

Regulation (EU) 2017/1004 of the European Parliament and of the Council of 17 May 2017 on the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy and repealing Council Regulation (EC) No 199/2008 (recast)

REGULATION (EU) 2017/1004 OF THE EUROPEAN
PARLIAMENT AND OF THE COUNCIL

of 17 May 2017

on the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy and repealing Council Regulation (EC) No 199/2008

(recast)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 43(2) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee⁽¹⁾,

Having regard to the opinion of the Committee of the Regions⁽²⁾,

Acting in accordance with the ordinary legislative procedure⁽³⁾,

Whereas:

- (1) A number of amendments are to be made to Council Regulation (EC) No 199/2008⁽⁴⁾. In the interests of clarity, that Regulation should be recast.
- (2) The common fisheries policy has been reformed by Regulation (EU) No 1380/2013 of the European Parliament and of the Council⁽⁵⁾. The objectives of the common fisheries policy and the requirements for data collection in the fisheries sector are set out in Articles 2 and 25 of that Regulation. Furthermore, Regulation (EU) No 508/2014 of the European Parliament and of the Council⁽⁶⁾ has reformed the structure of financial support for Member States' fisheries data collection activities.
- (3) In line with the objectives of the common fisheries policy on the conservation, management and exploitation of living aquatic resources in non-Union waters, the Union must take part in the efforts undertaken to conserve fisheries resources, in particular in accordance with the provisions adopted in sustainable fisheries partnership agreements or by regional fisheries management organisations.

- (4) This Regulation aims to establish rules on the collection, management and use of biological, environmental, technical and socioeconomic data concerning the fisheries sector.
- (5) The data collection framework should contribute towards reaching the objectives of the common fisheries policy, which include the protection of the marine environment, the sustainable management of all commercially exploited species, and in particular the achievement of good environmental status in the marine environment by 2020, as set out in Article 1(1) of Directive 2008/56/EC of the European Parliament and of the Council⁽⁷⁾.
- (6) The rules laid down in this Regulation as regards the collection, management and use of biological, environmental, technical and socioeconomic data should also apply to data concerning the fisheries sector, the collection of which is required under other Union legal acts, including, Regulations (EC) No 1921/2006⁽⁸⁾, (EC) No 295/2008⁽⁹⁾, (EC) No 762/2008⁽¹⁰⁾, (EC) No 216/2009⁽¹¹⁾, (EC) No 217/2009⁽¹²⁾, (EC) No 218/2009⁽¹³⁾, (EU) No 1236/2010⁽¹⁴⁾, (EU) No 1343/2011⁽¹⁵⁾ and (EU) 2016/2336 of the European Parliament and of the Council⁽¹⁶⁾, Directives 2000/60/EC⁽¹⁷⁾, 2008/56/EC and 2009/147/EC⁽¹⁸⁾ of the European Parliament and of the Council, Council Regulations (EC) No 2347/2002⁽¹⁹⁾, (EC) No 812/2004⁽²⁰⁾, (EC) No 1967/2006⁽²¹⁾, (EC) No 1100/2007⁽²²⁾ and (EC) No 1006/2008⁽²³⁾, Council Directive 92/43/EEC⁽²⁴⁾, Council Decision 2010/717/EU⁽²⁵⁾ and Commission Implementing Regulation (EU) 2017/218⁽²⁶⁾.
- (7) However, in order to avoid duplication, where the data concerning fisheries are collected and managed in accordance with the rules laid down in other Union legal acts, such as Council Regulation (EC) No 1224/2009⁽²⁷⁾ and Regulation (EC) No 223/2009 of the European Parliament and of the Council⁽²⁸⁾, this Regulation should only lay down the rules for the use and transmission of such data.
- (8) The obligations concerning access to the data covered by this Regulation should be without prejudice to Member States' obligations under Directive 2003/4/EC of the European Parliament and of the Council⁽²⁹⁾, as well as under Regulation (EC) No 1367/2006 of the European Parliament and of the Council⁽³⁰⁾.
- (9) It should be ensured at all times and at all levels that, as regards data storage, process and exchange, the obligations on personal data protection laid down in Directive 95/46/EC of the European Parliament and of the Council⁽³¹⁾ and Regulation (EC) No 45/2001 of the European Parliament and of the Council⁽³²⁾ are respected.
- (10) In the interest of legal clarity, this Regulation should provide for a set of definitions.
- (11) The definition of 'marine regions' should be based on scientific considerations.
- (12) This Regulation should enable the Union and its Member States to achieve the objectives and principles set out in Articles 2 and 25 of Regulation (EU) No 1380/2013. To that end, a multiannual Union programme is needed to coordinate the data collection efforts of all Member States. It is appropriate to set out key requirements and criteria for the establishment of such a multiannual Union programme, as well as the consultations to be held before its adoption.

