



ADVICE

OBSERVATIONS AND COMMENTS TO THE ANNUAL MEETING OF NAFO Varadero (Cuba), 19-23 September 2016

Date: September 2016

Reference: R-06-16/WG2

1. Introduction

After the meeting of the Scientific Advisory Council of NAFO, held in Halifax (Canada) from the 3rd to the 16th of June of 2016, the LDAC makes a number of clarifications for the awareness of DG MARE of the European Commission and the Administration Fisheries of the Member States of the EU, with a view to prepare the forthcoming discussions within the 38th Annual Meeting of NAFO, to be held in Varadero (Cuba) from the 19th to the 23rd of September of 2016. The TACs and quotas for 2017 will be established at that meeting, together with other issues relevant to the future of fishing in the NAFO regulatory area.

The policy of progressive reduction of discards considered under the current CFP and the new proposals currently under observation lead us to also provide a specific response, with comments and approaches on the proposals regarding the landing obligation in the case of NAFO fisheries, which is addressed as a separate advice.

2. Greenland halibut (GHL) 2+3KLMNO

The industry members of LDAC are extremely concerned about the delay in the process of drafting the new Harvest Control Rule (HCR) that will govern the conditions of the fishery as from January 2018.

In order for the previously established calendar to be met on the above date without any delay, it is necessary that the Scientific Council (SC) of NAFO may develop the benchmarking process for Greenland halibut during 2017, so that the new HCR will be available for the meeting of the Fisheries Commission (FC) of 2017, and thus enter into force on 01.01.2018.

All the representatives of the industry of the European long-distance fleet in the EU involved in the fishery agree in highlighting the good status of the stock in NAFO waters, and so the new HCR should not be postponed to 2019 due to an issue of the workload of the NAFO SC.



Therefore, the LDAC urges the Contracting Parties to adopt in the Fisheries Commission the necessary measures to ensure that the human and financial resources or equivalent alternatives available to the SC of NAFO may enable the latter to develop a benchmarking process for Greenland halibut in the regulatory area 2 + 3KLMNO.

In addition to the above-referred process, there are two ongoing issues of concern that the LDAC kindly requests to be clarified by the SC (the new benchmarking will no doubt enable this):

- The unavailability of catch estimates by Canadian commercial fisheries for the period 2011 - 2015, which creates uncertainty and hampers the ability to know whether there were exceptional circumstances in the Management Strategy Evaluation (MSE) for the stock in 2015, as this requires the comparison between the indices and catches simulated in the MSE and the indices and catches actually observed during the campaigns. It is necessary to solve this data deficit in the shortest possible time.
- The severe discrepancy in the Canadian spring survey (especially the data for 2014, in comparison to that of the years 2011-2013), and the fact that in 2015 it has not been able to be contrasted, whereby it shows an actual bias with regard to the two autumn surveys, in addition to determining a steady reduction in the TAC of 5% each year, by applying the biased data to the current HCR. A 5% decrease of the TAC would mean an estimated economic loss, in terms of average catch value, of 4 million euro only for the European fleet. Nevertheless, the data situation needs to be improved while the precautionary approach should be followed.
- Therefore, it would be necessary to clear up such uncertainty using new data that may enable better understanding of the actual consistency of the 2014 data, as there are doubts about the accuracy of the survey in terms of bathymetry and the lack of age groups for this population. A review of the consistency of these data is requested, given that if the current HCR is applied without taking into account the results of the spring survey of 2014, it would mean an increase of 7% of the TAC.

In view of the above, the LDAC would request the Commission to acknowledge the weaknesses/deficiencies of the current management procedure of the HCR in place for Greenland Halibut and advocates for a “*status quo*” of the TAC for 2016 until the new HCR is adopted. It also requests to actively promote the conclusion of the review of the MSE by fall 2017, subjected to the approval of the Contracting Parties, for which dedicated meetings of the SC and the FC must be called upon.



3. Cod 3M

There are no relevant comments regarding this stock since the proposed TAC for 2017 was already planned and fixed previously, and it represents a 10.80% improvement compared to the TAC available for 2015.

In addition, the full work schedule of the NAFO SC for this stock in 2017, with a complete comparative assessment (benchmark process) in April, will enable the Fisheries Commission to have a consistent working basis for the 2017 meeting.

Nevertheless, it is important to highlight the problems that the SC is encountering when adopting an exploitation rule that gives stability to the decisions when establishing the TAC in the future, in line with the current system for halibut, even though the standard contained in the system may be different.

