



GENERAL FISHERIES COMMISSION FOR THE
MEDITERRANEAN

COMMISSION GÉNÉRALE DES PÊCHES POUR
LA MÉDITERRANÉE



A

الهيئة العامة لمصايد أسماك البحر الأبيض المتوسط

الهيئة العامة لمصايد أسماك البحر الأبيض المتوسط
الدورة الخامسة والثلاثون
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إدارة مصايد أسماك البحر الأبيض المتوسط*

* اللغة الأصلية: الانجليزية

مقدمة

1- تستأنف هذه الوثيقة الاستنتاجات الرئيسية ونصائح الإدارة الناتجة عن اللجنة العلمية الاستشارية كما وردت في تقرير دورتها الثالثة عشرة (GFCM:XXXIV/2010/Inf.9). وتشير الوثيقة أيضا إلى مشروع توصية الهيئة الدولية لصون التونة في الأطلسي، ويرد النص بالكامل في الوثيقة GFCM:XXXV/2011/10.

مقترحات ومشورة اللجنة العلمية الاستشارية

2- بناء على الاستنتاجات والمقترحات الرئيسية للأجهزة الفرعية للجنة العلمية الاستشارية، وافقت اللجنة العلمية الاستشارية على التوصيات التالية:

الجوانب المتعلقة بالبيئة والنظم الأيكولوجية البحرية

3- أحاطت اللجنة العلمية الاستشارية علما بالتقدم المحرز في حماية المرجان الأحمر، وبرنامج العمل المتوسط الأجل بشأن الأسماك الغضروفية وأيدت مقترحات اللجنة الفرعية المعنية بالبيئة والنظم الأيكولوجية البحرية بشأن اعتماد تدابير فنية خاصة لتخفيض الصيد العارض من الطيور البحرية، والسلاحف البحرية، والفقمة الناسكة. وقامت على وجه الخصوص بصياغة النصائح التالية للإدارة:

• إدارة المرجان الأحمر

• حظر صيد أسماك المياه الضحلة على عمق يقل عن 50 مترا. وينبغي مواصلة العمل بالتدابير الصارمة الموجودة بالفعل وبحث اعتماد نهج للتكيف.

- وضع نظام للحصص اليومية و/أو الموسمية استنادا إلى عدد من التراخيص. وسيشتمل هذا النظام: نظاما للابلاغ طبقا لخطة المهمة 1 التي ينبغي أن تُحدد لها وحدة تشغيلية خاصة، ونظام رصد ملائم لعمليات الإنزال.
- حظر استعمال المركبات التي تُدار عن بعد كوسيلة لحصاد المرجان الأحمر. وقد اقترحت اللجنة العلمية الاستشارية، كنهج احتياطي، إجراء دراسات تجريبية إقليمية لتقدير الأثر البيولوجي والبيئي والاقتصادي المحتمل لاستعمال مثل هذا النوع من الأجهزة.
- وضع خطة إدارة إقليمية مرنة طويلة الأجل تضع في اعتبارها نتائج اجتماعي الخبراء المعقودين لهذه الغاية: وقد عُقد الأول في عام 2010 ومن المتوقع أن يُعقد الثاني في عام 2011 ضمن برنامج العمل الحالي.
- بناء على اقتراح اللجنة الفرعية المعنية بالبيئة البحرية والنظم الأيكولوجية بوضع حد أدنى لقطر الكابل وهو 10 ملليمترات مع خلوص بنسبة 20 في المائة لفروع المرجان الأحمر، أشارت اللجنة العلمية الاستشارية إلى أن هذا الاقتراح سابق لأوانه وقد يتطلب مزيدا من البحث والنقاش للبت في الحجم الأدنى.
- تخفيض المصيد العارض¹
 - ينبغي تقديم بيانات كافية عن المصيد العارض في إطار خطة المهمة 1 للهيئة العامة بالنسبة للأسماك الغضروفية، والسلاحف البحرية، والطيور البحرية، والفقمة الناسكة، حسب الوحدة التشغيلية ومعدات الصيد والفترة.
 - اقترحت التدابير الفنية التالية لتخفيض المصيد العارض:
 - 1- بالنسبة للأسماك الغضروفية، يوصى باستخدام سنارة دائرية لأسماك القاع الصغيرة ورباط من النايلون بخيوط طويلة لحماية أنواع أسماك القاع الصغيرة، واستخدام الشباك والفواصل لأسماك المياه العميقة. ويوصى بحماية مناطق الفقس كأداة عامة لحماية أسماك القاع الصغيرة والأسماك الغضروفية.
 - 2- بالنسبة للفقمة الناسكة: إلزام وضع شباك ثابتة (شباك خيشومية، شراك، إلخ) على مسافة لا يقل نصف قطرها عن 5 أمتار حول مكان تواجد الفقمة الناسكة أثناء الخريف والشتاء، ويمتد نصف قطر المسافة إلى 10 أمتار حول كهوف التربية.
 - 3- بالنسبة للسلاحف البحرية: استخدام أجهزة نزع الخطافات للافراج عن الحيوانات التي يتم صيدها عرضا بالخيوط الطويلة.

¹ وفقا لمسرد اللجنة العلمية الاستشارية، يتم تعريف المصيد العارض على النحو التالي:

By-catch: The total catch of unwanted animals including vulnerable and endangered species. By-catch of commercial species should be reported as associated species

-4- بالنسبة للطيور البحرية:

- في مجال صيد الأسماك بالخيوط الطويلة: ينبغي أن يؤخذ بوضع المعدات فقط أثناء الليل، واستخدام أجهزة إفزاز الطيور، والسرعة في إلقاء الخيوط الثقيلة الوزن وكذلك تزويد الطعم (مذاب، وأزرق مصبوغ).
- في مجال الصيد بالجر: استخدام أجهزة الإفزاز بتثبيتها على انفتالات شبكة الجر.

وفي كلا النوعين من ممارسات الصيد، ينصح بالتقليل من ترك المخلفات للطيور وذلك بتجميدها إلى كتل أو تمييعها للتخلص منها في وقت لاحق عند عدم تواجد الطيور.

- بالنسبة للفقمة الناسكة، ينبغي تحديد المواقع مسبقاً. ولتحقيق هذا الهدف، طُلب من الأمانة جمع هذه المعلومات للأطراف. (وقد وجهت رسالة تعميمية بتاريخ مارس/آذار 2011 إلى الأعضاء لطلب هذه المعلومات، وستقدم الأمانة هذه المعلومات عند توافرها).

4- وفيما يتعلق بتحسين اختيار معدات الصيد، وافقت اللجنة العلمية الاستشارية على تبني مقترحات حلقة العمل المستعرضة التي تهدف إلى مواصلة الدراسات التجريبية عن الأحجام المختلفة للشباك وأجهزة الحماية المختلفة، على أن يشمل ذلك دائماً تحليل المؤشرات الاجتماعية والاقتصادية ذات الصلة.

5- وفيما يتعلق باقتراح إنشاء منطقة جديدة لحظر الصيد في جزر بلياريك، أشارت اللجنة العلمية الاستشارية إلى أنها ليست في وضع يسمح لها بتبني هذا الاقتراح إلى أن يتم تقديم دراسة أوفى عن المنطقة، تركز أساساً على رسم خرائط للموائل المختلفة، ووصف الأسطول، وتوزيع الجهد، بالإضافة إلى الأثر الاجتماعي والاقتصادي المحتمل لتدابير الحماية المقترحة.

6- وأكدت اللجنة العلمية الاستشارية على الحاجة الملحة لأن تقدم البلدان الأعضاء معلومات مستمدة من نظم رصد السفن إن أمكن، وعن عدد السفن المشاركة في أنشطة الصيد، وعدد أيام الصيد لكل منها في عام 2008 في المنطقة المحددة على أنها منطقة لحظر الصيد في خليج ليونز بما في ذلك السفن التي يقل طولها عن 15 متراً.

7- ووافقت اللجنة العلمية الاستشارية أيضاً على دراسة تشجيع تسويق المصيد بمعدات صيد منتقاة عن طريق الوسم الأيكولوجي لمعرفة ما ينبغي تخصيصه من دراسات تجريبية.

8- واتفق أيضاً على مواصلة الدراسات البحثية عن التفاعل بين الأسماك الرخوة وزهور الطحالب ومسايد الأسماك، وتعميق المعرفة بالأخاديد العميقة والجبال المغمورة.

جمع المعلومات والإحصاءات

9- أيدت اللجنة العلمية الاستشارية المشورة التي تلقتها من لجنتها الفرعية المعنية بجمع البيانات والمعلومات الإحصائية ووافقت على المقترحات التالية:

- فيما يتعلق بالحاجة إلى تبسيط عملية تقديم مختلف البيانات عن السفن، تتمثل الخطوة الأولى للتوصل إلى حل متفق عليه في أن تعمل اللجنة الفرعية المعنية بجمع البيانات والمعلومات الإحصائية على وضع نموذج بدعم من أمانة الهيئة العامة، مع مراعاة المعلومات التي تتطلبها توصيات الهيئة العامة والمتعلقة بقوائم السفن؛
- وافقت اللجنة العلمية الاستشارية على اعتماد نهج تدريجي لوضع إطار لتقديم البيانات البيولوجية، بما يؤدي إلى توسيع المهمة 1.5 الحالية واحتمال تحويلها إلى مهمة جديدة. ويتطلب هذا النهج من اللجنة الفرعية المعنية بتقدير الأرصد أن تحدد بدقة احتياجاتها من البيانات لأغراض التقدير، على أن تصمم هذه اللجنة الفرعية في مرحلة ثانية نمودجا لجمع البيانات يتوافق مع إطار المهمة 1؛
- وفيما يتعلق بمسائل الحصول على البيانات والسرية المرتبطة ببيانات المهمة 1، وافقت اللجنة العلمية الاستشارية على ضرورة إتاحة النشرة الإحصائية والإحصاءات الأساسية للجمهور دون قيود، بينما تُحال حقوق الحصول على البيانات بالنسبة للمهمة 1 إلى لجنة الامتثال لإجراء مزيد من الدراسة؛
- وضع حد أقصى قدره 15 كيلوغراما لسجل الهيئة العامة، مع إعطاء البلدان الأعضاء إمكانية وضع حدود أقل بين صفر و 15 كيلوغراما؛
- ينبغي استمرار تقديم البيانات على أساس النموذج STATLANT 37A طالما أن المهمة 1 لاتعمل بصورة كاملة ويمكن استبدالها.

10- وأيدت اللجنة العلمية الاستشارية المقترحات المقدمة لحلقة العمل عن قدرة الأسطول بوضع خطة عمل إقليمية لإدارة قدرة الصيد. ويرد المشروع في المرفق 1 لهذه الوثيقة. والخيارات المقرر أن تبحثها الهيئة العامة هي على النحو التالي:

- بحث إدخال عناصر مشروع المخطط لخطة العمل الإقليمية التابعة للهيئة العامة بشأن قدرة الصيد ضمن التوصية GFCM/34/2010/2 مع الاستمرار في تطوير خطة العمل الإقليمية.
- أو إشراك خبير استشاري في صياغة خطة العمل الإقليمية على أساس المخطط الموضوع والمقترحات الأخرى المقدمة من الأجهزة الفرعية للهيئة العامة.
- أو عقد حلقة عمل لاستكمال صياغة خطة العمل الإقليمية على أساس المخطط الموضوع والمقترحات الأخرى المقدمة من الأجهزة الفرعية للهيئة العامة.
- أو أي توليفة مما تقدم.

11- ووافقت اللجنة العلمية الاستشارية على أن يصاحب المخطط المرجعي للشبكة الإحصائية الذي وضعته اللجنة الفرعية المعنية بجمع البيانات والمعلومات الإحصائية في دورتها التاسعة الشبكة الإحصائية التي اعتمدها الهيئة العامة بالفعل والتي ترد في صيغة منقحة للتوصية GFCM34/2010/1 عن السجل والمعرضة هنا بوصفها المرفق 3.