- (13) The data needs of end-users of scientific data should be identified and it should be specified which data are to be collected under this Regulation. Those data should include ecosystem data relating to the impact of fisheries and data on the sustainability of aquaculture, as well as socioeconomic data on fisheries and aquaculture.
- (14) In the interest of simplification and rationalisation, the data to be collected should be selected on the basis of needs clearly substantiated by end-users of scientific data, taking into account the scientific relevance and usefulness of those data.
- (15) The data collected should allow the targets required for the implementation of the multiannual plans referred to in Article 9 of Regulation (EU) No 1380/2013, such as fishing mortality rates and spawning stock biomass, to be determined. They should also allow the gaps in the coverage of data relating to the fishing fleet to be closed and the number of data-deficient stocks in certain regions to be reduced.
- (16) It is important to collect biological data on recreational fisheries where there is a potentially significant impact on the state of the stock, in order to enable ecosystem-based management and conservation as necessary for the operation of the common fisheries policy, as well as to improve stock assessment.
- (17) For the purpose of maintaining, adjusting or withdrawing emergency measures and other measures based on the precautionary principle, additional information is usually required. Where possible, priority should therefore be given to the collection of data that are necessary for the assessment of measures imposed on the basis of the precautionary principle.
- (18) In view of the evolution of the status of fisheries resources over time, it is necessary to build and maintain time-series of data in order to allow for an effective long-term scientific monitoring of those resources.
- (19) Research surveys at sea are an important method for collecting biological data. In view of their importance in marine regions where stocks are shared, it is appropriate for a sufficient number of mandatory research surveys at sea to be carried out at Union level.
- (20) Member States should implement the multiannual Union programme at national level by setting out their main data collection activities in the form of a section of the operational programme referred to in point (p) of Article 18(1) of Regulation (EU) No 508/2014, supplemented by a work plan for data collection in accordance with Article 21 of that Regulation. Requirements concerning the contents of such work plans should be set out in this Regulation.
- (21) It is appropriate to describe the steps Member States should follow and the aspects they should take into consideration when establishing the methodologies for data collection in their national work plans. With a view to ensuring effective and homogeneous implementation of this Regulation by Member States, it is also necessary to set out key requirements as regards national coordination arrangements, data collectors' rights and the obligations of masters of fishing vessels.
- (22) The Commission is required to approve the Member States' operational programmes and the national work plans and any amendments thereto pursuant to Article 19(1)

and Article 21(2) of Regulation (EU) No 508/2014. In accordance with Article 22 of that Regulation, the Commission may adopt implementing acts laying down rules on procedures, format and timetables for their approval.

