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Northwest Atlantic Fisheries Organization



NAFO Joint Fisheries Commission-Scientific Council Working Group on Catch Reporting (WG-CR)

06 February 2017 NEAFC Secretariat, London, UK

NAFO Dartmouth, Nova Scotia, Canada 2017

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1. Opening

Katherine Sosebee (USA), co-Chair of the WG, opened the meeting at 10:00 hours on 6 February 2017 at the headquarters of the North East Atlantic Fisheries Commission (NEAFC) in London, UK. Temur Tairov (Russian Federation), co-Chair of the WG, joined the meeting via WebEx teleconference. Representatives from the following Contracting Parties were in attendance: Canada, Denmark (in respect of Faroe Island and Greenland), European Union, Japan, Russian Federation, and United States of America (Annex 1).

2. Appointment of Rapporteur

Tom Blasdale and Ricardo Federizon (NAFO Secretariat) were appointed co-Rapporteurs.

3. Adoption of Agenda

The revised provisional agenda previously circulated was adopted (Annex 2).

- 4. Review and provision of guidance of the catch estimation process and catch estimates of the priority Stocks 2+3KLMNO Greenland halibut, 3LNO American plaice, and 3M Cod
- a. Work conducted by the NAFO Joint Fisheries Commission-Scientific Council Catch Data Advisory Group (CDAG) on the evaluation of the data sources and the development of catch estimate methodology.

The Catch Data Advisory Group (CDAG) met in early 2016 to compare the various NAFO catch data sources, and developed an Estimation Strategy (FC-SC Doc. 16-02). This strategy, presented in Annex 3 is based mainly on the use of Port Inspection data (PSC3)¹, as those are considered to be the most accurate because they are verified by an inspector. The Secretariat presented FC-SC CR-WP 17-05, which included the preliminary values calculated using the CDAG Estimation Strategy for the three priority stocks (3LMNO GHL, 3M COD, 3LNO PLA). The Secretariat highlighted a few challenges that were encountered when applying the method. These challenges included:

- The application of the rule to address discrepancies between daily catch records (CATs) and PSC3s, when the actual weight of the discrepancies is very low (footnote 2 of Estimation Strategy),
- Instances where the current method could not be applied, i.e. no PSC3 information is available for the flag State and therefore an alternate method is required (i.e. the "Leftover" column in Table 2 of FCSC CR-WP 17-05).

CPs noted that some flag States fishing solely for one species, and landing in their own ports are not required to undergo a port inspection under the NAFO CEM, and that perhaps the method is best applied to certain stocks (i.e. Greenland halibut, which requires 100% port inspection). The WG agreed to forward these issues back to CDAG to further refine the Estimation Strategy.

Port Inspection protocol is described in Chapter VII: Port State Control of the NAFO Conservation and Enforcement Measures (NCEM). Each port inspection shall be documented by completing form PSC3. During inspection, landed fishery products by species and weight are recorded in the form. Completed PSC3s also includes information on product weight, conversion factor and equivalent live weight.



b. Work conducted by the Secretariat on the validation of the 2016 catch estimates.

CDAG considered and compared all data sources available to the Secretariat in 2016. It concluded that the daily catch reports² (CATs) were the primary data source for 2015 catches, but that the Haul by Haul³ (H \times H) were not sufficiently complete for use in 2015, due to the restriction to the top three species. The Secretariat presented FC-SC CR-WP 17-03 (Revised), which included catch values on a trip by trip basis for fishing trips⁴ in the NAFO Regulatory Area that ended in 2016 for the three priority stocks (3LMNO Greenland halibut, 3LNO American plaice and 3M cod) from various data sources that are held at the NAFO Secretariat (daily CATs (Art. 28.6.c), H x H data (Art. 28.8.b), Observer data (Art. 30), and port inspection data (Chapter VII, Art. 10.5.e)). During the meeting, some discrepancies were corrected and the final version of the WP is FC-SC CR-WP 17-03 (Rev. 2).

The NAFO Secretariat also presented a comparison of the CAT data and the STATLANT data for 2015 in FC-SC CR-WP 17-04. Participants noted the values were slightly different from those presented at the 2016 Scientific Council meeting, and the Secretariat agreed to look into this further.

