth, supported by the concurrence of good year-class recruitments and moderate fishing mortality rates.
- Up until 2010 the exploitable and spawning biomass of females 7+ decreased due to failed recruitment and the eventual increase of the natural mortality rate, related to the increased abundance of cod in the same habitat, cod being a predator for redfish, in pre-recruitment age classes. Increasing the TAC for cod would have contributed towards bringing the natural mortality rate for redfish back to a more normal situation.
- Since 2011 the redfish biomass inverted its downward trend, increasing towards levels that are close to the peak of 2006.
- The fishing mortality rate for redfish 3M is low since the end of the 1990s, and the Scientific Council has not evidenced any direct relationship between exploitation by fishing and changes to the size of the stock in the last decade. Other causes must be researched into.
- The recent recovery of this stock's biomass to the levels prior to 2008, comparable to the highest levels in the historical series, justifies reinstating the TAC at an intermediate level between the 6,500 tonnes of the last 2 years and the 10,000 tonnes of 2010 and 2011.

A comparison of the graphs for the biomass and the TACs that illustrate the assessment of the stock made by the Scientific Council evidences that recent TACs are much lower than past TACs for very similar quantities of spawning biomass:



The slope for the biomass increase, between 2003 and 2012, is much higher than the slope for the changes to the TACs in the same period, showing that the ma..agement measures taken for this redfish stock are apparently quite conservative compared to the availability of the resource. For similar biomass levels in 2012 and 1992, the TAC of 1992 was almost 5 times greater. The good abundance of redfish at the Flemish Cap, combined with more fishing days in division 3M to catch the quotas for cod, will lead to the exhaustion of the current TAC of 6,500 tonnes a few months before the end of the year. This raises the issue of the EU exceeding its quota in international waters, rendering discards inevitable.

Recommendation: The LDRAC recommends the EU to defend returning the TAC to 8,500 tonnes, because the growing trend of the biomass has been verified in the last 2 years. With the current TAC at 6,500 tonnes the fishery closes in the summer, leading to discards, bearing in mind that this species is an important by-catch in the cod fishery for this same division.

3.3 - WHITE HAKE 3NO

WHITE HAKE		3NO		TAC 2012	**5.000**		TAC 2013	**1.000**		-80%			
C.P.		U.E.	CAN	CUB	FAR	SPM	ISL	JAP	KOR	NOR	RUS	UKR	USA	OTH
2013	Quota	588	294								59			59
	Share	59%	29%								6%			6%
2012	Quota	2.941	1.471								294			294
	Catch	117	0								0			0
	Used	4%	0%								0%			0%

Regulation of this stock using TAC started in 2005. The European Union proved abundant catches in the immediately preceding years, whereby it is the contracting party with the most robust share in the distribution key. Total catches are falling since 2004, because the last strong recruitment occurred in 1999, leading to significant catches in 2002 and 2003. The year class for 2011 is much larger than the average, so it is expected that there will be white hake available in the fishing zone as from next year. The behaviour of this stock needs to be researched into, as the changes to the biomass seem to relate to environmental causes and not to the fishing effort, which is practically nil. At the annual meeting in 2012, despite the fact that the TAC was reduced by 80% to 1,000 tonnes, a flexible system was envisaged that allows to return to the 2012 TAC if abundant catches of white hake are fished. It would not be surprising to see Canada continuing to lobby for the tac to decrease further due to political reasons.

Recommendation: We propose the EU to defend maintaining the current TAC of 1,000 tonnes and the flexible regime in its revision adopted in 2012. It would be a discredit to change, immediately the following year, an innovative management measure that needs to be tested.