- (23) It is appropriate for the Commission to assess work plans after consultation of the Scientific, Technical and Economic Committee for Fisheries (STECF), in order to ensure that those plans comply with minimum requirements set out in this Regulation.
- (24) For the purpose of verification of the implementation of data collection activities by the Member States, there is a need for reporting by the Member States to the Commission in a clearly defined, standardised format that reduces the administrative burden.
- (25) It is necessary for Member States to cooperate among themselves, as well as with third countries, and coordinate their work plans with respect to the collection of data regarding the same marine region and regions covering relevant inland waters.
- (26) In view of the objective of the common fisheries policy to give more responsibility to Member States and to better involve end-users of scientific data in data collection, regional coordination should be strengthened and expanded from one single meeting into a continuous process coordinated by regional coordination groups for each marine region. In this framework, Member States should aim to cooperate with relevant stakeholders including third countries.
- (27) Those regional coordination groups should be tasked to develop and implement procedures, methods, quality assurance and quality control for collecting and processing data with a view to enabling the reliability of scientific advice to be further improved.
- (28) The regional coordination groups should also aim to develop and implement regional databases, and should start all the necessary preparatory steps in order to attain that goal.
- (29) It is important to take full advantage of data for the sustainable management of fisheries and for the evaluation and monitoring of stocks and ecosystems, including data related to the landing obligation.
- (30) Member States should determine the way they collect data, but in order to be able to combine data on a regional level in a meaningful way, minimum requirements for data quality, coverage and compatibility should be agreed by Member States at regional level, taking into account the fact that in some regions basins are managed jointly with third countries. When there is general agreement on the methods at regional level, regional coordination groups should, on the basis of that agreement, submit a draft regional work plan for approval by the Commission.
- (31) Union legislation should no longer determine the details of methodologies to be applied in collecting data. Provisions on particular methods of data collection should therefore be replaced by the description of the process by which they will be determined. That process should essentially include cooperation between Member States and data users in regional coordination groups, and validation by the Commission through the approval of work plans submitted by Member States.
- (32) The data referred to in this Regulation should be put into national computerised databases so that they are accessible to the Commission and can be made available

to end-users of scientific data and other interested parties. Data which do not allow for personal identification should be available without restrictions to any party with an interest in their analysis, including on the environmental aspects of fisheries management. For that purpose, interested parties other than end-users of scientific data should be deemed to include any individual or body expressing such an interest.

- (33) Scientific advice to fisheries resources management requires the processing of detailed data in order to address the needs of fisheries managers. In that context, Member States should make available data needed for scientific analysis and should ensure that they have the technical capacity to do so.
- (34) In accordance with point (e) of Article 25(2) of Regulation (EU) No 1380/2013, it is necessary to ensure the availability in a timely manner of the relevant data and respective methodologies to bodies with a research or management interest in the scientific analysis of data in the fisheries sector and to any interested parties, except in circumstances where protection and confidentiality are required under applicable Union law.
- (35) To give full effect to point (e) of Article 25(2) of Regulation (EU) No 1380/2013, Member States should set up adequate processes and electronic technologies to ensure availability of data and cooperate with other Member States, the Commission and end-users of scientific data to develop compatible data storage and exchange systems, taking account of Directive 2007/2/EC of the European Parliament and of the Council⁽³³⁾. Further dissemination of information should also be ensured both at national and Union level. In all cases, appropriate safeguards such as a higher level of aggregation or anonymisation of data should be put in place in case data include information relating to identified or identifiable natural persons, taking into consideration the purposes of processing, the nature of the data and the potential risks relating to the processing of personal data.
- (36) There is a need to ensure that end-users of scientific data are provided with data in a timely manner and in a standardised format, with clear codification systems, as they need to provide timely advice to enable fisheries to be sustainable. Other interested parties should also be assured of receiving data within a certain deadline.
- (37) In order to improve the reliability of scientific advice needed to conduct the common fisheries policy, the Member States and the Commission should coordinate and cooperate in the relevant international scientific bodies.
- (38) The scientific community should be consulted on, and those working in the fishing industry and other interest groups should be kept informed of, the implementation of the data collection provisions. The appropriate bodies in which to gather the opinions required are STECF and the Advisory Councils established pursuant to Article 43 of Regulation (EU) No 1380/2013.
- (39) In order to supplement certain non-essential elements of this Regulation, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of establishing a detailed list of data requirements for the purpose of data collection under this

Regulation within the framework of the multiannual Union programme. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making⁽³⁴⁾. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