The lack of staff to advance the process and the interaction with numerous other efforts that the SC is performing highlight the need to review the methods and work processes of the SC itself.

Likewise, the differences and inconsistencies between the data available from various National Oceanographic Institutes of the different Contracting Parties, the lack of agreement and specific data on natural mortality of cod in the area, as well as the necessary revision of the benchmarks make the industry members of the LDAC fear that the adoption of a new operating rule may end up being delayed at least a year.

It is also important to note that this year the first selectivity trials have been performed for the cod fishery in the NAFO RA 3M on commercial fishing vessels from UK and Spain using sorting grids and the same fishing gear used in the fishing grounds of Norway and Svalbard. The LDAC industry members are in favour that this exercise continues, albeit safeguarded by a scientific program validated by the Commission in order to be applicable to the new exploitation rules to be adopted next year.

4. Redfish 3M

As noted in 2015, this population has the highest levels of biomass since the late 1980s until today.



Considering that this year there was no assessment review of the stock by the Fisheries Commission, the SC reiterated its advice from the previous year for 2016-7, namely:

- *Age structured model.*
- *Stock above historical average level.*
- *Fmsy unknown (Reference points not defined)*
- *Catch at low level over past 19 years.*
- *Next full evaluation 2017.*

Recommendation for 2016 and 2017: Recent decline in proportion of *S. mentella* and *S. fasciatus* allows a marginal increase in TAC in 2016-17 to 7000t, without changing the exploitation rate on these species and having the stock remain at a relatively high level.

Regarding the assessment by species, the SC states that: ***The next full assessment of the Beaked Redfish (*S. mentella* and *S. fasciatus*) in Div. 3M stock is scheduled for June 2017. Scientific Council will endeavour a full assessment of the 3M golden redfish (*Sebastes marinus*) at that time.***

The quota allocation in the area was made on the basis of the existing allocation from 1997 and on the basis of 20,000t, although the fishery is closed once 7,000 t. of catches are reached, resulting in an “olympic fishery”.

Canada has an allocation of 500t, Cuba 1,750t, EU 7,813t, Japan 400t, Russia 9,137, DK, FR, KOR and USA 69t each, and there is a quota to “others” of 124t. Within the EU TAC, Estonia, Latvia and Lithuania have assigned 1,571t each; Spain, 1,313t; and Portugal, 974t.

During 2015, there have been many swaps on these fishing rights: Japan transferred 400t to Canada, which in turn transferred 800t to Spain; Cuba transferred 1,100t to Portugal; France 69t to Estonia; and Korea 69t to the EU.

On 9 February the fishery was closed by TAC full utilisation in the first half of the year and, after the reopening on 1 July, the final closure took place on 13 July 2015, i.e. less than 2 months of effective fishing.

The fishing activity in 2015 was led by the EU and the declared catches, according to Statlant 21A, amounted up to 85% (Estonia 800t, Spain 1,713t and Portugal 4,232t), while Russia remained at 15% of their quota utilization (1.085t). The other CPs did not participate in this fishery.



The TAC set in 2016, also proposed for 2017, could have been higher bearing in mind that fishing mortality has been at the lowest limits of the historical series.

5. White hake 3NO

If in the previous case the TAC set in 2016 was maintained for 2017, in this case the SC proposes to reduce it from 1,000 tonnes to a range between 100-300 t for 2017.

We believe that since it is a species whose presence is highly seasonal, depending mainly on its recruitments, it is of interest to set a TAC that may cater for accidental catches in other fisheries.

Therefore it is suggested to maintain the TAC at 1,000 t.

6. Cod 3NO

According to the Scientific Council of NAFO, the review of available data for this stock confirmed the recommendation made in previous years. It stated that this population is keeping moderate (rather low) levels of recruitment and a fishing mortality well below F_{lim} . Even though with a fishing mortality at F_{sq} level catches between 1,000 and 1,500 t could be obtained, it is considered appropriate to maintain the population under a moratorium, as proposed by the Scientific Council.

The limit for by-catch established for this stock under Article 6.3 (b) of NCEM "*for cod in Division 3NO: 1,000 kg or 4%, whichever is the greater*" has been exceptionally low in recent years, responding to express recommendations by the SC to achieve a faster recovery of the stock. This figure should be adjusted upward as such recovery is recorded, in order to reduce the increasing need to discard if unavoidable. The analysis of CATs shows that the current limit is being exceeded with some frequency in the redfish, ray and yellowtail flounder fisheries.