3.4 - REDFISH 3O

REDFISH		3O		TAC 2012	**20.000**		TAC 2013	**20.000**		0%			
C.P.		U.E.	CAN	CUB	FAR	SPM	ISL	JAP	KOR	NOR	RUS	UKR	USA	OTH
2013	Quota	7.000	6.000					150	100		6.500	150		100
	Share	35%	30%					1%	1%		33%	1%		1%
2012	Quota	7.000	6.000					150	100		6.500	150		100
	Catch	5.346	0		101			0	0		971	0		0
	Used	76%	0%					0%	0%		15%	0%		0%

This redfish population is managed by total allowed catch since 2005. The initial TAC of 20,000 tonnes has remained unchanged since that year. The EU, Canada and Russia have relatively equal shares in the distribution key, but only the fleet of the Member States has shown an interest in making use of its respective quota. The scientific assessment of the stock is supported by data from 3 research surveys and the yield of commercial fishing. Some conclusions from this assessment must be highlighted that confirm the stock's good state of health:

- The Canadian surveys that cover the entire area of distribution of the population, show increasing biomass indices since the year 2000.
- The fishing mortality rate is at the lowest level of the historical series, since 2006.
- It is surprising that a stock for which there are survey data with sufficient longevity and length frequency data from commercial fishing has not undergone an analytical assessment structured in a yield model that is different to the one that has been used regularly.

It would not be surprising that Canada, after having achieved the decision to reduce the TACs for skate 3LNO and white hake 3NO, may now start to lobby for this TAC to be reduced too, with the support of the contracting parties that have nothing to lose with such decision, as they do not enter the fishery. Despite having a quota, Canada does not fish for this species and stock and so Canada would not be affected, as opposed to the Community fleet, whose utilisation rates of its quota are significant.

Recommendation: The LDRAC recommends that the TAC be maintained at 20,000 tonnes, because the research surveys reveal a continued increase in size for this population.

3.5 – YELLOWTAIL FLOUNDER 3LNO

YELLOWTAIL		3LNO		TAC 2012	**17.000**		TAC 2013	**17.000**		0%			
C.P.	U.E.	CAN	CUB	FAR	SPM	ISL	JAP	KOR	NOR	RUS	UKR	USA	OTH
2013 Quota		16.575			340								85
2013 Share		98%			2%								1%
2012 Quota		16.575			340								85
2012 Catch	970	1.794	8		321					84		275	0
2012 Used		11%			94%								0%

Canada holds a dominant position for this stock, with a 98% share of the TAC. The EU has not made use of its quota and regularises catches of this species respecting the by-catch rules provided for by NCEM. The depth strata and distribution zone for this species are sensitively the same as for American plaice. The Canadian fleet avoids directed fishing for this species, in order not to incur in irregular by-catches of American plaice 3LNO, which stock is under moratorium. The

biomass of yellowtail flounder increases since 1994 and is almost twice the Bmsy, which would allow to set a TAC of 30,000 tonnes. Canada has no interest in this happening because it has no strategic interest in investing in this fishery and would be exposed to pressure to surrender quota, as happened with the USA some years ago.

Recommendation: The LDRAC understands that the EU should not take a stand on the level of TAC for yellowtail flounder, in order not to encourage pressure from other contracting parties in the management of stocks for which it is the contracting party with the largest share of the TAC.

3.6 - SHORT FIN SQUID SA 3+4

The biomass indices from the surveys and the average body weight of the individuals caught are the indicators to determine whether the stock is in a high or low yield regime. For the years in which the yield is low, a situation that occurs since 1982, the TAC should not exceed 34,000 tonnes. Catches in the last 3 years have been insignificant and are falling. The EU and Canada have quotas that are practically the same.

3.7 - OUTHER STOCKS ASSESSED, WHOSE FISHERIES ARE UNDER MORATORIUM

ASSESSMENT UNTIL 2015	**ASSESSMENT UNTIL 2016**	
CAPELIN 3NO	COD 3NO	WITCH FLOUNDER 2J3KL
Fishing banned since 1995. The state of the stock remains unchanged in recent years.	Fishing banned since 1994. The spawning biomass is half of Blim = 60,000 tonnes. There are difficulties to regularise by-catches due to the greater abundance of this species. Fishing mortality is low.	Fishing banned since 1995. Catches are residual since 2004. The biomass is below Blim that is 15% of the highest index in the survey (1984). Recruitment is irregular throughout the series.
LDRAC RECOMENDATION		
Maintain the moratorium until the survey biomass indices recommend reopening the fishery.	Maintain the moratorium while the stock remains below Blim. The current limit of 4% by-catch is difficult to comply with. It is justified that the by-catch principle adopted for American plaice be applied to this stock for the same reason.	Maintain the moratorium, until the biomass limit reference is ensured.