مسائل أخرى

12- فيما يتعلق بمصايد الأسماك الترفيهية، وافقت اللجنة العلمية الاستشارية على المقترحات التالية للجنة الفرعية المعنية بالعلوم الاقتصادية والاجتماعية:

- وضع بروتوكول متوائم لرصد مصايد الأسماك الترفيهية.
- تصميم مخطط لجمع البيانات الخاصة بمؤشرات مصايد الأسماك الترفيهية.
- إجراء دراسة إقليمية عن التنفيذ المحتمل لمخططات الترخيص بالنسبة لهذا القطاع.

13- وعلاوة على ذلك، وافقت اللجنة العلمية الاستشارية على وضع مدونة ممارسات للصيد الترفيهي الرشيد.

14- وشجعت اللجنة العلمية الاستشارية على إجراء دراسات تهدف إلى تقدير الأثر الاجتماعي والاقتصادي لتنفيذ شبك بعيون مربعة 40 ملليمتر/بعيون ماسية 50 ملليمتر للصيد بالجر، وكذلك استطلاع أثر الوسم الأيكولوجي.

رصد الأرصد السكمية وتدابير إدارة مصايد الأسماك

15- استعراض اللجنة العلمية الاستشارية نتائج التقييمات التي أجرتها مجموعات عمل متخصصة واللجنة الفرعية المعنية بتقديرات الأرصد. وتم تقدير 24 رصيда من أنواع أسماك القاع منها 23 رصيда اعتبر أنها تعرضت للاستغلال المفرط ورصيда واحد استغل بالكامل. وتم تحليل 11 رصيда من أسماك السردين والانشوفة، واعتبر اثنان من بينها على أنها تعرضت للاستغلال المفرط والباقي استغل بالكامل أو بصورة معتدلة. ويرد في الجدولين 1 و 2 من المرفق 2 ملخص مع مشورة الإدارة وتعليقات اللجنة العلمية الاستشارية والهيئة العامة مدعوة لبحث إمكانية تحويل المشورة إلى تدبير للإدارة على شكل توصية أو قرار.

Table 1 Management advice for demersal species²

GSA	Species	Stock status	Working Group management advice	Working Group comments	SCSA comments	SAC comments
GSA 01 & 03 (Northern and Southern Alboran Sea)	<i>Pagellus bogaraveo</i>	Over-exploited; current F (0.40) higher than $F_{0.1}$ (0.18) and F_{max} (0.37)	Decrease the fishing effort. Adopt the same management measure in GSA 03 and GSA 01. Improve the sampling standardisation. Maintain the joint assessment.	Improve the biological sampling and estimate the importance of juveniles in the catches by trawlers in shallow areas. The WG endorsed the assessment and recommendations.	No further comments. Endorsed	The SAC appreciated the effort of Morocco and Spain scientist to jointly assess the stock status. The relevant contribution of the regional project Copemed II was highlighted. Endorsed
GSA 03 (Southern Alboran Sea)	<i>Parapenaeus longirostris</i>	Over-exploited; $F_{curr}/F_{0.1} = 392\%$ $F_{curr}/F_{MSY} = 353\%$	It was recommended to decrease the fishing mortality by 60-80% . The abundance indices observed during surveys indicate a decrease of this resource.	The WG recommend extending the assessment of the <i>Parapenaeus</i> stock including the data from other adjacent areas (Spanish and Algerian areas) . The WG endorses the assessment and the related recommendations.	No further comments. Endorsed	No further comments. Endorsed
	<i>Boops boops</i>	Over-exploited; current F (0.90) higher than $F_{0.1}$ (0.61) and F_{max} (0.75)	Reduce the fishing mortality and control the trawling ban in coastal waters.	No sign of depletion is evident. The fishing mortality can be reduced limiting the moving of trawlers from the Atlantic to the Mediterranean. The WG endorses the assessment and the related recommendations	No further comments. Endorsed	No further comments. Endorsed
	<i>Mullus barbatus</i>	Over-exploited; current F (0.68) higher than $F_{0.1}$ (0.55) and F_{max} (0.56)	Reduce the fishing mortality and control the trawling ban in coastal water.	No sign of depletion is evident. The fishing mortality can be reduced limiting the moving of trawlers from the Atlantic to the Mediterranean. The WG endorses the assessment and the related recommendations	No further comments. Endorsed	No further comments. Endorsed
GSA 05 (Balearic islands)	<i>Merluccius merluccius</i>	Over-exploited; current F (0.85) higher than $F_{0.1}$ (0.20) and F_{max} (0.31)	Reduce fishing mortalities by 30 to 50% through reducing the effort activity and improving the selection pattern of the fishery.	Explore the parameterisation of XSA (the contribution of each tuning fleet in the model) and run sensitivity analysis on its effects. The WG endorses the assessment and related recommendations.	No further comments. Endorsed	No further comments. Endorsed
	<i>Mullus surmuletus</i>	Over-exploited; current F (0.60) higher than $F_{0.1}$ (0.38) and lower than F_{max} (0.74)	Reduce fishing mortalities by 30% to 50% through reducing the effort activity and improving the selection pattern of the fishery.	The WG endorses the assessment and the related recommendations.	No further comments. Endorsed	No further comments. Endorsed

GSA	Species	Stock status	Working Group management advice	Working Group comments	SCSA comments	SAC comments
GSA 05 (Balearic islands)	<i>Mullus barbatus</i>	Over-exploited; current F (0.82) higher than $F_{0.1}$ (0.33) and F_{max} (0.53)	Reduce fishing mortalities by 40% to 60% through reducing the effort activity and improving the selection pattern of the fishery.	Explore the parameterisation of XSA (the contribution of each tuning fleet in the model). The WG group noticed that both SSB and recruitment show a decreasing trend . The WG suggest performing sensitivity tests to check the influence of different biological parameters values in the results. The WG endorses the assessment and the related recommendations.	No further comments. Endorsed	No further comments. Endorsed
	<i>Nephrops norvegicus</i>	Over-exploited; current F (0.45) higher than $F_{0.1}$ (0.30) and lower than F_{max} (0.63)	Decrease fishing mortality by 20-30% by: Reducing effort, both in capacity and/or activity, improving the selection pattern of the fishery and implementing area closures.	Perform a sensitivity analysis . The WG endorses the assessment and the related recommendations	No further comments. Endorsed	No further comments. Endorsed
	<i>Aristeus antennatus</i>	Over-exploited; current F (0.62) higher than $F_{0.1}$ (0.33) and lower than F_{max} (0.76)	Decrease fishing mortalities by 30% to 50% through reducing the effort activity and improving the selection pattern of the fishery. Implementing area closures for fishing in the nursery areas during the recruitment period.	Evaluate the effect of the biological parameters running XSA with sex combined data. Explore the parameterisation of XSA (the contribution of each tuning fleet in the model). The WG endorses the assessment and the related recommendations.	No further comments. Endorsed	No further comments. Endorsed
	<i>Parapenaeus longirostris</i>	Over-exploited	The problems found with the residuals and the retrospective analysis makes not possible to provide a full management advice .	The WG agrees that the stock is overfished but some uncertainties do not allow to suggest an available value to reduce the actual fishing mortality . The WG endorses the assessment as a source of general information of the stock.	The assessment must be considered as a rough estimation of the stock status. To be verified.	The SAC consider this assessment as provisional .

GSA	Species	Stock status	Working Group management advice	WG comments	SC comments	SAC comments
GSA 06 (Northern Spain)	<i>Merluccius merluccius</i>	Over-exploited; current F (1.70) higher than $F_{0.1}$ (0.60)	To reduce the growth overfishing: - Decrease the effort of trawl. - Improve the fishing pattern of the trawl fleets. To avoid recruitment overfishing: - Reduce effort in trawl 70% - Special surveillance in the use of 40 mm square mesh size in the cod end in trawl gears. - Encourage studies to allocate area closures to fishing (FRA).	The stock show dangerous signals of recruitment overexploitation due to the decreasing trend in recruitment and very low levels of the spawning stock . The WG endorses the assessment and the related recommendations	No further comments. Endorsed	The SAC noted that the absolute value of F, both in terms of current and target F are higher than those of the other areas of the Mediterranean. Due to the robustness of Y/R analyses, the percentage of reduction of current F to reach the target values should not be biased. Endorsed
	<i>Mullus barbatus</i>	Over-exploited; current F (0.76) higher than $F_{0.1}$ (0.39)	Decrease the fishing mortality by 70%. More effective control in shelf areas above 50 m depth to reduce the catch of small individuals under the minimum legal size. The use of the 40 mm square mesh in the cod-end should improve trawl exploitation pattern and Y/R by 24% , but a close supervision of the observance of this measure is needed.	Co-occurrence of SSB increasing and recruitment decreasing. The WG endorses the assessment and the related recommendations.	No further comments. Endorsed	No further comments. Endorsed
	<i>Parapenaeus longirostris</i>	Over-exploited; current F (1.37) higher than $F_{0.1}$ (0.30) and lower than F_{max} (2.73)	Reduce growth overfishing: Reduce the effort of trawl by 70% and Improve the fishing pattern of the trawl.	Since there are some evidences of synchronous oscillation of abundance of the species in the western Mediterranean, environmental factors (e.g. water temperature) are thought to notably affect the stock dynamics . The WG endorses the assessment and the related recommendations.	No further comments. Endorsed	No further comments. Endorsed

GSA	Species	Stock status	Working Group management advice	WG comments	SC comments	SAC comments
GSA 07 (Gulf of Lions)	<i>Merluccius merluccius</i>	Over-exploited; current F (0.87) higher than $F_{0.1}$ (0.20) and F_{max} (0.29)	<p>Reduce fishing mortality by 60% to 70%</p> <p>To reduce growth overfishing:</p> <ul style="list-style-type: none"> - Improve the fishing pattern of the trawl - close nursery areas at least temporarily - Reduce the effort of trawl, from reducing time at sea, number of fishing boats, engine power, Bollard pull and/or trawl size <p>To avoid recruitment overfishing:</p> <ul style="list-style-type: none"> - Reduce the effort of longline and gillnets in order to increase (or at least maintain) the SSB. - Establish temporal closures for longline and gillnet during the period of maximum spawning 	<p>The trend of the SSB does not show any risk of stock depletion or collapse.</p> <p>The parameterization of the XSA model may have an impact on the results obtained. To identify the extension of such decisions, further work must be done to explore different parameterizations of the model and run sensitivity analysis on its effects.</p> <p>The WG endorses the assessment and the related recommendations.</p>	No further comments. Endorsed	No further comments. Endorsed
	<i>Mullus barbatus</i>	Slightly over exploited	Current F has to be reduced by 30-40% .	The WG endorsed the assessment and recommendations	Since the current F (0.7) is higher than $F_{0.1}$ (0.4) and F_{max} (0.5), the Sub-Committee recommends not to use the attribute “slightly” in identifying the stock status. Endorsed	No further comments. Endorsed
GSA 09 (Ligurian and North Tirrenian)	<i>Merluccius merluccius</i>	Over-exploited; current F (1.40) higher than $F_{0.1}$ (0.22) and F_{max} (0.35)	The stock appears to be highly overexploited with a need of F reduction of about 40-80% . The current SSB is estimated as 5% and 10% of the virgin SSB, nevertheless, the stock productivity does not appear to be impaired and able to still produce relatively large year classes.	The group noticed a decreasing trend of the SSB for both assessments performed with SURBA on 2 different surveys (MEDITS and GRUND). The WG endorses the assessment and the related recommendations.	No further comments. Endorsed	No further comments. Endorsed