The WG agreed that follow-up work must be undertaken by the Secretariat to update and refine the catch estimates in consideration of these points of discussion. In addition, the update should consider a further scrutiny of fishing trips with Apparent Infringement⁵ or suspected mis-recording. At the time of the update, it is expected that the 2016 H × H data would be complete. Catch estimates from the observer⁶ data will be also included. The update will be presented by the Secretariat to the WG at the next meeting (see agenda item 11). One Contracting Party remarked that increasing the port inspection coverage, and consequently more complete PSC3 reports, would improve the catch estimation. Port States were encouraged to carry out port inspections to more than the minimum requirement of 15% coverage prescribed in the NCEM.

5. Discussion on the project proposal Study on Catch Estimates Methodologies

The EU presented the project proposal in FC-SC CR-WP 17-01 (Revised), which reflected feedback from CDAG and STACTIC (see FC-SC Doc. 16-02). The project outline envisions that the Secretariat would be the project proponent and that the Contracting Party would provide most of the funding.

Concern was raised about the possible involvement of CDAG in this project as it goes beyond any mandate given to CDAG and the Secretariat. It was noted that consideration of this study as a NAFO proposal would require more extensive review and engagement.

Contracting Parties discussed alternate approaches to advance this project and noted other projects in which the Secretariat provided support for projects that were not led by NAFO. Examples included NAFO's involvement in NEREIDA and ABNJ. EU indicated that it would explore an alternate way to have the project implemented. It will report back at the next meeting of this WG (see agenda item 11).

⁶ Observers on board the fishing vessel as per Article 30.A of the NCEM.



² Article 28.6.c of the NCEM stipulates: every fishing vessel shall transmit electronically the quantity of catch retained and quantity discarded by species for the day, by Division, including nil catch returns, sent daily before 12:00 UTC. The daily catch report of the fishing vessel is identified as "CAT" in the NAFO Vessel Monitoring System.

³ Article 28.8.b of the NCEM stipulates the recording and submission requirements of catches on a haul by haul (or tow or set) basis, or logbook information, of each fishing vessel.

Per Article 1.7 of the NCEM, "fishing trip" for a fishing vessel includes the time from its entry into until its departure from the Regulatory Area and continues until all catch on board from the regulatory Area has been landed or transhipped.

Apparent Infringements are issued by at-sea inspectors. Mis-recording of catches is one of the serious infringements listed in the NCEM. At-sea inspection protocol and procedures relating of infringements are described in Chapter VI: Joint Inspection and Surveillance Scheme of the NCEM.

6. Discussion on the future of this WG and the Catch Data Advisory Group

The CDAG was created under the umbrella of this WG (FC-SC Doc. 15-01 and FC-SC Doc. 16-02). These two groups have essentially the same membership. The WG reflected on the purpose served by the continued existence of both groups and considered the discontinuation of CDAG.

It was noted that the two bodies had a different focus and specific Terms of Reference. In particular, CDAG had a very technical focus and operated in more informal structure that recognized the highly technical nature of the discussions. Recognizing the progress made by CDAG in 2016 and its plan to continue to refine the catch estimation method in 2017, it was agreed that the status quo be maintained at least for another year.

It was suggested that FC and SC evaluate the progress of CDAG in 2017 and give consideration to the longer-term needs relating to catch estimation. This could include the possible sunset of one or both bodies and/or merging or amending the Terms of Reference.

7. Advice for data collection for the NAFO Observer Program

The Chair of STACTIC, Judy Dwyer (Canada), noted the ongoing work of STACTIC Observer Program Review Working Group (WG-OPR) which reviews the NAFO Observer Scheme with the aim of improving it.

The NAFO Observer Scheme (Article 30 of the NCEM) was basically established for compliance purposes. However, the data collected by observers as prescribed in Annex II.M. of the NCEM relate primarily to catches of species on a haul by haul basis. The observer may also collect scientific data if so requested by the Fisheries Commission. The catch data, as well as the any other data that could be collected by observers, has potential benefit for a variety of users, but given that the WG-OPR is a STACTIC WG, discussions to date have centered on compliance uses. The WG-OPR is seeking input from other NAFO bodies on any other types of data that observers could collect, or on how the current data collection could be improved to optimize the value of the observer program.

The WG-OPR has been tasked to revisit the NAFO Observer Scheme to clarify its role and related tasks. In this vein, the observer should be a data collector to serve NAFO users, including the scientists. The Chair of STACTIC presented FC-SC CR-WP 17-02, which contained two questions from the WG-OPR to help facilitate the improvement of the NAFO Observer Program.

