DISCARD PLAN FOR THE MOLLUSC BIVALVE VENUS SPP (CHAMELEA GALLINA) IN THE ITALIAN TERRITORIAL WATERS FOR 2020-2022

Background

In 2016 Italy submitted to the European Commission a proposal of a three-year discard plan for the fisheries targeting Venus clams by hydraulic dredges in the Northern Adriatic Sea. With the derogation at the basis of the discard plan expiring in December 2019, the IT administration submitted an updated discard plan. This draft discard plan, accompanied by a study which evaluates the possible effects of re-defining the MCRS and the monitoring of the previous two years of implementation, were assessed by STECF at the winter plenary of 2019[1].

STECF was requested to review and make any appropriate comments and recommendations on the draft discard plan for the fisheries targeting Venus clams in the Northern Adriatic Sea and its supporting study.

STECF was requested to:

- Provide an opinion whether the survivability of Venus clams has been scientifically underpinned in the discard plan, and assess the potential survivability rates of Venus clams, considering the characteristics of the fishing gear, the fishing operations, the biological state of the Venus clams after the fishing operations, and the environmental conditions of the re-stocking area.
- Assess the potential past and future impacts on the stock of the proposed change in the MCRS for Venus clams from 25 mm to 22 mm on exploitation rates and stock biomass.
- Considering the results of the monitoring program for the period 2017-2018, assess whether the proposed new scientific monitoring program is likely to provide adequate data and information to evaluate the effects of the discard plan

In its subsequent advice STECF concluded the following:

- There is no new information presented in the supporting documents to quantify the survivability of discarded catches. A full study following the agreed standards is required and conducted under commercial discarding conditions. If restocking of any retained <MCRS clams takes place, appropriate monitoring of survival is also necessary.

- Improvements in the selectivity of the hydraulic dredge gear operating at the seabed could reduce the quantities of undersized animals that are brought on board the vessels. Some discussion of the effects of adjusting bar spacing and the scope for making adjustments are required.

- New information in the supporting documents is at present insufficient to provide indications of exploitation rate or trends in stock biomass.

[1] Scientific, Technical and Economic Committee for Fisheries (STECF) – 60th Plenary Meeting Report (PLEN-19-01). Publications Office of the European Union, Luxembourg, 2019, ISBN 978-92-76-02904-5, doi:10.2760/56785, JRC116423

- The monitoring programme instigated appears quite comprehensive, but some adjustments and improvements in the analysis and presentation of available data are required in order to make best use of the material being collected.

- Increased focus on stock survey elements of the monitoring (survey design, clarity in data presentation, construction of time trends etc) and on presentation of fishery information (catches, effort, effort distribution etc) would facilitate calculation of exploitation rates and provide more robust interpretation of biomass changes.

Based on this evaluation, the Member States from the Sudestmed Member States Group submitted a revised discard plan with additional supporting information. EWG 19-08 has made a further evaluation of the revised JR.

New Information supplied

The following supporting information was supplied to EWG 19-08:

- Report of the activity carried out after the entry into force of the commission delegated regulation 2016/2376 (2017-2018) (Annex A)
- An Explanatory Memorandum that explains the content and supporting documentation of the JR (Annex B)
- A report detailing relevant survivability information and a description of planned work (Annex C)
- A report on the economic impacts of the 2016 Discard Plan on the fleets and fisheries involved (Annex D)
- A scientific paper entitled, "Variation of growth performance of the striped Venus clam *Chamelea gallina* (Mollusca: Bivalvia) (Linnaeus, 1758) in relation to environmental variables along the southern part of its geographic range" (Delgado et al. 2015).
- A scientific paper entitled, "Aspects of reproduction of striped Venus *Chamelea gallina* in the Gulf of Cádiz (SW Spain): Implications for fishery management" (Delgado et al. 2013).

Discard plan for mollusc bivalve Venus spp (Chamelea gallina) in the Italian territorial waters for 2020-2022	
Fishery	Main Findings EWG 19-08
Venus clams caught by hydraulic dredges in the Northern Adriatic Sea	**Background** In 2016 Italy submitted a proposal for a three-year discard plan for the fisheries targeting Venus clams by hydraulic dredges in the Northern Adriatic Sea. This plan expires at the end of 2019. The Italian administration have submitted an updated discard plan. This draft discard plan and supporting documents was assessed by STECF at the winter plenary of 2019. Based on the comments from STECF, a revised discard plan along with supporting documentation has been submitted by the Italian administration. This revised plan has been reviewed initially by EWG 19-08 but should be further reviewed by STECF at PLEN 19-02.

	EWG 19-08 Observations General Observations The efforts made by the Italian administration to improve the JR should be acknowledged. The revised JR submitted has attempted to respond to the observations made by STECF PLEN 19-01. This has included re-structuring of the existing data presented, the inclusion of new information and supporting studies, measures to manage the fishery as well as indications of new research to be undertaken to fill the knowledge gaps. An economic analysis of the impacts of the 2016-2019 discard plan has also been provided. This analysis shows the daily fishing hours have halved compared to 2016, and that the trawled areas per day have been reduced. As a result, it has been easier to manage the fishing activity and conserve the resource in areas closed to fishing. The analysis highlights a return to a minimum conservation reference size for clams of 25 mm would imply negative implications for the sector in economic terms, but also for the environment, since the boats should dredge the bottom for a much longer time to reach the daily quota, as can be seen from the fishing effort data. <u>Survivability</u> The supporting documentation to the JR provides a review of the relevant survivability experiments that have been carried out. No new information is presented in the supporting documents to quantify the survivability of discarded catches and therefore, EWG 19-08 cannot fully assess the survivability of clams in this fishery and in the re-stocking areas. However, one study that investigated the level of shell damage to clams captured by hydraulic dredging in two sites along the north-western Adriatic coast found a survival rate of at least 80%. The JR also indicates that the Italian administration has funded work to study the survivability of clams discarded after sorting. Two survival experiments - one in experimental tanks and the other at sea - are planned. The experiments are due to be completed by the end of 2019. Based on the description provided for these experiments, EWG 19-08 considers they will help to fill the gaps in knowledge on survivability of clams in this fishery. <u>Selectivity</u> The need for improvements in the selectivity of the hydraulic dredge gear operating at the seabed to reduce the quantities of undersized animals that are brought on board the vessels is recognised in the revised JR. In this regard, the JR indicates that the Italian administration has recently financed an extensive series of projects to improve the selective performance of the gear as whole: the cage, where the first selection of the product occurs, and the vibrating sieve, where most of the section occur. These experiments should held to improve the understanding of selectivity over the course of the fishing operation. <u>Reduction of MCRS</u> Detailed information on exploitation rates and trends in stock biomass have been provided for the main Italian clam fisheries. Based on the data presented there is no evidence to suggest reduction in MCRS has a detrimental impact on the stock and there are indications that the situation has improved. While there are gaps in the time series presented, the general trends since 2016 seem positive. EWG 19-08 cannot assess whether this is related to the discard plan or natural fluctuations in populations levels.

	<u>Monitoring programme</u> As identified by STECF PLEN 19-01, the monitoring programme instigated appears quite comprehensive. Based on the conclusions of STECF, additional information has been provided and adjustments in the analysis and presentation of available data have been made. The combination of these amendments is likely to lead to improvements in the effectiveness fo the monitoring programme.