GSA	Species	Stock status	Working Group management advice	WG comments	SC comments	SAC comments
GSA 09 (Ligurian and North Tirrenian)	<i>Mullus barbatus</i>	Over-exploited; current F (0.73) higher than F_{MSY} (0.64)	A reduction of fishing mortality by about 10% is considered necessary in order to reach the F_{msy} level.	The WG endorsed the assessment and recommendations	No further comments. Endorsed	No further comments. Endorsed
	<i>Parapenaeus longirostris</i>	Fully -exploited	Do not increase fishing mortality.	This stock could be strongly driven by environmental and ecological factors (e.g. water temperature, predatory release effect) that can make difficult to evaluate the effect of fishing on the stock. The WG endorses the assessment and the related recommendations but notes that only the reference points computed by VIT should be considered for management.	No further comments. Endorsed	No further comments. Endorsed
GSA 12,13,14, 15&16 (Strait of Sicily)	<i>Parapenaeus longirostris</i>	Over-exploited; current F (1.13) higher than $F_{0.1}$ (0.90) and lower than F_{max} (1.23)	A reduction of Fishing mortality by about 20% is considered necessary. In addition the exploitation pattern of the fishery should be improved. A protection of the stable nurseries on the Adventure and Malta Banks in the Strait of Sicily is advised	A change in M and k has pronounced effect on Y/R when the variation was applied in opposite directions. On the other hand B/R and SSB/R are not strongly affected when the change is in the same direction. Alternative methods such as global production methods and trawl survey based approach should be used in the future to make the assessment more robust. The WG endorses the assessment and the related recommendations	No further comments. Endorsed	The SAC appreciated the effort done by the scientists of Italy, Malta and Tunisia to assess jointly the stock status. The relevant contribution of the regional project Copemed II and Medsudmed in pursuing the activity was highlighted. Endorsed

GSA	Species	Stock status	Working Group management advice	WG comments	SC comments	SAC comments
GSA 17 (Northern Adriatic)	<i>Solea solea</i>	Over-exploited; current F (0.61) higher than $F_{0.1}$ (0.29) and F_{max} (0.42)	A reduction of F of 50-80% , especially by rapido trawling, would be recommended. A two-months closure for rapido trawling inside 11 km off-shore along the Italian coast , after the biological fishing ban (August), would be advisable to reduce the portion of juvenile in the catches. The safeguard of spawning area is also advised	Include in the future assessments biological samples data from the eastern fishery as well as to extend the rapido trawl survey inside the 12 nm from the Croatian coast, as was performed in 2005 and 2006. Such requirements could be attained in the framework of ADRIAMED regional project.	No further comments. Endorsed	No further comments. Endorsed
GSA 18 (Southern Adriatic)	<i>Merluccius merluccius</i>	Over-exploited F_{curr} (0.57-0.58) $F_{0.1}$ (0.2) F_{max} (0.3)	Fishing mortality reduction of 30-40% is necessary. A more sustainable exploitation in the long-term can be partly achieved following the newly enforced regulation on the mesh size of 40 mm squared mesh on the cod end .	The WG discuss the use of the slow or fast growth parameters to assess the hake stock and of the sensivity analyses. Results from VIT (only one year data) are consider as indicative.	No further comment. Endorsed.	The SAC appreciated the effort done by the scientists of Albania ,Italy and Montenegro to asses jointly the stock status. The relevant contribute of the regional project Adriamed in pursuing the activity was highlighted. Endorsed
GSA 26 (South Levant)	<i>Solea solea</i>	Over-exploited; F_{curr} (0.66) higher than $F_{0.1}$ (0.41) and lower than F_{max} (0.81)	Reduce fishing mortality by about 40-60% . Improve the trawl selectivity. Identify and protect the nursery grounds. Improve the fishery data collection system.	As the assessment was done at first using three years 2006-2008 and it was found that the length composition of year 2008 is greatly different from the two others, the assessment was redone using the mean number of years 2006-2007 . The WG endorses the assessment	No further comments. Endorsed	Since the stock is exploited not only by trawlers, the SAC recommended to include catches of artisanal fisheries in next assessment. Endorsed
	<i>Boops boops</i>	Over-exploited; current F (1.09) higher than $F_{0.1}$ (0.59) and F_{max} (0.94)	Reduce the fishing mortality by 40-60%	The WG endorses the assessment and the related recommendations	No further comments. Endorsed	Since the stock is exploited not only by trawlers, the SAC recommended to include catches of artisanal fisheries in next assessment. Endorsed
	<i>Pagellus erytrinus</i>	Over-exploited; current F (0.65) higher than $F_{0.1}$ (0.34) and F_{max} (0.57)	Reduce the fishing mortality by 40-60% . Identify and protect nurseries	The WG endorsed the assessment and recommendations.	No further comments. Endorsed	Since the stock is exploited not only by trawlers, the SAC recommended to include catches of artisanal fisheries. Endorsed

Table 2 Management advice for small pelagic

GSA	Species	Stock status	Working Group management advice	WG comments	SC comments	SAC comments
GSA 01 (Alboran Sea)	<i>Engraulis encrasicolus</i>	Moderately exploited. Sustainable fisheries	Not increase the fishing effort. The management of anchovy fisheries needs to account the multi-species effects, mainly the interaction with sardine.	The WG considers the analytical assessment as provisional. The WG endorsed the assessment and recommendations.	No further comments. Endorsed	Endorsed
	<i>Sardina pilchardus</i>	Fully exploited. Sustainable fisheries	Not increase the fishing effort. The management of sardine fisheries needs to account the multi-species effects, mainly the interaction with anchovy.	The WG considers the analytical assessment as provisional. The WG endorsed the assessment and recommendations.	No further comments. Endorsed	Endorsed
GSA 03 (Southern Alboran Sea)	<i>Sardina pilchardus</i>	Fully exploited: current $F=0.6$, ratio $F_{0.1}/F_c=0.62$ and $F_{max}/F_c=1.86$ Uncertain biomass	Maintain the current fishing effort; Reduce the mortality of fishing on the spawning fish Introduce seasonal closure during January which coincides with the peak of the spawning; Prohibit fishing during May near Short-nap close Kebbana to preserve the young fish.	The WG endorses the assessment and the related recommendations.	No further comments. Endorsed	Endorsed
GSA 06 (Northern Spain)	<i>Engraulis encrasicolus</i>	The stock abundance is considered low, while the exploitation rate is uncertain.	Avoid further reduction in SSB	The WG considers the analytical assessment as provisional. The WG endorsed the assessment and recommendations	No further comments. Endorsed	Endorsed
	<i>Sardina pilchardus</i>	Overexploited The stock has declined over many years, partly due to reduced recruitment and partly to poor survival of the recruits. Most likely, the stock has been increasingly overexploited in recent years	A substantial reduction in exploitation is advised.	The WG considers the analytical assessment as provisional. The WG endorsed the assessment and recommendations.	No further comments. Endorsed	Endorsed

GSA	Species	Stock status	Working Group management advice	WG comments	SC comments	SAC comments
GSA 07 (Gulf of Lions)	<i>Engraulis encrasicolus</i>	Fully exploited moderate harvest ratio. Low biomass	Reduce fishing effort on anchovy in the Gulf of Lion Respect the European regulation on minimum length size of catch (> 9 cm, UE 1976/2006) Consider interactions with sardine fisheries.	The WG endorses the assessment and the related recommendations.	No further comments. Endorsed	Due to the likely effect of environmental factors on small pelagics, in case of low biomass at sea the SAC recommend to avoid assessing the stock status (fully, over-exploited), it is advisable, on the other hand, to define harvest ratio and/or biomass level. Endorsed.
	<i>Sardina pilchardus</i>	Moderately exploited Production capacity severely reduced	Strongly reduce fishing effort on sardine in the Gulf of Lion; Formalize and establish a protocol of "sentinel" activity for fishermen, and produce monthly spatial and temporal observations to describe the evolution of the system, Respect the European regulation on minimum length size of catch (11cm, UE 1976/2006. Consider interactions with anchovy fisheries.	The WG endorsed the assessment and recommendations	No further comments. Endorsed	Due to the likely effect on small pelagics of environmental factor, the same recommendation than for anchovy above. It also recommended to maintain the recent level of fishing effort induced by the very low abundance of adults in the stock until indication of a better status of the stock. Endorsed.
GSA 16 (Strait of Sicily)	<i>Engraulis encrasicolus</i>	High exploitation rate (ratio between total landings and biomass estimates): high fishing mortality. Very low Stock abundance. (acoustic biomass estimate)	Not increase the fishing effort; Assess the impact of fry fishery may have. Not extend fry sardine fishery after March to avoid additional mortality on juvenile anchovy.	Negative effects on these populations could result from pressure of other fishing gears on pre-juvenile stages (locally known as "bianchetto" or "neonata"). The WG endorses the assessment and the related recommendations	Since the stock is characterised by both high exploitation rate and low biomass the SC recommends to change "not increase the fishing effort" into "decrease the fishing effort" . Endorsed with this modification.	No further comments. Endorsed

GSA	Species	Stock status	Working Group management advice	WG comments	SC comments	SAC comments
	<i>Sardina pilchardus</i>	Moderate exploitation rate (ratio between total landings and biomass estimates) low/intermediate stock abundance. (acoustic biomass estimate)	Do not increase the fishing effort; assess the impact of fry fishery. As the impact of fry fishery on this population is not known, a proper quantification of the catches in the fry fishery is mandatory.	Over the last four years the population appears to be stable though at a relatively low level. However, taking into account the moderate exploitation rates experienced, results would suggest the stock being able to tolerate the current level of exploitation.	No further comments. Endorsed	No further comments. Endorsed
GSA 17 (Northern Adriatic)	<i>Engraulis encrasicolus</i>	The stock at the present level of biomass can be considered as moderately exploited	Do not increase the fishing effort. Consider the interactions with sardine fisheries.	Important improvements were made regarding the echo-survey data used as tuning index for VPA: in particular, for the first time, biological data from the western Adriatic were used to split into age classes only the abundance estimated by the western echo-survey, while biological data from the eastern Adriatic were applied to the eastern echo-survey abundance.	No further comments. Endorsed	No further comments. Endorsed
	<i>Sardina pilchardus</i>	The stock at the present level of biomass can be considered as moderately exploited	Do not increase the fishing effort. Consider the interactions with anchovy fisheries.	Important improvements were made regarding the echo-survey data used as tuning index for VPA: in particular, for the first time, biological data from the western Adriatic were used to split into age classes only the abundance estimated by the western echo-survey, while biological data from the eastern Adriatic were applied to the eastern echo-survey abundance	No further comments. Endorsed	No further comments. Endorsed

16- وناقشت اللجنة العلمية الاستشارية باستفاضة اعتماد نقاط مرجعية بيولوجية ووافقت على اقتراح اللجنة الفرعية المعنية بتقديرات الأرصد بشأن اعتماد نهجين مختلفين حتى يتسنى تقديم مشورة للإدارة.

- فيما يتعلق بمعظم أنواع أسماك القاع التي تتوافر لها تحليلات خاصة بحصيلة سمك التزويد والكتلة الحيوية، كان هناك قبول عام لاعتماد النقطة المرجعية البيولوجية على أساس معدل النفوق في مصايد الأسماك وعلى شكل منحنى تحليل حصيلة سمك التزويد. وأختيرت القيمة F_{max} كنقطة مرجعية حدية، والقيمة $F_{0.1}$ كنقطة مرجعية مستهدفة.

- وفي الحالات التي يتعذر فيها اتباع نهج تحليلي تقليدي إما لأسباب تقنية أو لسمات خاصة بديناميات الأرصدة مثل تلك المتعلقة بأسمك القاع الصغيرة، وهي من الأنواع القصيرة العمر والتي تتأثر كثيرا بالبيئة، وافقت اللجنة العلمية الاستشارية على نهج تجريبي وهو نهج إشارة المرور الذي يجمع بين حالة الرصيد، ومؤشرات الكتلة الحيوية المأخوذة من استقصاءات، ومؤشرات الضغط (معدل الحصاد و/أو الإجهاد البيئي).