As a general comment, the LDAC would like to remind the European Commission and the NAFO CPs of the fishing rights of the EU in relation to cod stocks in other NAFO areas such as 2JKL, with an allocation of 5% of the quota caught by Canada. As a matter of principle, all possible fishing rights of the EU in RFMOs should be pursued and upheld.



7. Thorny Skate 3LNO

The SC recommendation for 2017-2018 says:

"The stock has shown little improvement at recent catch levels (approx. 4700 t, 2011 - 2015), therefore Scientific Council advises no increase in catches".

When referring to the Stock status in the summary, it says:

"The stock is currently above Blim. The probability that the current biomass is above Blim is 0.99. Stock biomass has been increasing very slowly from low levels since the mid-1990s. Recruitment declined below average in 2014-2015. Fishing mortality is currently low." (Advice based only survey index and catches)

Also, the SC report adds the following:

"Since 1997, biomass indices have been increasing very slowly from low levels, while abundance indices remain relatively stable at very low levels".

There are no warning signs that justify changes in the exploitation patterns, and the recommendation of not increasing catches can be easily meeting without need of adjusting the TAC provided that there are no changes in the current fishing effort.

FC is tasked to set the TAC in 3LNO while Canada sets autonomously a TAC of 1,050t for RA 3Ps, which has remained stable since 1997 (even when the current catches are only 247t).

Some CPs, which do not have a commercial interest in the fishery and do not consume its quota within the RA, have used SC recommendations in previous years to ask for reductions on the TACs to align it with the catches in a process that only affects those CPs that do catch their quotas and see reduced their TAC as a result. This has led to a reduction of the TAC, without any scientific evidence, from 13,500t to the current 7,000t despite the fact that the present biomass is higher than the referenced one for setting the initial TAC.

The key figures for this stock are shown here:

TAC 2015-2016, 3LNO 7,000t (CAN 1,167 (catches 1t 0%), UE 4,408 (63%), RUS 1,167 (catches 74t ó 6%); Others 258t).

The total EU catches in 2015 were approx. 3,750t, (80% of its TAC), 3,399t ESP (TAC 3,403t) 100%, 310t POR (TAC 660t) approx. 50%, y 47t EST (TAC 345t) approx. 15%.



A decrease of the TAC 3LNO to 4,700t (average catches for the period 2011-2015), would leave the EU with 2,961t so it should have to reduce automatically its fishing effort, which is not in accordance with what the SC asks, as this would bring the volume of catches down. On the contrary, in Canadian waters (3PS) this criteria is not applied when adapting the quota to the catches, and it would remain unchanged.

In terms of the fishing exploitation rate, it seems to be a downward trend in the volume of annual landings. The situation of the ray fishery is quite specific, having the by-catches a great incidence on its performance. The progressive improvement of the yellowtail flounder, plaice and cod stocks has caused steady increases of by-catches of these three species.

This can be identified as the main limiting factor of the directed ray fishery: once the by catch species improve their state, it creates a limitation de facto on the targeted fishing activity due to the ceilings in form of fixed percentages, which obliges to effort displacement in accordance with the NAFO CEM rules.

For the case of Yellowtail Flounder, there is an exception allowing a 15% by-catch limit so its effect in the process is mitigated, but in the case of cod the by-catch limit is only 3% and for plaice, 5%. Its impact here for the ray targeted fishery is higher.

In view of the above, the LDAC recommends:

Regarding fishing opportunities, if the stock shows a slight improvement at the current catch levels, and if the origin of such catches is taken into account, the level of TAC applied in 2015 and 2016 should be maintained for 2017, whereby we understand that no changes should be considered for the management for next year, and thus maintain the TAC for this species at 7,000 t, despite the overall average catches has been of 4,700t in the period 2011-2015, in the endeavour to prevent that the Contracting Parties who do not fish their quota may cause the established TAC to be further eroded, thus harming the fleets that do catch it (as it is the case for Spain).



8. Redfish 3LN

The scientific assessment indicates that the stock is above B_{lim} and fishing mortality below F_{lim} with recently increased recruitments, which endorse that the current HCR may set a TAC of 14,200 tonnes for the biennium 2017-2018.