- (40) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission in respect of the approval of draft regional work plans submitted by regional coordination groups, as well as in respect of procedures, cost-sharing arrangements for participation in research surveys at sea, the area of marine region for the purpose of data collection, and format and timetables for the submission and approval of such regional work plans. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council⁽³⁵⁾.
- (41) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission for the establishment, within the framework of the multiannual Union programme, of a list of mandatory research surveys at sea and thresholds below which it is not mandatory to collect data or carry out research surveys at sea. Those powers should be exercised in accordance with Regulation (EU) No 182/2011.
- (42) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission in respect of setting out the rules on procedures, format and timetables for the submission and approval of annual reports submitted by Member States to the Commission. Those powers should be exercised in accordance with Regulation (EU) No 182/2011.
- (43) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission in respect of laying down rules on procedures, formats, codes and timetables to be used to ensure the compatibility of data storage and exchange systems, and to establish safeguards, where appropriate, in the event that those systems include information relating to identified or identifiable natural persons. Those powers should be exercised in accordance with Regulation (EU) No 182/2011.
- (44) Since the objective of this Regulation, namely to establish a Union framework for the collection, management and use of data in the fisheries sector, cannot be sufficiently achieved by the Member States, but can rather, by reason of the scale or effects of the action, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective.

- (45) Regulation (EC) No 199/2008 should be repealed. However, transitional measures should be provided for as regards national programmes already approved and as regards the multiannual Union programme currently in force,

HAVE ADOPTED THIS REGULATION:

CHAPTER I

GENERAL PROVISIONS

Article 1

Subject matter and scope

1 With a view to contributing to the objectives of the common fisheries policy set out in Article 2 of Regulation (EU) No 1380/2013, this Regulation establishes rules on the collection, management and use of biological, environmental, technical and socioeconomic data in the fisheries sector as provided for in Article 25 of Regulation (EU) No 1380/2013.

2 The data referred to in paragraph 1 shall only be collected if no obligation to collect them exists under Union legal acts other than this Regulation.

3 For data necessary for fisheries management which are collected under other Union legal acts, this Regulation only defines rules for the use and transmission of those data.

Article 2

Data protection

Where relevant, the processing, management and use of data collected under this Regulation shall comply with, and be without prejudice to, Directive 95/46/EC and Regulations (EC) No 45/2001 and (EC) No 223/2009.

Article 3

Definitions

For the purposes of this Regulation, the definitions referred to in Article 4 of Regulation (EU) No 1380/2013 apply. In addition, the following definitions apply:

- (1) ‘fisheries sector’ means activities related to commercial fisheries, recreational fisheries, aquaculture and industries processing fisheries products;
- (2) ‘recreational fisheries’ means non-commercial fishing activities exploiting marine biological resources for recreation, tourism or sport;
- (3) ‘marine region’ means a geographical area set out in Article 4(2) of Regulation (EU) No 1380/2013, an area established by regional fisheries management organisations or an area defined in the implementing act referred to in Article 9(11);

- (4) ‘primary data’ means data associated with individual vessels, natural or legal persons or individual samples;
- (5) ‘metadata’ means data giving qualitative and quantitative information on the collected primary data;
- (6) ‘detailed data’ means data based on primary data in a form which does not allow natural persons or legal entities to be identified directly or indirectly;
- (7) ‘aggregated data’ means the output resulting from summarising the primary or detailed data for specific analytic purposes;
- (8) ‘scientific observer’ means a person appointed to observe fishing operations in the context of data collection for scientific purposes and designated by a body in charge of the implementation of the national work plans for data collection;
- (9) ‘scientific data’ means data referred to in Article 1(1) that are collected, managed or used under this Regulation.

CHAPTER II

COLLECTION AND MANAGEMENT OF DATA IN THE FRAMEWORK OF MULTIANNUAL UNION PROGRAMMES

SECTION 1

Multiannual Union programmes

Article 4

Establishment of a multiannual Union programme

1 The Commission shall establish a multiannual Union programme for the collection and management of data referred to in Article 1(1), in accordance with the content and the criteria set out in Article 5.

The Commission shall adopt the part of the multiannual Union programme covering matters provided for in point (a) of Article 5(1) by means of delegated acts in accordance with Article 24.