4. MONITORING OF OTHER STOCKS BY THE SCIENTIFIC COUNCIL

4.1 – POPULATIONS WITH AUTHORISED FISHING

4.1.1 - REDFISH 3LN

REDFISH			3LN		TAC 2012		**6.000**		TAC 2013		**6.500**		8%	
C.P.		U.E.	CAN	CUB	FAR	SPM	ISL	JAP	KOR	NOR	RUS	UKR	USA	OTH
2013	Quota	1.185	2.769	637							1.870			38
	Share	18%	43%	10%							29%			1%
2012	Quota	1.094	2.556	588							1.726			36
	Catch	1.586	922	134	31	38					1.588			0
	Used	145%	36%	23%							92%			0%

The EU holds a minority position in the share of this redfish population, despite which the Community quota is important enough to justify the presence in the NAFO regulatory area of vessels from the Baltic States since they joined the EU. The catches by the Community fleet exceed the available quota, as transfers were received from other contracting parties, including Canada, who are not making full use of their own quotas.

Fishing for this redfish was banned from 1998 to 2008. The TAC for 2013 is of 6,500 tonnes and results from a fishing mortality of 1/6 Fmsy, for an exploitable biomass of 1.5 Bmsy. All the research surveys confirm a continued increase of the biomass indices since 2005, reaching the most robust values in the historical series. Recruitments are above average and their survival has reinforced the mature component of the population.

In order to understand the discrepancy between the indicators of reference for maximum sustainable yield (MSY) management, according to the assessment model, and the management that has been adopted for redfish 3LN, the relevant data are compared in the following chart:

REFERENCES	MORTALITY	BIOMASS	YIELD
Recommendation for MSY of the ASPIC assessment model	Fmsy = 0.11	B/Bmsy = 1	TAC msy = 25,000 t
Current biological status and management adopted by NAFO	1/6 Fmsy = 0.02	B / Bmy = 1.514	TAC 2013 = 6,500 t
Variation between management and MSY recommendation	-82%	51%	-74%

For an MSY stock biomass, currently 50% higher, the model suggests that a maximum catch of 25,000 tonnes is viable. No stock grows forever. It is during the rising stage that catches ought to be enhanced and not when the biomass and abundance indices are decreasing. No reasons are discerned for the TAC to correspond to a mortality rate of 1/6 de Fmsy when the biomass is = 1.5 Bmsy, when the Scientific Council has provided a projection for TAC and B based on a mortality of 1/3 Fmsy.

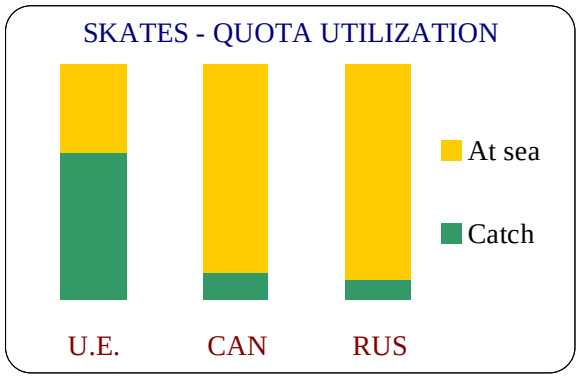
Recommendation: The LDRAC recommends the EU to verify the logic in the above exercise, as it reflects the conclusions in the 2012 report by the Scientific Council. The EU must defend a TAC resulting from a mortality of 1/3 Fmsy = 12,277 tonnes.