Feedback from this WG and SC potential users of the observer data was sought both on the utility of this data collection and on how to improve the quality of observer data for these users. The WG considered the observer data as potentially useful for scientific purposes and catch data comparison. The length frequency data could also be useful for the Scientific Council. Some scientists noted that to be valid, scientific data must be collected in a specific way and in an independent manner. Further scrutiny of the available observer data is needed to evaluate its usefulness. In this regard, the catch estimates from observer data will be included in the follow-up task that the Secretariat will undertake (see agenda item 4).

The SC Chair indicated that she would attend the next meeting of the WG-OPR in May 2017.

8. Recommendations to forward to FC and SC

This agenda item is deferred to the next meeting (see agenda item 11).

9. Other Matters

a. NAFO Working Group on Improving Efficiency of NAFO Working Group Process

The Secretariat reported on the progress of the NAFO WG on Improving Efficiency of NAFO WG Process. Feedback was sought on the possibility of allocating two-week period for the proposed WG meetings; and on



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the development of a clear communication mechanism amongst NAFO's subsidiary bodies to allow improved collaboration between them intersessionally.

Concerning the first issue, the WG is open to the possibility of a two-week period allocation for WG meetings as long as the period allocation gives consideration to the fact that some WG meetings must adapt to the timing of the SC June Meeting and the Annual Meeting in September. If circumstances warrant, flexibility is needed to have meetings outside the two-week period. The preparation by the Secretariat in September 2017 of a tentative meeting calendar would be very useful and help improve the efficiency of the process.

Concerning the second issue, the WG would continue to reflect on the communication mechanism. The WG and CDAG can work intermittently via Share Point and when a meeting is necessary, it could be decided to have that meeting via WebEx.

10. Adoption of Report

The report was adopted by correspondence following the meeting.

11. Adjournment

The meeting was adjourned at 17:00 hours on 6 February. It was agreed that there will be a follow-up meeting, a joint WG-CR and CDAG meeting, sometime in the second half of March via Web-Ex. The co-Chair (SC Chair) will consult the participants via online survey to determine the exact date.



Annex 1. Participant List

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Annex 2. Provisional Agenda

- 1. Opening
- 2. Appointment of Rapporteur
- 3. Adoption of Agenda
- 4. Review and provision of guidance of the catch estimation process and catch estimates of the priority Stocks 2+3KLMNO Greenland halibut, 3LNO American plaice, and 3M Cod
 - a. Work conducted by the NAFO Joint Fisheries Commission-Scientific Council Catch Data Advisory Group (CDAG) on the evaluation of the data sources and the development of catch estimate methodology,
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- 11. Adjournment



Annex 3. Catch Estimation Strategy developed by the Catch Data Advisory Group Available Data

In recent years, there have been many improvements in the data that vessel masters are required to provide when fishing in the NAFO Regulatory Area (NRA). To date, CDAG has assessed the utility of these data sources and concluded that some data sources, such as tow by tow data, are not in a usable condition for this year.

It is anticipated that with recent improvements to the NAFO Conservation and Enforcement Measures (NCEM), as well as the resolution of technical issues relating to the submission and utilization of tow by tow data that this data source will be ready for use for the validation/estimation of 2016 catch. In the case of observer data, further assessment is required of the availability and improvements required to make that data useful.

In evaluating the utility of the current sources of data, CDAG decided that the most complete and timely data available are the daily catch reports (CAT)¹ which are reported by vessel masters to the Secretariat.

Given the completeness and timeliness of the CAT data, it is suggested that this be used as the base data.

Catch weighed off and recorded by port inspection (PSC3) is considered the most accurate. Based on these two factors, the following estimation methodology is proposed:²

- 1. Where PSC3 data is available, this equivalent live weight (plus recorded discard weight from CATs) be used;
- 2. For trips where no PSC3 data is available, a correction factor be applied to the sum of the CATs for that trip. The correction factor is defined as follows: the average per cent difference (weighted bycatch) between the CAT total and the PSC3 total for other trips by that same vessel;
- 3. If no PSC3 data is available at the vessel level, then a flag state factor be determined using the methodology in (2) using all vessels of that flag state;

In instances where the difference between CAT and PSC3 is greater than 50%, it is suggested that the Secretariat follow up with the appropriate Fisheries Monitoring Centre to ensure there is no administrative error. If no error exists but the discrepancy is related to extenuating circumstances which cannot be reconciled by the Secretariat, then the data from that trip should not be used in the development of any correction factor.



¹ In some instances, SC documents refer to this as DCR