The Commission shall adopt the part of the multiannual Union programme covering matters provided for in points (b) and (c) of Article 5(1) by means of implementing acts in accordance with the examination procedure referred to in Article 25(2).

2 Before adopting the delegated and implementing acts provided for in paragraph 1 of this Article, the Commission shall consult the regional coordination groups referred to in Article 9, STECF and any other appropriate scientific bodies referred to in Article 26 of Regulation (EU) No 1380/2013.

Article 5

Content and criteria for the establishment of the multiannual Union programme

- 1 The multiannual Union programme shall establish:
 - a a detailed list of the data requirements to achieve the objectives set out in Articles 2 and 25 of Regulation (EU) No 1380/2013;
 - b a list of mandatory research surveys at sea;
 - c thresholds below which it is not mandatory for Member States to collect data based on their fishing and aquaculture activities or carry out research surveys at sea.
- 2 The data referred to in point (a) of paragraph 1 shall include:
 - a biological data on all stocks caught or by-caught in Union commercial and, where appropriate, recreational fisheries in and outside Union waters, including eels and salmon in relevant inland waters, as well as other diadromous fish species of commercial interest, to enable an ecosystem-based approach to fisheries management and conservation as necessary for the operation of the common fisheries policy;
 - b data to assess the impact of Union fisheries on the marine ecosystem in and outside Union waters, including data on by-catch of non-target species, in particular species protected under Union or international law, data on impacts of fisheries on marine habitats, including vulnerable marine areas, and data on impacts of fisheries on food webs;
 - c data on the activity of Union fishing vessels in and outside Union waters, including levels of fishing, and on effort and capacity of the Union fleet;
 - d socioeconomic data on fisheries to enable the socioeconomic performance of the Union fisheries sector to be assessed;
 - e socioeconomic data and sustainability data on marine aquaculture to enable the socioeconomic performance and the sustainability of the Union aquaculture sector, including its environmental impact, to be assessed;
 - f socioeconomic data on the fish processing sector to enable the socioeconomic performance of that sector to be assessed.
- 3 In addition, the data referred to in point (a) of paragraph 1 may include socioeconomic data and sustainability data on freshwater aquaculture to enable the socioeconomic performance and the sustainability of the Union aquaculture sector, including its environmental impact, to be assessed.
- 4 For the purpose of establishing the multiannual Union programme, the Commission shall take into account:
 - a the information needs for the management and efficient implementation of the common fisheries policy, with a view to reaching its objectives as set out in Article 2 of Regulation (EU) No 1380/2013. Such information shall also allow the targets required for the implementation of the multiannual plans referred to in Article 9 of that Regulation to be determined;
 - b the need for data that are relevant, comprehensive and reliable for the purpose of decisions on fisheries management and protection of ecosystems including vulnerable species and habitats;
 - c the need for and relevance of data for the sustainable development of aquaculture at Union level, taking account of the predominantly local character of its impacts;
 - d the need to support impact assessments of policy measures;

- e costs and benefits, taking account of the most cost-effective solutions to achieve the objective of data collection;
- f the need to avoid disruption of existing time-series;
- g the need for simplification and to avoid duplication of data collection, in accordance with Article 1;
- h where relevant, the need for data to cover data-deficient fisheries;
- i regional specificities and regional agreements concluded in regional coordination groups;
- j the international obligations of the Union and its Member States;
- k spatial and temporal coverage of the data collection activities.

5 The list of mandatory research surveys at sea referred to in point (b) of paragraph 1 shall be drawn up taking into account the following requirements:

- a information needs for the management of the common fisheries policy, with a view to reaching its objectives as set out in Article 2 of Regulation (EU) No 1380/2013;
- b information needs arising from internationally agreed coordination and harmonisation;
- c information needs for the evaluation of management plans;
- d information needs for the monitoring of ecosystems variables;
- e information needs for an adequate coverage of stock areas;
- f the need to avoid duplication between research surveys at sea; and
- g the need to avoid disruption of time-series.