4.1.2 – THORNY SKATE 3LNO

SKATES			3LNO		TAC 2012		**8.500**		TAC 2013		**7.000**		-18%	
C.P		U.E.	CAN	CUB	FAR	SPM	ISL	JAP	KOR	NOR	RUS	UKR	USA	OTH
2013	Quota	4.408	1.167								1.167			259
	Share	63%	17%								17%			4%
2012	Quota	5.353	1.417								1.417			315
	Catch	4.043	187			20					3			0
	Used	76%	13%								0,2%			0%

The stock was regulated by TAC in 2005, therefore it is important to have a broad picture of the activity of the fleets of the contracting parties with a quota to catch this resource:

SKATE			
Quotas and Catches 2005-2012			
CP	EU	CAN	RUS
Quota	62,967	16,667	16,667
Catch	39,308	1,964	1,463
Rate	62%	12%	9%
At sea	23,659	14,703	15,204



The initial TAC for skate is of 13,500 tonnes, after 5 years of stability it was reduced down to 12,000, 8,500 and 7,000 tonnes in 2013, for Canada's convenience, whose rate of utilisation of its quota is irrelevant (12%) if compared to that of the EU. Canada's quota for 2012 (1,417 tonnes) is slightly lower that the aggregate catches of skate from 2005 to 2012. The EU skate quota in 2013 (4,408 tonnes) is practically identical to the catches in 2012 and below the annual catch average ever since the stock was regulated in 2005. Canada, with this fishing behaviour, is in a condition to continue to lobby before the Fisheries Commission to reduce the skate TAC, aiming at conditioning

the activity of the Community fleet in a fishery in which it is dominant. We do not censure Canada, because its strategies are legitimate to defend its own interests. The LDRAC will not understand if the EU submits to such lobbying, weakening access to the resource whose biological safety is not being compromised due to the low fishing mortality rates that are being verified. In 2010 and 2011 there are records of good year classes with lengths <21 cm, whose survivors will increase the exploitable stock in the coming years. The assessment will only be updated in 2014, yet another strong reason for not changing this year the management measure of 2012. We note that a reduction of 1,000 tonnes in the TAC will impact the EU quota by 630 tonnes.

Recommendation: The stock will be reassessed in 2014. We anticipate pressure to reduce the TAC. The LDRAC recommends that the TAC of 7,000 tonnes for 2013 be maintained in 2014.

4.2 – POPULATIONS WHOSE FISHING IS BANNED

RECOMMENDATION / 2011		**RECOMMENDATION / 2012**
AMERICAN PLAICE 3M	WITCH FLOUNDER 3NO	AMERICAN PLAICE 3LNO
Applicable 2012 / 2013 / 2014	Applicable 2012 / 2013 / 2014	Applicable 2013 / 2014
Under moratorium since 1996	Under moratorium since 1995	Under moratorium since 1995
Spawning biomasses below the limit biomass, indispensable to restart fishing		
LDRAC proposes to maintain the ban on directed fishing until a new assessment is made		

5. SHRIMP STOCKS. TO BE ASSESSED BEFORE THE ANNUAL MEETING

5.1 - SHRIMP 3L

SHRIMPS		3L			TAC 2012	**12.000**		TAC 2013	**8.600**			-28%	
C.P.		U.E.	CAN	CUB	FAR	SPM	ISL	JAP	KOR	NOR	RUS	UKR	USA	OTH
2013	Quota	479	7.163	96	96	96	96	96	96	96	96	96	96	
	Share	6%	83%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
2012	Quota	668	9.994	134	134	134	134	134	134	134	134	134	134	
	Catch	959	7.866	0	1.036	0	0	0	0	0	0	0	0	
	Used	143%	79%	0%	775%	0%	0%	0%	0%	0%	0%	0%	0%	

This shrimp stock, whose distribution area includes Canada's EEZ and the regulatory area, is regulated by TAC since 1999. The TAC increased rapidly up to 30,000 tonnes in 2009/2010. Falling biomass indices and the reduction of the exploitation rate imposed a tac of 8,600 tonnes in 2013. The decision at the AM of 2012 was surprising, authorising Canada to fish its quota in international waters, without having compensated the EU with the transfer of 500 tonnes of redfish 3LN that had been committed.