17- ووافقت اللجنة العلمية الاستشارية على المقترحات المحددة التالية:

- بالنسبة لصون واستغلال الأسماك الغضروفية:
- وضع برامج لرصد المصيد والجهد على المستوى الوطني لضمان رصد دقيق للمصيد، والمصيد العارض والذي ينبغي الإبلاغ عنه عن طريق مخطط الهيئة العامة لتقديم البيانات فيما يتعلق بالمهمة 1.
- توفير الحماية القصوى عن طريق أنشطة الصيد للأنواع المدرجة في المرفق الثاني أو الاستغلال الصحيح للأنواع المدرجة في الملحق الثالث لبروتوكول SPA/BD المكمل لاتفاقية برشلونة (نوفمبر/تشرين الثاني 2009). ويحث اعتماد تدابير الاتحاد الأوروبي الخاصة بسمك القرش الولود على نطاق البحر الأبيض المتوسط.
- تحديد مناطق الفقس ورسم خرائط لها وحمايتها من أنشطة الصيد بالجر.

18- وأيدت اللجنة العلمية الاستشارية مشورة حلقة العمل عن شعبان السمك الأوروبي بهدف جمع وتحليل المعلومات الحالية المتناثرة فيما بين البلدان ووافقت على تقديم الدعم الكامل لوضع خطط إدارة وطنية و/أو إقليمية على النحو الذي طلبه الاتحاد الأوروبي.

توصية مقترحة لعمل اللجنة العلمية الاستشارية

19- أشارت اللجنة العلمية الاستشارية إلى قرار الهيئة العامة بتخفيض جهد الصيد العام لحماية أرصدة أسماك القاع في البحر الأبيض المتوسط (القرار GFCM:XXXI/2009/1) ووافقت بالإجماع على وجود أدلة قوية تعزز تحويل هذا القرار إلى توصية ملزمة في إطار المادة الخامسة من اتفاق إنشاء الهيئة العامة لمصايد أسماك البحر الأبيض المتوسط.

التوصيات المقترحة للهيئة العامة لصون التونة في الأطلسي بشأن مصايد أسماك البحر الأبيض المتوسط

20- اعتمدت الهيئة العامة لصون التونة في الأطلسي التوصيات التالية المتعلقة بمصايد أسماك البحر الأبيض المتوسط في اجتماعها الاستثنائي السابع عشر المعقود في باريس (فرنسا) في نوفمبر/تشرين الثاني 2010:

- توصية الهيئة الدولية [4-10] لتعديل توصية الهيئة الدولية بوضع خطة إنعاش متعددة السنوات للتونة ذات الزعانف الزرقاء في شرقي المحيط الأطلسي والبحر الأبيض المتوسط.

- توصية الهيئة الدولية [6-10] بشأن أسماك القرش السنقفية الأطلسية ذات الزعانف القصيرة التي تم اصطيادها بالارتباط مع مصايد الأسماك التي تديرها الهيئة الدولية.
- توصية الهيئة الدولية [8-10] عن أسماك القرش هامر هيد التي تم اصطيادها بالارتباط مع مصايد الأسماك التي تديرها الهيئة الدولية.
- توصية الهيئة الدولية [9-10] عن المصيد العارض للسلاحف البحرية في مصايد أسماك الهيئة الدولية.

21- ويستنسخ نص هذه المقترحات في الوثيقة GFCM: XXXV/2011/10.

الإجراءات المقترحة أن تتخذها الهيئة العامة

- 22- الهيئة العامة مدعوة لدراسة استنتاجات أو مشورة لجننتها الاستشارية العملية وإقرارها حسب الاقتضاء.
- 23- والهيئة العامة مدعوة أيضا لدراسة، وربما اعتماد، التوصيات المتعلقة بالبحر الأبيض المتوسط والتي اعتمدها الهيئة الدولية لصون التونة في الأطلسي في عام 2010.

المرفق 1

DRAFT OUTLINE FOR A REGIONAL PLAN OF ACTION (RPOA) FOR THE MANAGEMENT OF FISHING CAPACITY IN THE GFCM AREA

(متوفر فقط باللغة الانجليزية)

1. Introduction

It is widely recognised that overcapacity is a problem, along with environmental concerns, in many national and international fisheries that may foster destructive fishing operations, aggravates overfishing and by-catch of unwanted or protected species, creates chronic management problems, and weakens the long-term economic performance of the fishing sector.

There are existing commitments including those of the Johannesburg Declaration on Sustainable Development (2002), the International Plan of Action for the Management of Fishing Capacity (IPOA-Capacity), and the actions and obligations already adopted by the GFCM.

Modernisation is important, especially in the GFCM convention area where many boats in the fleets are old. In the existing and upcoming programmes for modernisation, it is critical to specify the purpose and objectives of such programs and, in particular, their potential contribution or ability to increase capacity.

It is necessary for the GFCM to be able to develop an Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity), including actions to monitor and manage fishing capacity and, where appropriate, measures to tackle overcapacity and its effects based on scientific advice.

2. History

The General Fisheries Commission for the Mediterranean (GFCM) in its Recommendation GFCM/34/2010/2:

RECALLED that the objectives of the Agreement establishing the General Fisheries Commission for the Mediterranean are to promote the development, conservation, rational management and best utilization of living marine resources;

RECALLED the Declaration of the Third Ministerial Conference on the Sustainable Development of the Fisheries in the Mediterranean held in Venice, Italy, on 25 and 26 November 2003;

RECALLED Recommendation GFCM/27/2002/1 which urges the control of fishing effort and the improvement of the exploitation pattern of demersal fisheries, as well as limiting catches of juveniles of small pelagic species;

CONSIDERED that in the advice for 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 and 2009 the GFCM Scientific Advisory Committee (SAC) considered that several demersal and small pelagic stocks are overexploited, some with high risk of recruitment overfishing, and that sustainable management requires measures aimed at controlling or reducing the fishing effort from 10 percent up to 40 percent and more;

NOTED that the stock assessment conducted by the SAC only concerns specific geographical subareas corresponding to the data supplied by certain Members and that the assessed stocks may be shared with adjacent GFCM geographical sub-areas;

RECALLED that in cases where no scientific information on the status of fisheries and of the exploited resources is available a more cautious approach is needed in the development plans of fishing fleets and that suitable information coming from adjacent areas could be used for proper and precautionary management of fisheries until sound scientific evidence becomes available;

NOTED that the Scientific Advisory Committee (SAC) advises to apply the precautionary principle;

RECALLED that any possible global limitation of the fleet capacity at regional level shall not prevent or hinder transferability of fishing fleet capacity from one Member to another and from one GSA to another provided that the targeted fisheries are exploited sustainably and that the overall capacity does not increase;

RECALLED the International Plan of Action (IPOA) for the management of fishing capacity elaborated within the framework of the FAO Code of Conduct for Responsible Fisheries which calls upon States to cooperate, where appropriate, through regional fisheries management organizations or arrangements and other forms of co-operation, with a view to ensuring the effective management of fishing capacity, as specified in article 27 of the IPOA.

RECALLED Recommendation GFCM/34/2009/3 on the implementation of the GFCM Task 1 Statistical Matrix including in particular mandatory submission of the components Tasks 1.1, 1.2 and 1.4 by February 2010 for the first time while Task 1.3 and Task 1.5 by January 2011 and noting that the SAC calls for a mandatory submission by the Members as from 2009 of several components of TASK 1 statistical matrix including in particular Tasks 1.1, 1.2, and 1.4;

NOTED that GFCM, at its thirty-second session, requested the SAC to carry out an evaluation of consequences of a possible freezing of the fleet capacity and the proposals and results of the workshop on the assessment, management and monitoring of fishing fleet capacity held in February 2010;

RECALLED Recommendation GFCM/34/2009/6 on the establishment of a GFCM record of vessels over 15 metres authorized to operate in the GFCM area;

RECALLED Recommendation GFCM/34/2009/5 on the establishment of the GFCM Regional Fleet Register by June 2010 to contain information on all vessels, boats, ships or other crafts that are equipped and used for commercial fishing activity and as from 2011 Contracting Parties shall submit a full data base at least at the beginning of each calendar year followed by updates as appropriate;

3. Definitions

Capacity may be defined both as an input-based estimate (vessels numbers, size (GT, LOA), engine power (kW)) or an output-based estimate, i.e. the maximum potential harvest or output that could be realized if only the fixed factors limited production. As a minimum common standard GT and/or kW must be used.

'Fishing capacity' means a fishing vessel's tonnage in GT and/or GRT and its engine power in kW. The fishing capacity level per GFCM Member shall be the sum of its vessels expressed in tonnage (GT and/or GRT) and engine power (kW).

Overcapacity can be defined in two ways: (1) in input terms, "overcapacity" means there is more than the minimum fleet and effort required to produce a given TAC or given output (harvested catch) level; and (2) in output terms, overcapacity means that the maximum harvest level that a fisher could produce with given levels of inputs, such as fuel, amount of fishing gear, ice, bait, engine horsepower and vessel size would exceed the desired level of harvesting or TAC.

Excess capacity is the difference between what a production facility could produce if fully utilized and what is produced by the owners, given the prices of inputs and outputs. It is a common, short run, self-correcting phenomenon in all types of industries at different points in time.

4. Nature and Scope of the RPOA-Capacity

As the long term aim is to achieve sustainability, there is an ongoing need for complete information regarding:

- the status of fish stocks throughout the entire GFCM area, and
- fishing capacity throughout the entire GFCM area, and especially the spatial distribution of this capacity by groups of species and geographical sub-areas.

5. Objectives and Principles

5.1 Principles

It is recognised that open access to fisheries is not an option compatible with the sustainable fisheries development and the RPOA-Capacity.

The levels of the overall fishing capacity in the GFCM area shall be determined based on a Regional Plan of Action considering the national and regional fishing capacity management plans and scientific advice.

Members shall work to ensure that efforts to address the management of fishing capacity are complementary, coherent and consistent to current activities and actions and international commitments, including the ecosystem approach to fisheries.

Responsible management for sustainable exploitation – Noting that there is a need to balance social concerns and issues with those of conservation, it is important to take into account and address the social and economic impacts of measures address overcapacity, including those that stop fishing activities.

Because there is a link between fleet capacity and sustainable stocks, there is a need to find the optimal capacity in each fishery which reflects the balance between economic and biologically sustainable exploitation.

The management of fishing capacity should not preclude consideration of issues such as safety including issues of vessel design, size and ability to catch fish as well as best practices in fish handling, hygiene and quality whilst ensuring that overall fishing capacity is not increased.

Precautionary Approach - Noting that the fishing capacity of the fleet will vary according to the resources being targeted, the implementation of precautionary approach to fisheries is of importance for sustainable exploitation of fisheries in GFCM area and should be applied strictly by the GFCM Members.

It is important that short term profitability does not lead to investments that undermine long-term economic efficiency.

Results-based management approach – the Members of the GFCM should endeavour to apply a results based management approach in relation to the management of fishing capacity.

Flexibility, adaptability, transparency and accountability - The principles of flexibility, adaptability, transparency and accountability are fundamental elements of the RPOA-Capacity.

5.2 The objective of the RPOA-Capacity is to:

- lay the foundation on which regional management plans and other related initiatives should be formulated, developed and implemented;
- provide guidance in the development and implementation of national plans of action for the management of fishing capacity in coherence with the RPOA-Capacity;
- enable the GFCM to promote the development, conservation and rational management and proper utilisation of living marine resources.

6. Mechanisms to Promote Implementation

6.1 Levels of actions

Regional and sub-regional Actions – There is need to recognize the role of regional and sub-regional cooperation projects and initiatives and the importance of taking into account the specifics of sub-zones.