6 For stocks that are subject to catch limits, the rules on participation by different Member States in the research surveys at sea referred to in point (b) of paragraph 1 shall be based upon the share of the relevant Member States in the total allowable catches that are available for the Union for the stocks concerned. For stocks that are not subject to catch limits, those rules shall be based upon the relative share of the relevant Member States in the total exploitation of the stock concerned.

7 For stocks that are subject to catch limits, the threshold referred to in point (c) of paragraph 1 shall be set on the basis of the share of the relevant Member State in the total allowable catches that are available for the Union for the stock concerned. For stocks that are not subject to catch limits, that threshold shall be set on the basis of the relative share of the relevant Member State in the total exploitation of the stock concerned. Regarding the aquaculture and the processing sector such thresholds shall be proportionate to the size of those sectors of a Member State.

SECTION 2

Implementation of the multiannual Union programme by the Member States

Article 6

National work plans

1 Without prejudice to their current data collection obligations under Union law, Member States shall collect data within the framework of an operational programme, as referred to in Article 18 of Regulation (EU) No 508/2014, and a work plan drawn up in accordance with the multiannual Union programme and pursuant to Article 21 of Regulation (EU) No 508/2014 ('national work plan').

2 When approving the national work plans in accordance with Article 21(2) of Regulation (EU) No 508/2014, the Commission shall take into account the evaluation conducted by STECF in accordance with Article 10 of this Regulation. If such evaluation indicates that a national work plan does not comply with this Article or does not ensure the scientific relevance of the data or sufficient quality of the proposed methods and procedures, the Commission shall immediately inform the Member State concerned and indicate amendments to that work plan that the Commission considers necessary. Subsequently, the Member State concerned shall submit a revised national work plan to the Commission.

3 National work plans shall contain a detailed description of the following:

- a data to be collected in accordance with the multiannual Union programme;
- b the temporal and spatial distribution and the frequency by which the data will be collected;
- c the source of the data, the procedures and methods to collect and process the data into the data sets that will be provided to end-users of scientific data;
- d the quality assurance and quality control framework to ensure adequate quality of the data in accordance with Article 14;
- e in what format and when data are to be made available to end-users of scientific data, taking into account the needs defined by the end-users of scientific data, where known;
- f the international and regional cooperation and coordination arrangements, including bilateral and multilateral agreements concluded to achieve the objectives of this Regulation; and
- g how the international obligations of the Union and its Member States have been taken into account.

4 In preparing its national work plan, each Member State shall, in the framework of the regional coordination groups referred to in Article 9, cooperate and coordinate its efforts with other Member States, in particular those in the same marine region, to ensure sufficient and efficient coverage and avoid duplication of data collection activities. In that process, Member States shall also aim to involve relevant stakeholders at the appropriate level. Where appropriate, such cooperation and coordination may also take place outside the framework of the regional coordination groups.

Article 7

National correspondents

1 Each Member State shall designate a national correspondent and shall inform the Commission thereof. The national correspondent shall serve as the focal point for exchange of information between the Commission and the Member State regarding the preparation and implementation of the national work plans.

2 Furthermore, the national correspondent shall, in particular, carry out the following tasks:

- a coordinate the preparation of the annual report referred to in Article 11;
- b ensure the transmission of information within the Member State; and
- c coordinate attendance of relevant experts in expert group meetings organised by the Commission and participation in the relevant regional coordination groups referred to in Article 9.

3 If several bodies in a Member State are participating in the implementation of the national work plan, the national correspondent shall be responsible for the coordination of that work.

4 Each Member State shall ensure that its national correspondent has a sufficient mandate to represent its Member State in the regional coordination groups referred to in Article 9.

Article 8

Cooperation within the Union

Member States shall cooperate and coordinate their actions to further improve the quality, timeliness and coverage of data enabling the reliability of data collection methods to be further improved, with a view to improving their data collection activities.

Article 9

Regional coordination and cooperation

1 As provided for in Article 25 of Regulation (EU) No 1380/2013, Member States shall coordinate their data collection activities with other Member States in the same marine region and shall make every effort to coordinate their actions with third countries having sovereignty or jurisdiction over waters in the same marine region.