The current management system for this stock was adopted in 2014, by the NAFO/FC Doc 14/29 "**Risk-Based Management Strategy for 3LN Redfish**", which defined an HCR to increase the TAC gradually, with the target to reach 18,100t in the period 2019-20, being this target compatible with an MSY level of 21,000t, being the SC responsibility to validate these increases. The SC made the following statement:

SC conducted the 2016 full assessment of Redfish in Division 3LN and evaluated the impact of the implementation of the adopted MS on the state of the stock. At the beginning of 2016, the stock was at or above B_{msy} and fishing mortality was well below F_{msy} during 2015. The probability of biomass being below B_{lim} or fishing mortality being above F_{msy} is < 1%. This statement means in practice to approve the increase of the TAC in accordance with the HCR adopted.

The TAC allocation approved for this stock is 10,400t para 2015, based on the allocation given in 1997, as follows: Canada 4,430t (42.60%); Cuba 1,019t (9.80%); EU 1.896t (18,23%); and Russia 2,992t (28.77%); and others 63t (0.6%). Within the EU, Estonia, Latvia and Lithuania have 514t each which means 14.82% of the total TAC; and Germany has 354t, 3.4% of the total TAC.

Regarding Swaps of Redfish in 3LN in 2015, Cuba transferred to Portugal 819t of 3LN Redfish; and the EU transferred to Canada 125 t, within the framework of a more general agreement.

Most part of the catches are being made by Canada within its EEZ; and Russia and EU-Portugal within the RA 3L. The estimation for 2016 according to Stantlant21 A, sums up to 10,244t, allocated between Canada 4,415t; Russia 2,972t; Faroe 64t; France St. Pierre 324t (in chartering with Estonia); Portugal 2,100t; Estonia 202t and Spain 177t.

It is worthy to note that Canada catches also in the Grand Banks 5,500t of Red Fish, under autonomous quotas in sub-areas 3Ps, 4T, 4VN, 4VS, 4W and 4X.

The LDAC considers the proposal by the Scientific Council as adequate, and it is understood that an improved stock assessment should have a positive impact on the management decisions of redfish stocks.



9. Redfish 30

The scientific assessment indicates that there is a high degree of uncertainty and data are limited, but there are indications that fishing mortality is low compared to that of the period 2000-2006, and while recruitments may be lower than desired due to the fishing of immature specimens as stated by the SC, it is no less evident that in the final decision of the FC the good status of the neighbouring stock in 3LN also ought to be weighed in.

Despite the fact that there is a lack of agreement for setting reference points for this stock, and the assessment is based only on the indexes of the scientific campaigns and the catch trends, the SC makes the following recommendation for 2017- 2019: ***There is insufficient information on which to base predictions of annual yield potential for this resource. Stock dynamics and recruitment patterns are also poorly understood. Catches have averaged about 13 000 t since the 1960s and over the long term, catches at this level appear to have been sustainable. Scientific Council is unable to advise on an appropriate TAC for 2017, 2018, 2019.***

It is also indicated in the SC report that recent recruitments have fallen and that the stock could have decreased in relation to the record values reached for both indicators on 2012. It is noted here that there are biomass indexes from scientific campaigns carried out by Spain which show that, out of the last 7 years, the stock has increased in 6 years, confirming a stable increasing trend and also that Canada did not carry out its autumn campaign in 2014, which makes more difficult to measure these data series.

The SC decided not to propose a TAC for the period 2017-2019 due to the scarce information available to base its advice: ***“There is insufficient information on which to base predictions of annual yield potential for this resource. Stock dynamics and recruitment patterns are also poorly understood. Council is unable to advise on an appropriate TAC for 2017, 2018 and 2019.”***

This last sentence is identical to that used by the SC in 2010, to do not establish a TAC for 2011-2013, and very similar to that of 2014 (*“Scientific Council is unable to advise on a more specific TAC level”*). In both cases, the FC kept the TAC at 20,000t.

Since the SC has not proposed a TAC for the period 2017-2019, the fishing industry represented in the LDAC with commercial interest in this fishery (Portuguese and Spanish fleet) agree that the EU advocates before the Fisheries Commission to keep a TAC “status quo” of 20,000t for the aforementioned three-year period, acknowledging the distinction between the TAC and the total levels of catches similarly to the case of Thorny Skate.