National Actions – Formulation of national plans of action for management of the fishing capacity should take into account management strategies of the different fisheries in neighbouring countries in the GFCM area, in accordance with the guidance provided by the RPOA-Capacity.

Local Actions – Local actions should be based as a minimum on the RPOA-Capacity and may serve as a example for larger management initiatives.

6.2 Tools and Instruments

Action must be accompanied with clear timeframes for achieving results which recognize the different financial, administrative, legislative and reporting changes that may be needed to do this.

6.2.1 *Financial instruments*

Financial instruments for the management of the fleet capacity shall avoid having a negative impact on exploited fishery resources, on marine environment and on long-term profitability of fishing activities.

Financial assistance with public funds shall not in any circumstance lead to an increase in the catch capacity or the power of fishing vessel's engine. Nonetheless, public financial assistance may contribute to improving safety on board, working conditions, hygiene and quality of products, energy saving and improve catch selectivity provided that it does not increase the ability of the vessels to catch fish. No public aid should be granted for the construction of fishing vessels or for the increase of vessel fish holds.

Financial mechanisms and subsidies³ designed to help fleets shrink, such as 'vessel buy-back' or decommissioning schemes, may have been successful in addressing the reduction of nominal capacity but they have often failed to counteract the contemporary increase in the fishing power of the remained capacity (technological creep).

³ Further detail could be found in the document: Westlund, Lena. *Guide for identifying, assessing and reporting on subsidies in the fisheries sector*. FAO Fisheries Technical Paper N° 438. 29 pp. <http://www.fao.org/docrep/007/y5424e/y5424e00.HTM>

Financial investments/assistance with private funds shall be allowed to operate only within an organized fisheries management framework designed and monitored to deliver sustainable exploitation on the basis of scientific advice and rationale management.

Financial instruments should be used with caution knowing that even so-called “good” subsidies can create incentives to increase, rather than reduce fishing capacity.

6.2.2 *Economic instruments*

It is important to take into account the socio-economic impacts when introducing measures to reduce fishing capacity.

Members of the GFCM should consider the use and impacts of the different management tools reported in Table 1.

Efforts towards investment in disinvestment in the fisheries of the GFCM Members should be encouraged where overcapacity and sustainable exploitation may be a concern.

6.2.3 *Technical instruments*

There is need to address scientific and biological issues including, but not limited to:

- the issue of the efficiency of fishing gear and electronic equipment such as used for detecting fish;
- the collection of data at the national level regarding the status of various stocks, fishing activities and ecosystems – and particularly for shared stocks – in a manner that is consistent and harmonized with other countries;
- the use of one or more indicators of fishing capacity to evaluate the balance between fleet capacity and fishing opportunities – both qualitatively and quantitatively.

Capacity measurement - GFCM Members should ensure the successful and complete implementation of the regional fleet register and use the agreed regional fishing capacity measure unit as established in the Recommendations GFCM 33/2009/5 and GFCM 34/2010/2, respectively.

6.2.4 *Administrative and legal instruments*

Members are encouraged to recall and implement GFCM decisions regarding the management of fishing capacity and related issues.

Entry/exit Regime - There is need for a simple and transparent entry/exit regime that applies to all members of the GFCM with the view to avoid any future increases of overall fishing capacity.

Capacity ceiling - Fishing capacity should be frozen within the soonest possible period based on scientific evidence, best practices and lessons learned.

Harmonization - There is a necessity to harmonize fisheries policies, legal and regulatory frameworks as well as specific fisheries regulations, particularly for shared stocks.

6.2.5 *Management instruments*

Regional and national measures such as temporary closures or fisheries management for other effort limitations shall be taken into account when establishing actions and measures.

7. Human resources development for management of fishing capacity

Communication and sensitization programmes related to fishing capacity should be created to increase general awareness amongst stakeholders and the general public about the problems of overcapacity.

Stakeholder participation – Effective participation of stakeholders, including fisheries organizations, should be supported by access to information and education.

Countries are encouraged to seek assistance in the monitoring of fishing capacity and for the development and implementation of national plans of action for the management of fishing capacity.

The diversification by fishers into of non-fishing activities should be encouraged.

8. Monitoring, control and surveillance of fishing capacity of fleets operating in the GFCM Convention area

Monitoring of fishing activity - As part of monitoring fishing activity there should be standardised logbook and catch documentation systems and include the use of VMS and other electronic reporting systems where appropriate.

8.1 Regulation of new constructions and imports of vessels

In exceptional cases where scientific evidence shows that there are sustainable new fishing opportunities, keeping in mind best practices and lessons learned as well as socio-economic concerns for local communities, new constructions and/or imports of vessels may be allowed, but all new constructions should be certified as in compliance with the RPOA-Capacity by the competent authorities.

In situations where there may not be new fishing opportunities but there is a desire for new constructions or import of vessels, then there should be a system of control as follows:

- All new constructions should have official authorization;
- To authorize a new construction or import, it should be necessary the destruction or exit from the register of at least the same tonnage and power that the one intended to be built. Priority consideration should be given to situations which enable the transfer of capacity from fleet segments in which there is overcapacity.

- To ensure that the tonnage and power of a new vessel be equal to or less than the tonnage and power of vessel(s) removed from the register of active vessels (i.e. registered and currently fishing vessels).

Fishing Licenses of withdrawn vessels should be transferred to the replacement vessel, taking into account that the indivisible “vessel unit” to transfer is composed of tonnage + power + fishing license.

9. Actions

Members of the GFCM shall undertake the following actions:

- Freeze fishing capacity within the soonest possible period based on scientific evidence, best practices and lessons learned in line with recommendation GFCM 34/2010/2.

- A part of such scientific advice will include analyses in order to reveal the existence of overcapacity per fishing area/sub-region, fleet segmentation, fishing type, species and fishing gears.

- Implement the precautionary approach to fisheries as an important element of the sustainable exploitation of fisheries in GFCM area. This approach needs to be followed strictly by the GFCM Members.

- Further work by GFCM Members to ensure the successful and complete implementation of the regional fleet register.

- Use an agreed regional fishing capacity measure unit as established in the Recommendation GFCM 33/2009/5.

- Implement Recommendation GFCM 34/2010/2.

- The levels of fishing capacity of vessels larger than 15 metres LOA shall be without prejudice to the transferability of fishing capacity from the one Member to another Member provided that overall fishing capacity of Members or Cooperating non-members concerned and authorized and licensed to fish in the GFCM area does not increase.

- Consider the use of some limitations or other mechanisms in order to prevent negative impacts of the transfer of fishing capacity from one operational unit to another and thereby endanger the stability of biodiversity.

- Collect and share data about national technical measures (length of net, period of fishing, restricted areas, forbidden gears, etc.).

10. Review and evaluation of the RPOA-Capacity

The GFCM shall develop mechanisms to monitor fishing capacity levels through, inter alia, the regional fishing fleet register and other data collection schemes.

The Commission shall monitor the implementation of the RPOA-Capacity through annual reports submitted by its Members and shall review the programs and impacts of the RPOA-Capacity every five years.

The RPOA will be reviewed and updated by the Commission every 5 years on the basis of the above and considering any additional management measures adopted by the GFCM during the preceding period.

Members of the GFCM should ensure the evaluation of the effects of modernization, new fishing practices, and technology creep on fishing capacity.

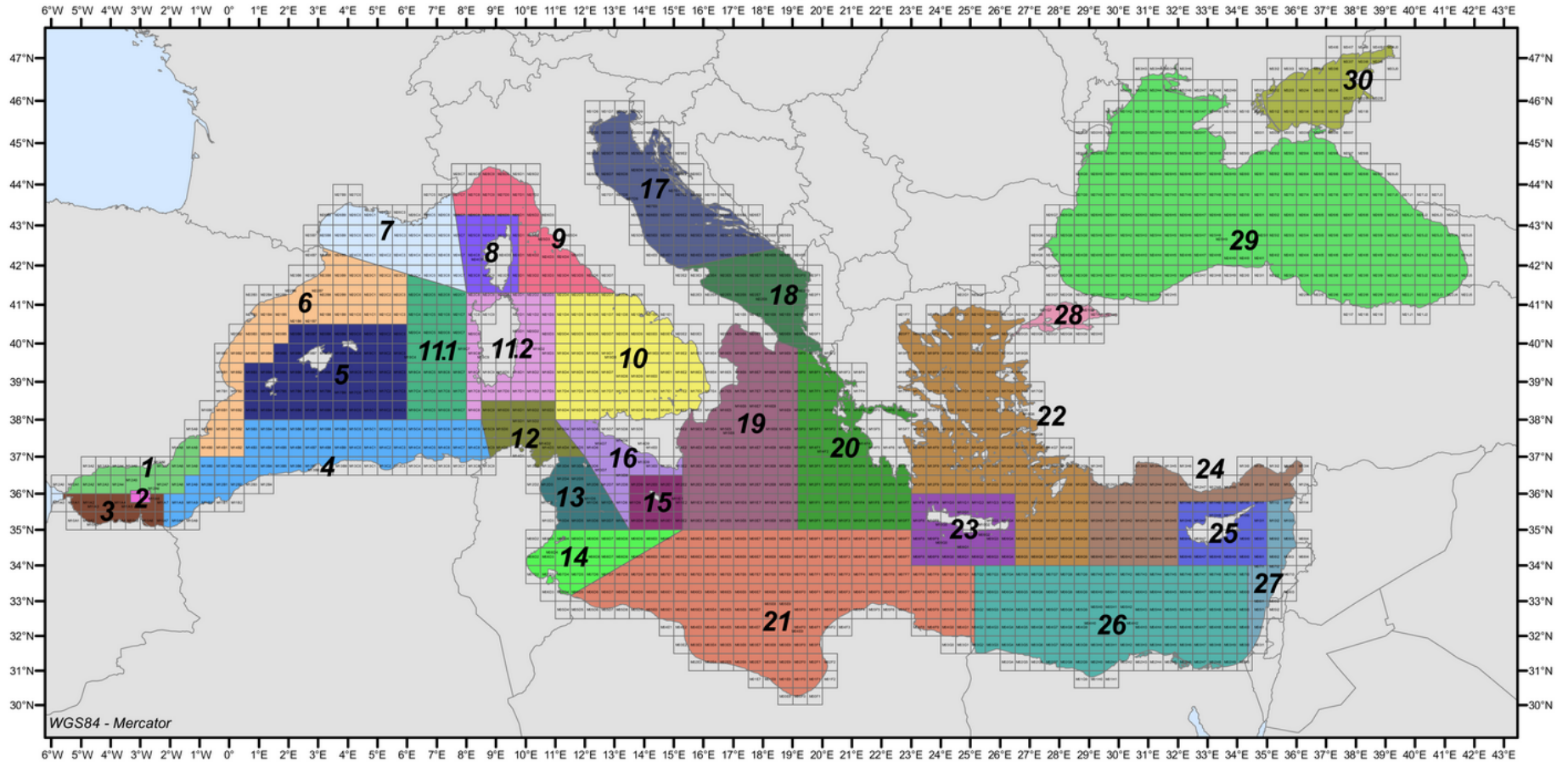
Table 1 - Fisheries Management Tools: Duration and Effect(s) on Overcapacity