2 In order to facilitate regional coordination, regional coordination groups shall be established by the relevant Member States for each marine region.

3 Regional coordination groups shall aim at developing and implementing procedures, methods, quality assurance and quality control for collecting and processing data with a view to enabling the reliability of scientific advice to be further improved. For that purpose, regional coordination groups shall aim to develop and implement regional databases.

4 Regional coordination groups shall consist of experts appointed by Member States, including national correspondents, and the Commission.

5 Regional coordination groups shall draw up and agree on rules of procedures for their activities.

6 Regional coordination groups shall coordinate with each other and with the Commission, where issues affect several marine regions.

7 Representatives of relevant end-users of scientific data, including the appropriate scientific bodies as referred to in Article 26 of Regulation (EU) No 1380/2013, regional fisheries management organisations, Advisory Councils and third countries shall be invited to attend the meetings of the regional coordination groups as observers, where necessary.

8 Regional coordination groups may prepare draft regional work plans, which shall be compatible with this Regulation and with the multiannual Union programme. Those draft regional work plans may include procedures, methods, quality assurance and quality control for collecting and processing data as referred to in points (a) and (b) of paragraph 2 and in paragraph 5 of Article 5, regionally coordinated sampling strategies and conditions for delivery of data in regional databases. They may also contain cost-sharing arrangements for participation in research surveys at sea.

9 Where a draft regional work plan is prepared, the Member States concerned shall submit it to the Commission by 31 October of the year preceding the year from which the regional work plan is to apply, unless an existing plan still applies, in which case the Member States concerned shall notify the Commission thereof. The Commission may approve a draft regional work plan by means of an implementing act. Such implementing act shall be adopted in accordance with the examination procedure referred to in Article 25(2). For that purpose, the Commission shall take into account, where relevant, the evaluation of STECF as referred to in Article 10. If such evaluation indicates that a draft regional work plan does not comply with this Article or does not ensure the scientific relevance of the data or sufficient quality of the proposed methods and procedures, the Commission shall immediately inform the Member States concerned and indicate amendments to that draft work plan that the Commission considers necessary. Subsequently, the Member States concerned shall submit a revised draft regional work plan to the Commission.

10 A regional work plan shall be considered to replace or supplement the relevant parts of the national work plans of each of the Member States concerned.

11 The Commission may adopt implementing acts laying down rules on procedures, cost-sharing arrangements for participation in research surveys at sea, the area of marine region for the purpose of data collection, and format and timetables for the submission and approval of regional work plans, as referred to in paragraph 8 of this Article. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 25(2).

Article 10

Evaluation of work plans by STECF

STECF shall evaluate the national and draft regional work plans referred to in Articles 6 and 9. When doing so it shall take into account:

- (a) the conformity of the work plans and any amendments thereto with Articles 6 and 9; and
- (b) the scientific relevance of the data covered by the work plans for the purposes laid down in Article 1(1) and the quality of the proposed methods and procedures.

Article 11

Evaluation and approval of the outcomes of the national work plans

1 Member States shall on an annual basis submit to the Commission a report on the implementation of their national work plans. The Commission may adopt implementing acts laying down rules on procedures, format and timetables for the submission and approval of annual reports. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 25(2).

2 In accordance with Article 10, STECF shall evaluate:

- a the execution of the national work plans; and
- b the quality of the data collected by the Member States.

3 The Commission shall assess the implementation of the national work plans on the basis of:

- a the evaluation by STECF; and

- b the consultation of appropriate regional fisheries management organisations to which the Union is contracting party or observer and relevant international scientific bodies.

SECTION 3

Requirements for the data collection process

Article 12

Access to the sampling sites

1 Member States shall ensure that, in order to carry out their duties, data collectors designated by the body in charge of the implementation of the national work plan have access to all catches, vessels and other sampling sites, business registers and any necessary data.

2 The masters of Union fishing vessels shall accept on board scientific observers and cooperate with them in order to allow them to discharge their duties while on board Union fishing vessels, as well as the use of alternative data collection methods, where appropriate, set out in national work plans, without prejudice to international obligations.