Another important factor is the close relationship existing between the stocks from 3LN and 3O, whose split seems artificial, as it is acknowledged by the SC on each assessment for this species, although for the time being recommends to keep the situation as it is:

Most studies the Council has reviewed in the past have suggested a closer connection between Divs. 3LN and Div. 3O, for both species of redfish. A recent study (Valentin et al. 2015) showed that some juvenile *S. fasciatus* sampled in the Gulf of St. Lawrence had the genetic signature of adult redfish from Divs. 3LNO and southern 3Ps. These findings suggest that stock structure is not well understood for not only Div. 3O but also neighbouring redfish stocks. However, differences observed in population dynamics between Divs. 3LN and Div. 3O suggested that it would be prudent to keep Div. 3O as a separate management unit.

It does not seem logical under these circumstances the diverging management decisions between the stock of Redfish 3LN, for which it is proposed this year an increase of 36.5% now and a further 27.5% in two years and that they propose with the scientific report for the same stock in 3O, to reduce the TAC with the false argument to align it with the catches, when the correct approach would be to keep the level of catches looking at the TAC distribution and the catches of last year.

The TAC in 3O, has remained at 20,000t since 2005, and is allocated between Canada (6,000t), the EU (7,000t), Japan (150t), given by swap to Canada, Russia (6,500t), Ukraine (150t, swapped to Poland), Korea (100t, swapped to the EU), and Others (100t).

Regarding the catches, according to Statlant21A, in 2015 they raised up to 8,364t (42% of the TAC), distributed as follows: Canada 31t (0,5% of its quota), which proves that it is not interested in this fishery, Russia 1,085t (18% of its quota, which decrease displacing vessels to 3L), and EU 6,745t (96% of its quota and 80% of its total catches). Within the EU, Spain caught 1.713t, Portugal 4.232t, and Estonia 800t.

As it can be checked in these three areas, the EU represents more than 80% of the catches in 3M and 3O, while in 3LN only counts for 18.23% of the TAC and almost one quarter of the catches due to the swaps. Therefore, the EU is the CP which is the most interested in having a uniform and balanced management along the three areas where the stocks are closely interrelated.

The LDAC also requests to the European Commission to ask for information from the Canadian administration on the results of their scientific observer spring campaigns for redfish in area 3O, including the volume of catches for each of the species of redfish to better understand the global state of the stock distributed both within the Canadian EEZ and in NAFO waters.



10. Plaice 3LNO

The 2016 assessment shows an improving trend in the spawning biomass, although the probability for it to exceed B_{lim} does not seem feasible until 2019, so the SC proposes to maintain the catch moratorium for 2017 and 2018.

It is considered by the LDAC appropriate to maintain the stock under a moratorium in force since 2009 during such period, as is proposed by the Scientific Council. It would be also positive to know discard data of this species as a by-catch from yellowtail flounder fishery.

11. Witch flounder 2J3KL

The quantitative assessment shows that the biomass is increasing since 2004, which in 2015 is close to B_{lim} , with low fishing mortality and improved recruitments in recent years (2013-2015), whereby the SC proposes to maintain that there be no directed fishing in the 2017-2019 triennium.

It is considered appropriate by the LDAC to maintain the stock under a moratorium during such period, as is proposed by the Scientific Council. Bycatches of witch flounder in other fisheries should be kept at the lowest possible level to allow for improved rebuilding of the stock.

12. Squid 3 + 4

Based on the assessment of the Scientific Council, the LDAC proposes to keep a TAC of 34,000t per annum ("roll over" equal to the current level) for the 2017-2019 period, which is considered appropriate.



13. Shrimp stocks

Background

For the last two decades the 3M shrimp stock in NAFO is the most important single one in terms of fishing opportunities, number of EU vessels and employment created.

A moratorium has been used for many collapsed fisheries globally in the past, but never on the North Atlantic shrimp stocks in the high-seas except for the NAFO stocks. Shrimp fishing differ from other fisheries in the high-seas because there is literally no by-catch due to the obligatory sorting grids.

The EU sector thinks that moratorium should not be considered as a conservation measure for shrimp in the high seas. If a stock is depleted or at very low levels the catch effort will immediately follow as NAFO records shows. It is important to allow for minor scale fishing effort for 3M shrimp to obtain CPUE data and to follow the stock development.

3LN shrimp

LDAC emphasized the importance of not to support reopening of the shrimp moratorium in 3LN unless same is applied for zone 3M.