5.2 - SHRIMP 3M

In 2010 the Fisheries Commission decided to ban this fishery as from the following year, in the light of the waning biomass verified during the EU survey focused on this division. The contribution of the rapid increase of the cod stock in the decline of the shrimp biomass is being researched into. The management of the cod fishery by an appropriate TAC integrates the concept, recently discussed at NAFO, of an ecosystem approach to fisheries management. The LDRAC reinforces the proposition made in the recommendation of 2012, which would be useful to improve the selective collection of the data needed to assess the stock, that a controlled fishing effort be authorised for a commercial vessel in periods of the year chosen by and under the supervision of Science.

6. SUMMARY OF CATCH ACTIVITY IN NAFO IN 2012

The European Union should be ever more aware of the weight that the NAFO fishing zone has to assert the external dimension of the common fisheries policy in the sustainable management of resources in the high seas. More than just a very rich history of decades of fishing in NAFO, before and after the establishment of exclusive economic zones, there is a consolidated present time in which the European Union is the contracting party that best combines sustainable management of stocks with obtaining economic revenues, as is proven by falling fishing mortality rates in almost all the fisheries and population units. The leadership, without reluctance, that is demanded for the EU in NAFO, apart from being necessary to counter the less clear strategies of some Coastal States, is the result of the top position of the EU in matters of fishing yield in the NAFO regulatory area, as proven by the statistics for 2012:

NAFO / TOTAL PRODUCTION OF RELEVANT SPECIES									**2012**
Species	Stock	EU	CAN	RUS	FAR	SPM	NOR	OTH	Total
G. halibut	2+3	7,133	6,014	1,543	147	198	1	3	15,039
Cod	3M	5,215		745	2,045	131	826	172	9,134
Redfish	3M	5,001		1,711	149	69		600	7,530
	3O	5,346		971	101				6,418
	3LN	1,586	922	1,588	31	38		134	4,299
Skate	3LNO	4,043	187	3		20			4,253
White hake	3NO	117							117
Yellowtail	3LNO	970	1,794	84		321		283	3,452
Shrimp	3L	959	7,866		1,036				9,861
Other	SA 3	3,350	323	189	3	285		29	4,179
Total catch CPs		33,720	17,106	6,834	3,512	1,062	827	1,221	64,282
Ratio over total		52%	27%	11%	5%	2%	1%	2%	100%
Ratio without Canada		71%		14%	7%	2%	2%	3%	100%

- The fishing yield by the community fleet prevails in 8 out of the 10 stocks analysed.
- The total catch by the EU is more than half of the total catches in the NRA.
- If we exclude the catches by Canada, that are made totally in its sovereign waters, the weight of the total EU catches in the NRA goes up to 72%, which is overwhelming.
- After the EU follow Russia and the Faroe Islands, with ratios of 14% and 7%, respectively.
- There are 5 contracting parties without any catch records in the NAFO regulatory area in 2012, though this did not diminish their intervention capacity in the Fisheries Commission, often becoming involved in political alliances that are detrimental to the EU stakes.

7. VULNERABLE MARINE ECOSYSTEMS

7.1 – ONGOING MEASURES IN NAFO TO PROTECT VMES

NAFO was one of the first regional fisheries organisations to be concerned with adopting the orientations specified in the Resolutions by the Assembly General of United Nations, especially resolution 61/105, for deep-sea fishing in the high seas, with a view to mitigate the impact on benthonic structures of the marine ecosystem that due to their sensitive biomorphological features have low resilience to more aggressive interferences to their life cycles. The NAFO Fisheries Commission established a specialised working group to conduct the research and propose measures to prevent significant adverse impacts on VMEs, respecting FAO guidelines for deep-sea fishing in international waters. Out of the most relevant measures adopted in recent years, we would like to highlight the following:

- Introducing a chapter in the NCEM that addresses this issue specifically.
- Delimiting protection zones around 6 sea mounts, for which deep-sea fishing is banned until December 31, 2014.
- Delimiting 12 impact prevention zones for corals and sponges in sub-area 3.
- Mapping the fishing area by superimposing vessel tracking since the 1980s.
- Defining and subsequently reducing the boundaries of encounter with VMEs in the fishing footprint, with move-on rules for vessels and reporting the event to the relevant entities.
- Strict rules to be complied with whenever starting exploratory fishing in new fishing areas.