<i>Management Approach</i>	<i>Management Tool</i>	<i>Duration</i>	<i>Effects</i>	
			<i>Direct Effect(s)</i>	<i>Longer-Term Effect(s)</i>
<i>Incentive Blocking Approaches</i>	Limited-entry programmes	Temporary	<ul style="list-style-type: none"> Limits participation 	<ul style="list-style-type: none"> Capital-stuffing—where a vessel's horsepower, length, breadth and tonnage are increased—typically occurs Drives changes (technological innovations) in gear, in fishing periods or areas Creates motives for IUU fishing Capacity will increase
	Buy-back programmes	Temporary	<ul style="list-style-type: none"> Purchase of vessel(s), licence(s) and/or gear(s) Capacity <i>may</i> be temporarily reduced in the fishery 	<ul style="list-style-type: none"> Any improvements in stock abundance will attract additional capacity Creates motives for IUU fishing Capacity will increase
	Gear restrictions, vessel restrictions	Temporary	<ul style="list-style-type: none"> Initial reduction in harvests 	<ul style="list-style-type: none"> Substitution of unregulated inputs or new gear types to replace restricted inputs Regulations lose effectiveness and additional regulations required Creates motives for IUU fishing Capacity will increase
	Aggregate quotas, total allowable catches (TACs)	Temporary	<ul style="list-style-type: none"> Likely to accelerate the growth of fishing capacity rather than reduce it 	<ul style="list-style-type: none"> Capacity and effort increase if effort and entry unrestricted Race for fish ("fishing derby") develops Creates motives for IUU fishing: additional regulations required, particularly to limit discarding and false reporting, ensure traceability and to control transshipment Potential for frequent overruns of the TAC resulting in over-exploitation Frequently results in excess processing capacity and processing plant downtime during closed season(s) Capacity will increase
	Non-transferable vessel catch limits (individual quotas/IQs)	Temporary	<ul style="list-style-type: none"> Overcapacity not addressed May limit additional growth of capacity 	<ul style="list-style-type: none"> Requires regulations to ensure traceability and to control transshipment Additional regulations required Creates motives for IUU fishing Capacity will increase

<i>Management Approach</i>	<i>Management Tool</i>	<i>Duration</i>	<i>Effects</i>	
			<i>Direct Effect(s)</i>	<i>Longer-Term Effect(s)</i>
<i>Incentive Adjusting Approaches</i>	Group fishing rights: community development quotas (CDQs), community-based management systems collaborative- or cooperative-based systems	Potentially enduring	<ul style="list-style-type: none"> • Reallocation of the fishery to the recipient community 	<ul style="list-style-type: none"> • Requires group understanding of asset value of user rights, capability to manage • Reduction of overcapacity or capacity containment depends on subsequent management
	Designated / Limited Access Privilege Programs (DAPPs, LAPPs) Catch Share Programs	Potentially enduring	<ul style="list-style-type: none"> • Reallocation of the fishery to the recipient community 	<ul style="list-style-type: none"> • Requires group understanding of asset value of user rights, capability to manage • Capacity managed automatically, overcapacity does not occur/recur • Compliance concerns internalised by fishers to protect asset (rally against IUU fishing) • Supplementary regulations helpful to reinforce conservation
	Territorial use rights (TURFs)	Potentially enduring	<ul style="list-style-type: none"> • Reallocation of the fishery to the recipient community 	<ul style="list-style-type: none"> • Requires group understanding of asset value of user rights, capability to manage • Reduction of overcapacity or containment of capacity linked to subsequent management
	Individual effort quotas (IEQs) denominated in trawl time, gear use, time away from port, fishing days, etc.	Mid-term	<ul style="list-style-type: none"> • Enforcement difficult • Additional regulations required to control input substitution 	<ul style="list-style-type: none"> • Capital-stuffing—where a vessel's horsepower, length, breadth and tonnage are increased—frequently occurs • Requires regulations to ensure traceability and to control transshipment • Creates motives for IUU fishing • Capacity will increase
	Individual transferable quotas (ITQs), individual fishing rights (IFQs)	Enduring	<ul style="list-style-type: none"> • Market forces drive out overcapacity • Consolidation occurs if overcapitalised 	<ul style="list-style-type: none"> • Capacity managed automatically, overcapacity does not occur/recur • Compliance concerns internalised by fishers to protect asset (rally against IUU fishing) • Supplementary regulations helpful to reinforce conservation
	Taxes and royalties	Indefinite duration	<ul style="list-style-type: none"> • Market forces drive out overcapacity • Consolidation if overcapitalised 	<ul style="list-style-type: none"> • Administratively intensive: requires constant adjustment of tax levels to maintain capacity at desired level • Politically difficult to impose, easier to rescind

المرفق 2

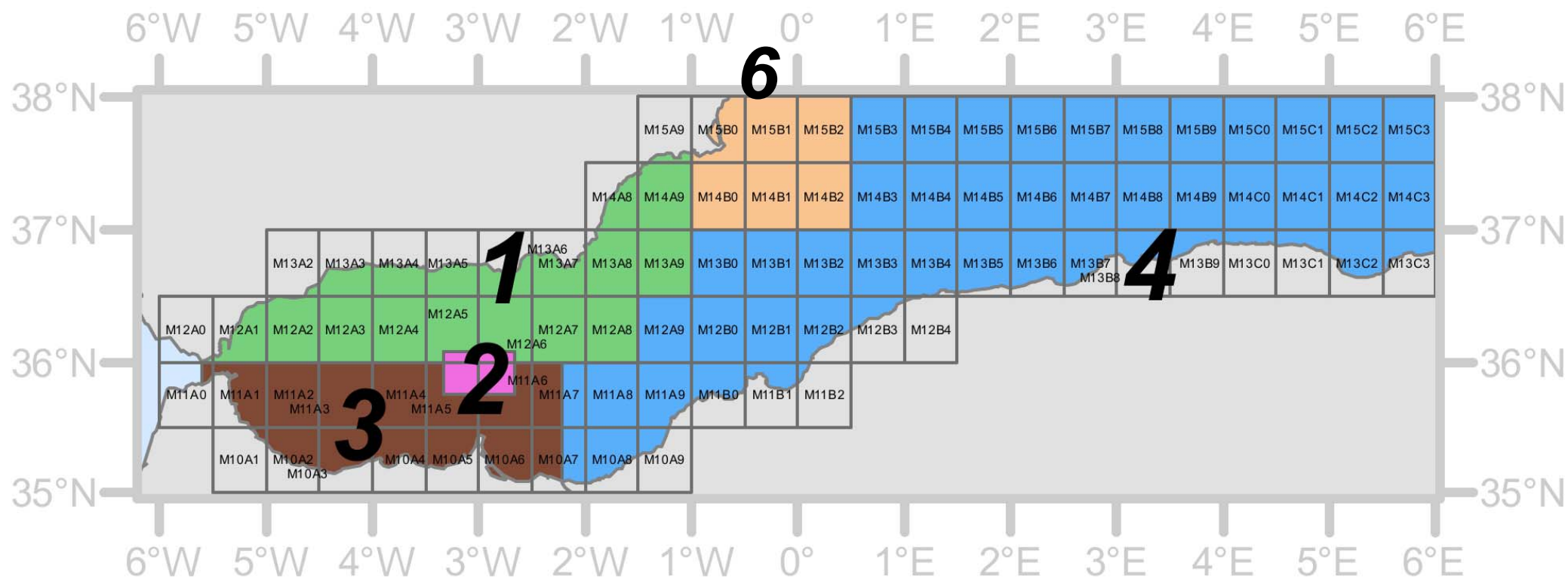
Mediterranean and Black Sea Geographical Sub-Areas (FAO area 37)

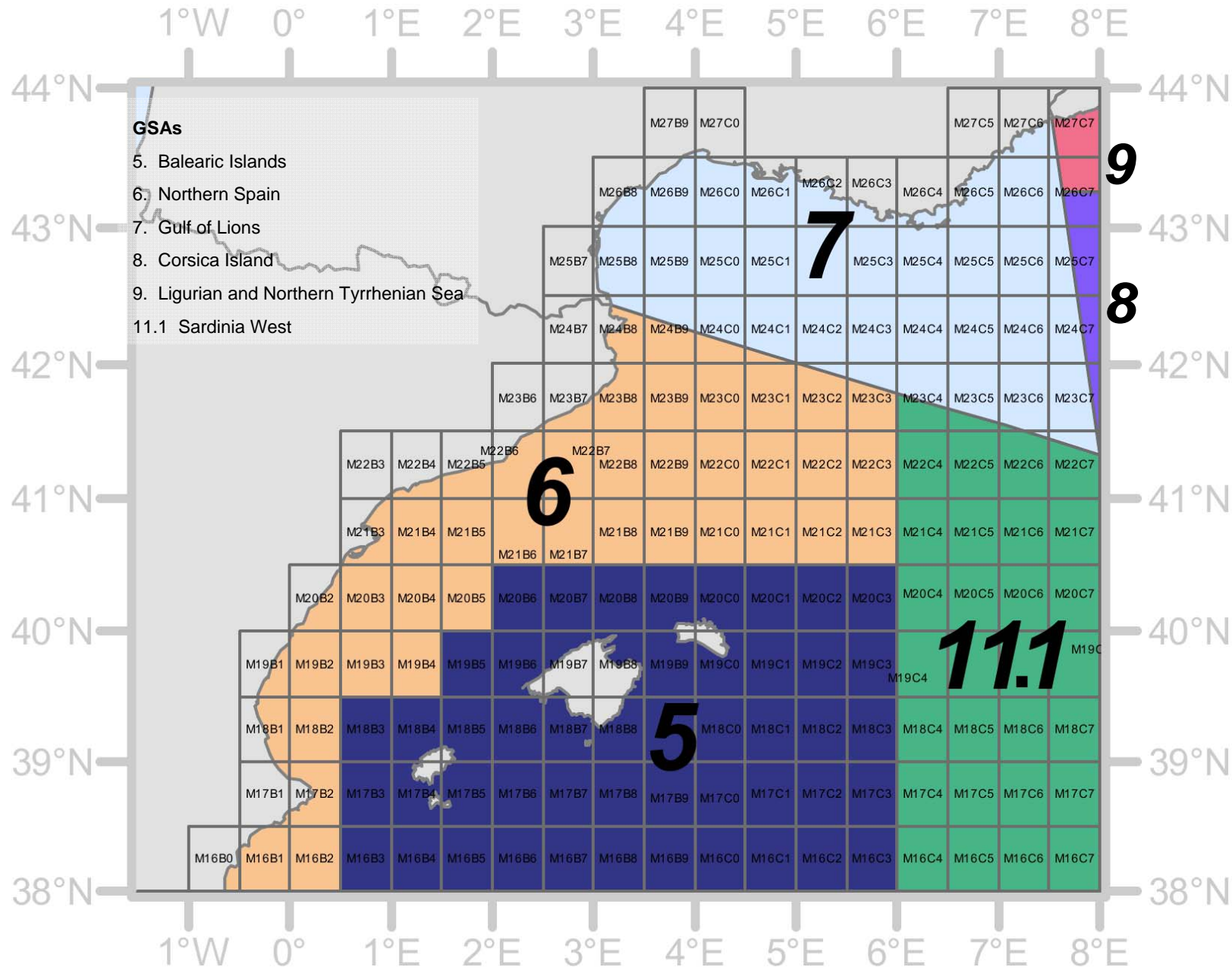


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|-------------------------|---|---------------------------|------------------------------------|--------------------------|
| □ 30min x 30min | 6, Northern Spain | 12, Northern Tunisia | 19, Western Ionian Sea | 26, South Levant (Egypt) |
| GSA | 7, Gulf of Lion | 13, Gulf of Hammamet | 20, Eastern Ionian Sea | 27, Levant |
| 1, Northern Alboran Sea | 8, Corsica Island | 14, Gulf of Gabes | 21, Southern Ionian Sea (Libya) | 28, Marmara Sea |
| 2, Alboran Island | 9, Ligurian and Northern Tyrrhenian Sea | 15, Malta Island | 22, Aegean Sea | 29, Black Sea |
| 3, Southern Alboran Sea | 10, Southern Tyrrhenian Sea | 16, South of Sicily | 23, Crete Island | 30, Azov Sea |
| 4, Algeria | 11.1, Sardinia West | 17, Northern Adriatic Sea | 24, North Levant (South of Turkey) | |
| 5, Balearic Islands | 11.2, Sardinia East | 18, Southern Adriatic Sea | 25, Cyprus Island | |