3M shrimp

The stock situation is not as well-known as it could because there is a lack of feedback from fishing vessels. The area has been fully closed for shrimp fishing for 6 years without any recorded improvement for the stock. If there are no signs of recovery it is clear the regression of the stock could not be connected to a lower or modest fishing effort, but more likely would be connected to an increase of the cod biomass in the region.

The only information available for the last six years has been the annual survey mainly focusing on the ground-fish in 3M. The annual survey is not comprehensive enough in terms of information on shrimp fisheries.



Recommendations for 3M and 3LN shrimp:

Experimental fishery in 3M should be allowed in 2017. It is proposed to allow for 100 fishing days effort, subject to a participation of a scientific observer to collect more data.

The reopening of commercial shrimp fishing in NAFO should apply to both 3LN and 3M simultaneously. The EU should under no circumstances agree on reopening of the 3LN shrimp until the moratorium in 3M is lifted, unless scientific advice for both stocks clearly state otherwise.

14. Alfonsinos

In relation to the effort limit to 16 fishing days for alfonsinos fishery, it should be taken into account the activity carried out in the last years by the EU fleet (one Spanish vessel) insofar as the access to the resource is not undermined, also looking at potential access (fishing rights) from fleets that exploited this resource in the past.

15. EU policy on naturally attached shark fins

The LDAC understands that the EC should continue pursuing its aim to establish within NAFO the same rules than those in force under the EU Regulation on this subject matter. A consensus will be needed from other CPs that have systematically opposed to the adoption of this proposal, not only Asian but also Canada, which has shown reticence in the past to adopt this management measure in NAFO.



16. Other areas of interest

16.1. Risk assessment on the impact of survey hauls in closed areas.

This issue has been analysed by the Scientific Council of NAFO in response to the consultation by the FC.

It is important to consider the assessment that the SC has performed regarding the negative impact it may have on the indices of Greenland halibut and grenadier, as they show the greatest differences.

It is important to bear in mind that the SC itself states that *“if closed areas are withdrawn from the surveys, it may be difficult in some strata to find closed areas that may be trawled in order to perform the hauls.”*

This would certainly have an impact on the quality of the data obtained in such surveys, whereby it is advocated that in the case of scientific surveys the authorization to trawl in closed areas be maintained (since, in addition, this will also enable to evaluate potential encounters inside them), at least until the SC itself determines the validity of an alternative method or methods that may render such hauls unnecessary during scientific surveys.

The LDAC requests to support provision of all data on tows where sponges have been found, and whether these data are utilized in the stock assessment analysis.

Position from Seas at Risk:

Research surveys for the purposes of fish stock assessment continue to be the largest single threat to VMEs otherwise protected by closed areas. Up to 10,000 kilograms of VMEs can be removed by one research tow. It is imperative that NAFO take swift measures to prevent further damage to VMEs from research surveys as concern over this issue has been raised since 2008 at NAFO meetings.

As a result SAR makes the following recommendations:

- i) NAFO agrees to prohibit scientific research trawls from taking place within VME areas where encounters above the thresholds have been documented.*
- ii) As a matter of priority, NAFO through Contracting Party scientists continues its work to resolve the issue of research trawls within VME closed areas, with a view towards eliminating this practice by 2018.*



16.2. Coverage of surveys for Greenland halibut

The SC pointed out that before any new assessment is performed it will be necessary to conduct an analysis in order to assess the internal consistency of the different surveys and also between them (as a reminder, this issue was mentioned herein when discussing the situation of the stock). A specific case is that of the spring survey in Canada, which despite its great weight in the current HCR, casts some doubt as to its results regarding this species, since there seems to be no representation of individuals aged under 5 years.

The process should clarify this issue, which leads to trends, or even to totally discordant points compared to the median, which points we understand are now greatly affecting the results of the HCR for this stock.

16.3. Working plan on the potential impact of activities other than fishing

Beyond the individual considerations of proposals for the closure of fishing areas, NAFO should face the debate on the protection of Vulnerable Marine Ecosystems (VMEs) and the seabed, not only regarding fishing activities, but also pursuant to all human interactions and activities, of any kind and industry, in this organisation's regulatory and supervisory area. It makes no sense to continue closing fishing areas and then allow for oil or gas drilling or, in a not too distant future, seabed mining.

While it is clear that NAFO is an organisation that mediates only in the supervision and regulation of fishing activities in the field of their Regulatory Area, it is also clear that the activities of other industries have an increasingly strong impact on the status of fish stocks and the marine environment that supports them. The effects of these industries must necessarily be incorporated into the analyses and recommendations of the SC as factors that may have an impact on the mortality or the spatial distribution of the stocks. Moreover, the impact on VMEs and on the seabed, in general, should also be assessed.