NAFO's intervention in this domain also renders credibility to the research survey directed to increase the knowledge about the seabed, conducted by a Spanish oceanographic vessel with the participation of researchers from several contracting parties. The collection and analysis of samples from the seabed in the area swept by the equipment has enabled VME management measures, namely the establishment of areas where bottom fishing is banned, to be based on objective scientific knowledge and not on conjectures that contaminate decision-making processes and the relationship between the stakeholders, even though they may be driven by the same principles of environmental sustainability. The NEREIDA project needs funding in order to proceed, and so the LDRAC requests the EU to mobilise financial resources to this purpose and to raise awareness for NAFO to assume its responsibilities.

7.2 – ADVICE ON CERTAIN INVERTEBRATE ORGANISMS

In item 7 of the request for annual advice to the Scientific Council, the Fisheries Commission lists a group of indicators for VMEs, for which it requests the definition of encounter boundaries and proper move-on rules for vessels in case the boundaries are crossed. We see it positive that the Scientific Council recognises that the areas containing vulnerable benthonic organisms are already very well defined in the fishing footprint, the logical result thereof having led to the adoption of broad areas where bottom fishing is banned.

In the assessment of the presence of VME indicators in the areas where the surveys took place between 2006 and 2011, it is hard to understand that the Scientific Council has valued the collection of small gorgonian corals weighing 200 grams, in trawl tows 13.8 nautical miles long, despite admitting that it is impracticable to implement management based on encounter boundaries and move-on rules with reference to such insignificant amounts. For the encounter boundaries with large gorgonian corals outside of the footprint, the recommendation is targeting 2 kg, without achieving to relate such weight to the length of commercial trawl tows. For rarer VME indicators, the location projections in the NRA are made with the quantities caught in the surveys which are identified by scales from sets of ten grams up to a few kilograms. The Scientific Council recognises that the very low catchability of these taxonomic groups is a problem for data quality, despite valuing any catch weight.

The LDRAC understands that there is a clear distortion of the principles and objectives of sustainable management of the ecosystem when such kind of analyses and advice are pursued. In order for prevention measures to be accepted and taken on board in everyday fishing, they must be proportional to the relationship between the economic losses they cause and the environmental benefit they envisage. The LDRAC questions the honesty in a recommendation that defends that a by-catch of 200 grams of coral in a trawl tow 13.8 nautical miles long is an event that may justify preventing catching several tonnes of fish from healthy stocks. Such kinds of positioning, essentially led by scientists from the Coastal States, legitimise the introductory considerations to this recommendation, warning the EU towards the imperative of separating propositions based on scientific knowledge from strategies whose aim is to open up the way for more profitable enterprises, eliminating sustainable fishing.

7.3 – REVISION OF AREAS WHERE FISHING IS BANNED AND NEW AREAS

The proposition to adjust the physical boundaries of some areas already closed to fishing and the establishment of new areas 12, 13 and 14 is using as a reference during the research surveys the catch of sea pens whose weight is far below the 7 kg provided for under no. 3 of Art. 22 of NCEM. Apparently, the boundary revision proposed for area 10 is unnecessarily expanding the closed zone towards the west quadrant, taking into account the location of the VME samples collected. Catch activities should not be conditioned without environmental reasons to justify doing so. The LDRAC supports the proposition by the EU (FC WG - VME WP 13/2 Rev1), despite having doubts as to the appreciations made under bullet point no. 2. The areas where fishing is banned are not more or less efficient according to their size, but rather according to the quality of the prospective assessment on which the decision by the Fisheries Commission to close them was based.