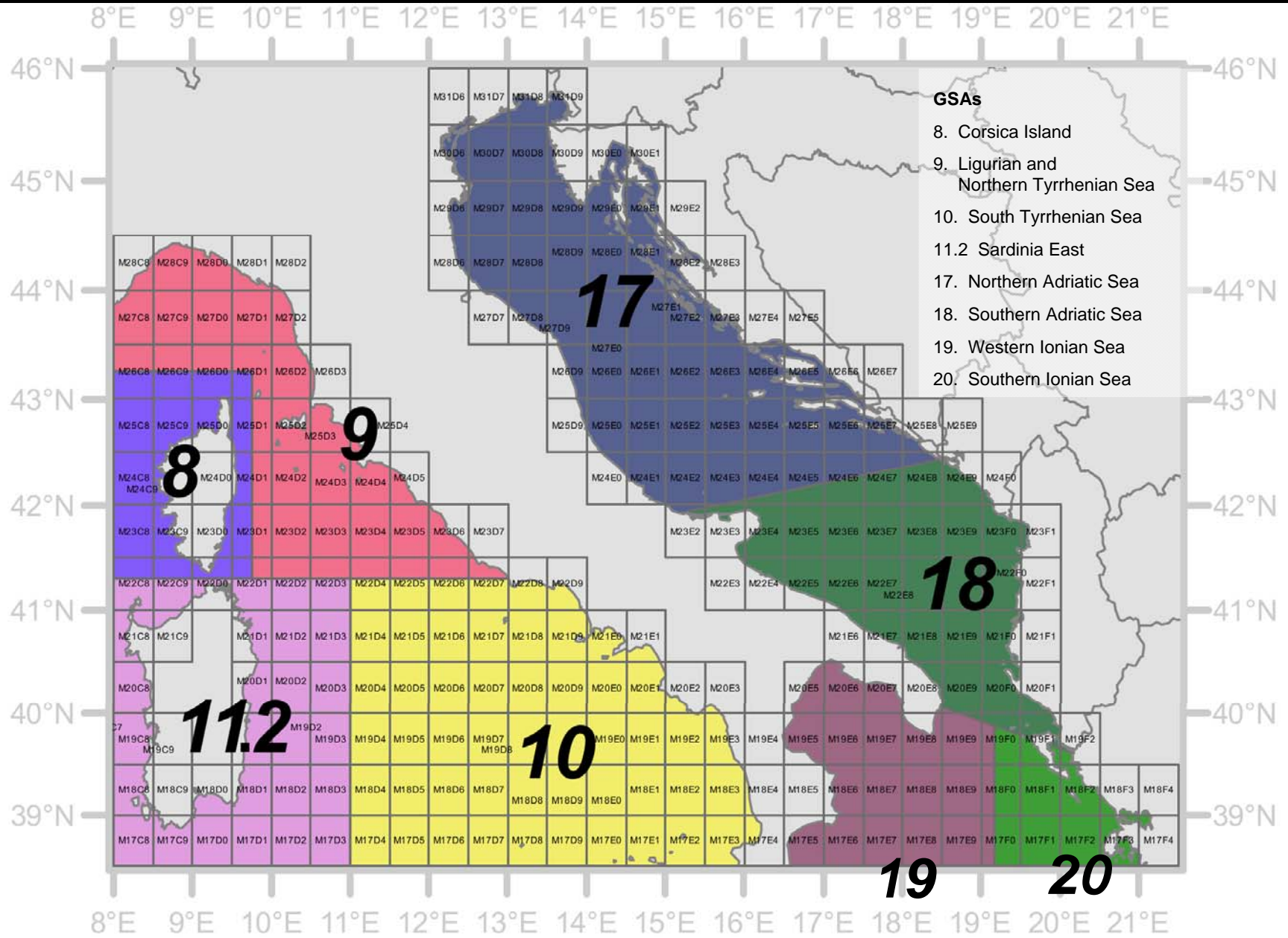
GSAs

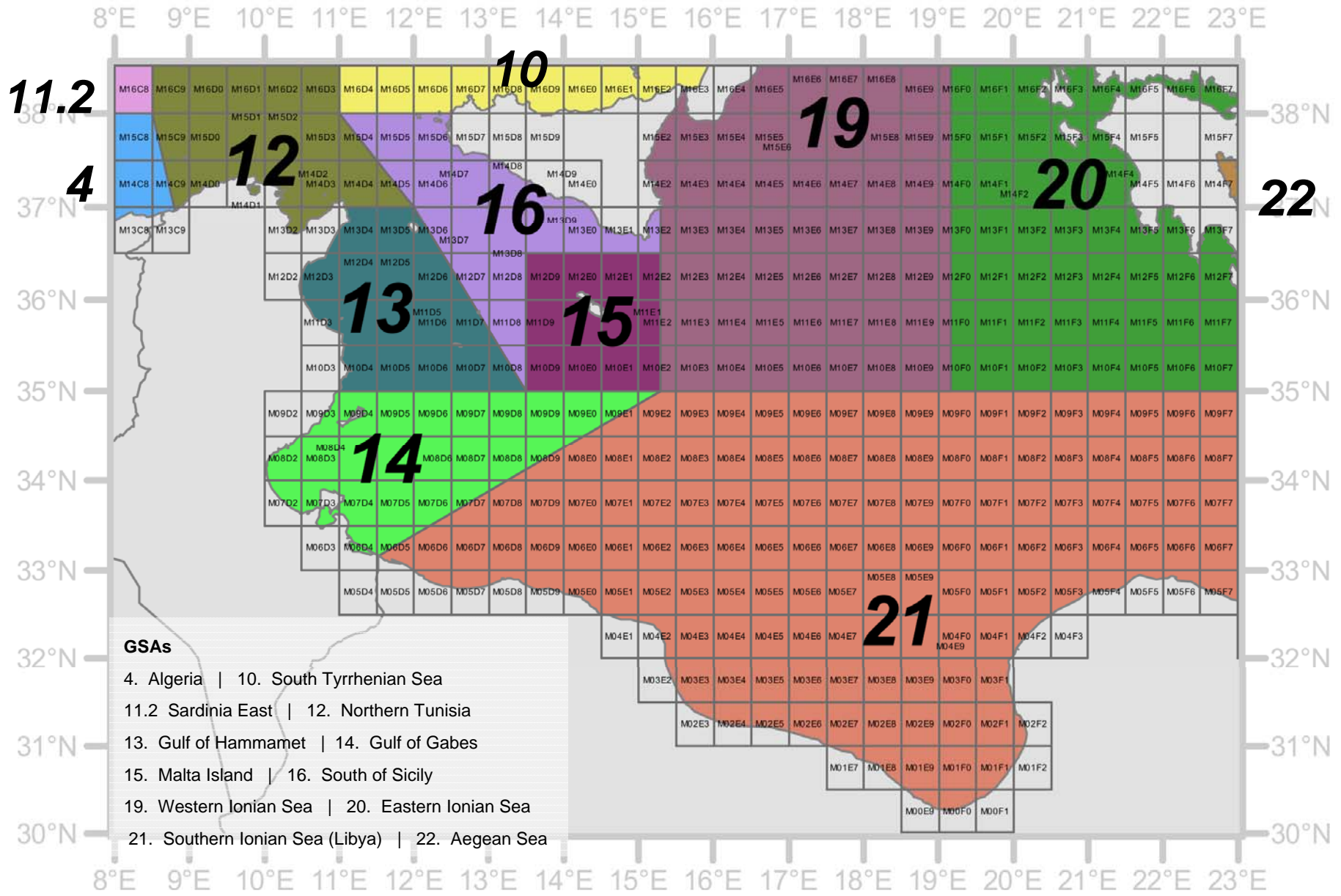
1. Northern Alboran Sea
2. Alboran Sea
3. Southern Alboran Sea
4. Algeria
6. Northern Spain



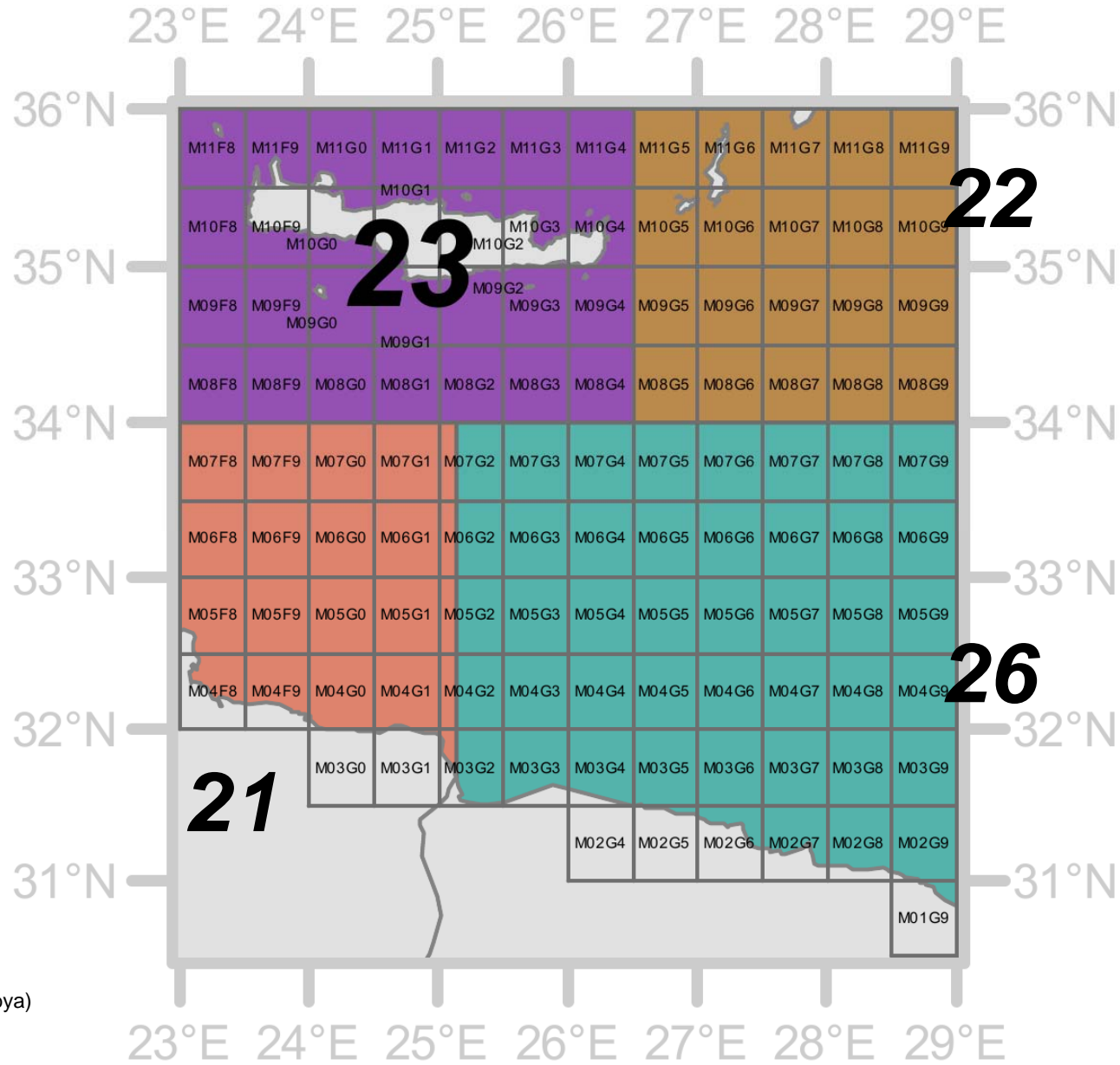


GFCM-GSA map (2/8)