It is also necessary that the RFOs in general, and NAFO in particular, begin to consider how to undo the Gordian knot that is the existence of numerous 'single-industry' bodies that regulate human activities in a given area. It makes no sense that an organisation may authorise underwater mining in an area closed to fishing or that the impact of such activities do not include the impact of the sediment plumes they leave floating in the sea.



On land, whenever an area is closed or regulated for conservation purposes, such decision affects all economic activities taking place there and the impact assessments must take into account the different interactions with ecosystems in order to approve any new activity. Such consistency should be the same on land and at sea, and therefore the thresholds to be respected by human activity should be equal in every area.

This discussion was featured in the recent Review Conference of the UN Agreement, held in May in New York. It is relevant in the field of marine biodiversity conservation and it is expected to mark the development of the discussions on the protection of the seabed in the context of ABNJ and BBJN.

The LDAC believes that NAFO should aim at actively leading such discussions, given its knowledge and experience on seabed impacts and conservation of marine habitats and ecosystems.

It should be debated whether or not present or future decisions towards closing or regulating a specific area should be made dependent on the implementation of similar measures regarding other human uses of the same area, by the competent organisations.

16.4. Structure and operation of the Scientific Committee

There is a recurring consideration at the meetings and conversations with the scientists who are collaborating and contributing to the work of the Scientific Committee, and that is the complexity of its structure and the workload it bears. It must be remembered that much of the work is carried out at the summer session each year in Halifax, where members meet during three weeks. To extend it to four weeks or longer seems to be a cosmetic measure.

The work of the Scientific Committee is the most important of all the committees that make up the decision-making framework of NAFO. Without its scientific validation, all other work and decisions made by policy makers and managers of the fishery would be no more than arbitrary and with no value for stock conservation.

Therefore, a thorough evaluation is necessary of the working methods of the SC as well as of its internal methodology and its composition in order that it may successfully tackle its workload and also perform it within the time frames necessary for the proper protection of the ecosystem for which NAFO



is responsible, but also of the fleets operating in the Regulatory Area, as they are also the responsibility of NAFO.

This is not criticising the SC and much less the scientists who make it up, quite the contrary. More and more matters are being referred to the SC for analysis before a decision is made, and thus there is an increasing burden of "minor issues" that prevent larger projects from progressing.

In a fishing scenario in which we always endeavour for the best science available to prevail, this cannot be construed as just the science available, but as the best science that may be achieved, and to such a purpose more means and organisational facilities should be made available for the activities of the SC.

It is also necessary for the SC to open up to new scientific approaches, and above all, to greater collaboration with the fishing industry and fleets operating in NAFO.

The LDAC further recommends reaching out to other RFMOs to learn about and potentially incorporate other scientific methods being used, especially regarding impact assessments, ecosystem road maps, MSE and HCRs.

[16.5. Reduction of discards](#)

A specific document will be issued separately in reply to the public consultation by the European Commission on the implementation of the landing obligation for European vessels outside Community waters in the NAFO regulatory area, submitted on 1 August 2016.

[16.6 Impact assessments](#)

To improve the knowledge on fishery specific impacts as proportion of the area, the LDAC proposes to assess the overlap of fisheries with VMEs. This has already been discussed at the 2016 WG on Ecosystem Approach Framework to Fisheries (WFEAFFM). It is further considered useful to work on studies regarding functional SAI (seriously adverse impact assessments) criteria, to include in the assessments parameters such as resilience and links with fisheries. With regard to SAI, certain areas still remain open.



Seas at Risk Position:

SAR proposes closures of areas 13 and 14. The 2016 impact assessment clearly shows that 81% of known significant biomass concentrations of seapens remain at risk of significant adverse impact or are being impacted. Existing recommendations for seapen closures (areas 13 and 14) have not been agreed since first recommended by the NAFO Scientific Council in 2014. It is imperative that NAFO CPs work together to fully protect known concentrations of VME indicator species and follow scientific advice that has been provided since 2014.

As a further recommendation, SAR proposes the following:

- the 30 closure should be extended to the 500m isobaths to protect known coral concentrations adjacent to current closure*
- adopt other area closures where significant concentrations of these VME indicator species have been identified*

-END-