8. TECHNICAL AND OTHER CONSERVATION MEASURES

Commercial fisheries in NAFO are developed respecting conservation measures for the population units that reconcile catch limits with technical measures. Every year the Fisheries Commission endeavours to perfect them by adopting the propositions by STATIC. The manual of conservation and enforcement rules has achieved very high levels of demand and compliance, therefore we consider it is more important to consolidate what has been achieved in fishing practice rather than to insist on new changes to the regulation at every annual meeting, questioning the credibility of NAFO and hampering the capability of skippers to take the rules on board. Regarding some of the propositions under discussion, the following are our recommendations:

8.1- PROTECTING NAFO WATERS FROM POLLUTION (STATIC WP 13/10)

This is a proposition by the EU pursuant to the obligations under the MARPOL Convention, and it basically focuses on sources of pollution issuing from vessels, relative to litter, plastic and other waste. Most of the vessels fishing in NAFO comply with MARPOL requirements and certainly will not be affected by the adoption of this proposition. We would like for no. 2 to contain an explicit mention to other sources of pollution, such as those that may issue from accidents in the subsea extraction of petroleum, gas and other fossil minerals, more so considering the recent environmental disaster caused by the oil spill in the Gulf of Mexico. The mention would be timely and opportune, as it is well known that Canada has made the decision to start prospecting for energy at the Grand Banks, within the NAFO regulatory area.

8.2 - BY-CATCH OF REDFISH 3M (STATIC WP 13 / 11)

With the rule adopted in 2012 of limiting to 50% the catch of the TAC for redfish until June 30th, the likelihood of discards increases if the above referred share of the TAC becomes exhausted in the first half of the year. This risk applies to the contracting parties that have quota and to those that lack quota and fish under the quota of "Others". We remember that the EU prohibited fishing for redfish by vessels flying the EU flag on June 19, 2013, through Regulation EC 551/2013 , creating a problem to accommodate by-catches, namely in the fishery for cod 3M. Therefore, it makes sense to overcome this difficulty with the authorization to regularise by-catches of redfish, after prohibiting fishing for having exhausted 50% of the TAC until June 30th. As this population unit is not under moratorium, the LDRAC understands that it would be pertinent to apply the rule in Article 6º 1 a) that provides for a maximum by-catch of 2,500 kg or 10%, because this is a temporary prohibition of directed fishing to a given species, which acts as if until June 30th the contracting party were to lack quota. Even so, the proposition by the EU to limit the by-catch to 1,250 kg or 5% fills a gap that was created by the new management modality for redfish at the Flemish Cap.

8.3 - LABELLING WITH CATCH DATE (STATIC WP 13/13)

The LDRAC, in its recommendation of 2012, detailed the history of Canada's reprehensible behaviour regarding the management of this issue. The adoption of supplementary identification requirements for fishing products retained on board, in the last few years, is proof that NAFO is enforcing a credible regime of traceability for production, whereby this new requirement is dispensable.

If it were to be absurdly adopted, there would be an overburdening of work on board, with the risk of increased stress for the crews and consequences for safety in general. There would be a reduction to the pace of fish processing and storage, to the detriment of complying with health and hygiene requirements and prolonging the presence of the vessels at the fishing zone, increasing operating expenses. The production date is information that is available in the relevant logbook, this being the routine enforced in international waters, under the management of organisations comparable to NAFO, without this issue having ever been raised. The LDRAC recommends that Article 27 of the NCEM be maintained with its current wording.

8.4 - CONVERSION COEFFICENTS (STACTIC WP 13/3)

Without detracting from the merit of the work of identifying methodologies, practices and routines in fish processing, that Canada submitted for reflection, the LDRAC underlines that this is an issue that is difficult to standardise, as the processing techniques on board are frankly different and take into account the eating habits of the consumers to whom the production is destined. There is no room to impose significant changes to the processes, as they may jeopardise the profitability of fishing operations which are very much compromised in this day and age of rising energy costs. We understand that the issue must be followed up attentively, and it is of the essence that the working techniques and fish presentations in the different Member States be safeguarded in the progress eventually made to this dossier, which calls for the stakeholders to be given prior audience.

The LDRAC ought to be the European Commission's preferred channel of communication with the stakeholders, given the amplitude and diversity of organisations that it represents. Without underestimating other institutional representatives of the EU, the European Commission must be aware of our predisposition to cooperate in building balanced solutions to maintain the population units in NAFO within biological safety zones, in order for the sacrifices that have been asked of European fishing to have a fair economic return.

Madrid, August 29, 2013