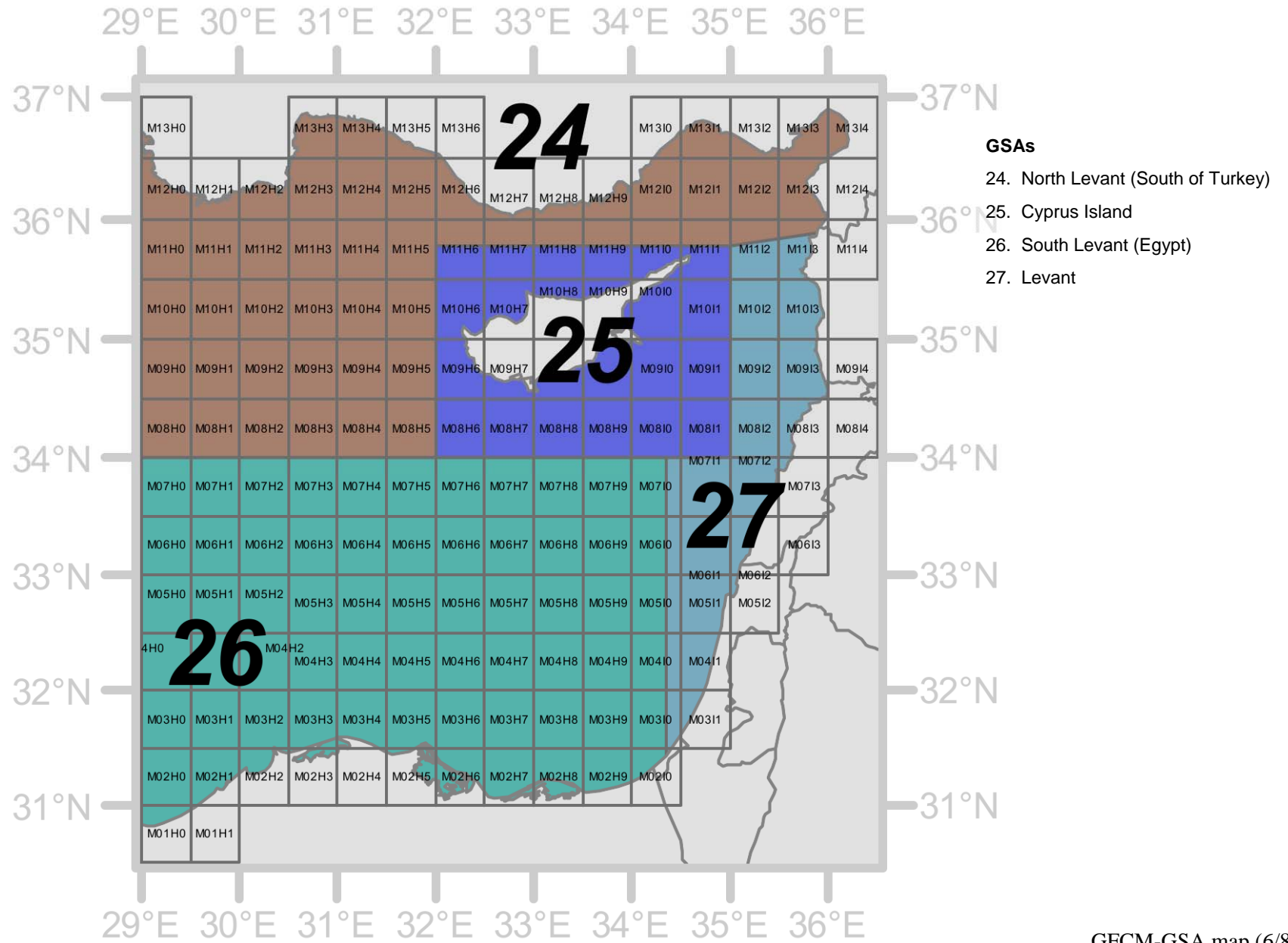


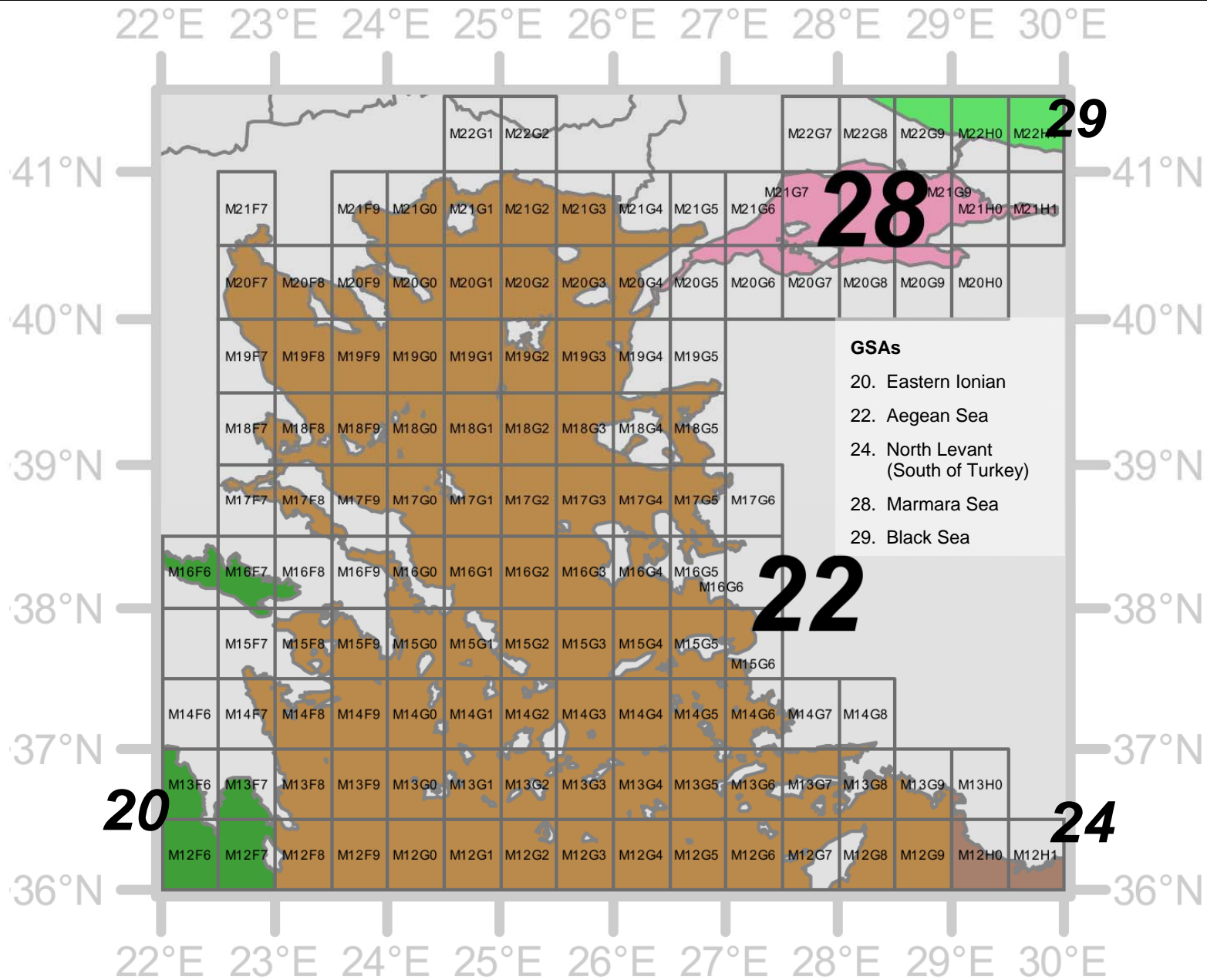
GFCM-GSA map (4/8)



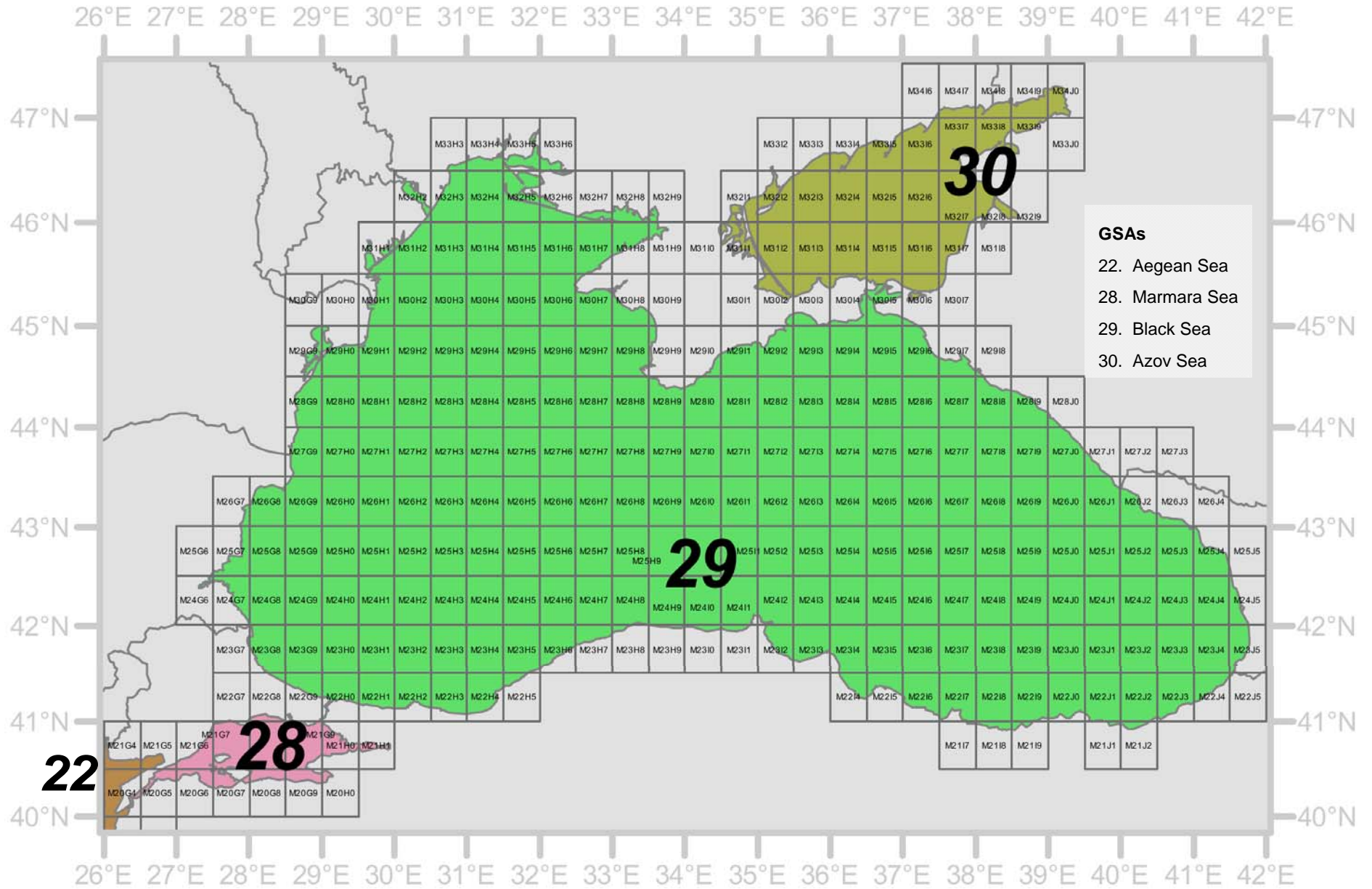
GSAs

- 21. Southern Ionian Sea (Libya)
- 22. Aegean Sea
- 23. Crete Island
- 26. South Levant (Egypt)





GFCM-GSA map (7/8)



GFCM-GSA map (8/8)