3 The masters of Union fishing vessels may refuse to accept on board the scientific observers operating under the at-sea monitoring scheme only on the basis of an obvious lack of space on the vessel or for safety reasons in accordance with national law. In such cases, data shall be collected through alternative data collection methods which are set out in the national work plan and designed and controlled by the body in charge of the implementation of the national work plan.

SECTION 4

Data management process

Article 13

Data storage

Member States shall:

- (a) ensure that primary data collected under national work plans are safely stored in computerised databases and take all necessary measures to ensure that they are treated as confidential;
- (b) ensure that metadata relating to the primary socioeconomic data collected under national work plans are safely stored in computerised databases;
- (c) take all necessary technical measures to protect such data against any accidental or illicit destruction, accidental loss, deterioration, or unauthorised consultation or distribution.

Article 14

Data quality control and validation

- 1 Member States shall be responsible for the quality and completeness of the primary data collected under national work plans, and for the detailed and aggregated data derived therefrom which are transmitted to end-users of scientific data.
- 2 Member States shall ensure that:
 - a primary data collected under national work plans are properly checked for errors by appropriate quality control procedures;
 - b detailed and aggregated data derived from primary data collected under national work plans are validated before their transmission to end-users of scientific data;
 - c the quality assurance procedures applied to the primary, detailed and aggregated data referred to in points (a) and (b) are developed in accordance with the procedures adopted by the international scientific bodies, regional fisheries management organisations, STECF and regional coordination groups.

CHAPTER III

USE OF DATA

Article 15

Access to and transmission of primary data

- 1 For the purpose of the verification of the existence of the primary data collected in accordance with Article 6(1), other than socioeconomic data, Member States shall ensure that the Commission has access to the national computerised databases referred to in point (a) of Article 13.
- 2 For the purpose of the verification of the socioeconomic data collected in accordance with Article 6(1), Member States shall ensure that the Commission has access to the national computerised databases referred to in point (b) of Article 13.
- 3 Member States shall conclude agreements with the Commission to ensure effective and unhindered access for the Commission to their national computerised databases referred to in paragraphs 1 and 2, without prejudice to the obligations established by other Union rules.
- 4 Member States shall ensure that the primary data collected under the research surveys at sea are transmitted to international scientific organisations and appropriate scientific bodies within regional fisheries management organisations in accordance with the international obligations of the Union and the Member States.

Article 16

Processing of primary data

- 1 Member States shall process the primary data into sets of detailed or aggregated data in accordance with:

- a relevant international standards, where applicable;
- b protocols agreed at international or regional level, where applicable.

2 The Member State shall provide to the end-users of scientific data and the Commission, whenever necessary, a description of the methods applied to process the requested data and their statistical properties.

Article 17

Procedure for ensuring availability of detailed and aggregated data

1 Member States shall set up adequate processes and electronic technologies to ensure an effective application of Article 25 of Regulation (EU) No 1380/2013 and of this Regulation. They shall refrain from any unnecessary restrictions to the dissemination of detailed and aggregated data to end-users of scientific data and other interested parties.

2 Member States shall ensure appropriate safeguards, in case data include information relating to identified or identifiable natural persons or legal entities. A Member State may refuse to transmit the relevant detailed and aggregated data if there is a risk of natural persons or legal entities being identified, in which case the Member State concerned shall propose alternative means to meet the needs identified by the end-users of scientific data which ensure anonymity.

3 In the case of requests made by end-users of scientific data in order to serve as a basis for advice to fisheries management, Member States shall ensure that relevant detailed and aggregated data are updated and made available to the relevant end-users of scientific data within the deadlines set in the request, which shall not be shorter than 1 month from the date of receipt of a request for those data.

4 In the case of requests other than those referred to in paragraph 3, Member States shall ensure that the relevant data are updated and made available to the relevant end-users of scientific data and other interested parties within a reasonable period of time. Within 2 months from the date of receipt of the request, the Member States shall inform the requesting party of the duration of such time, which shall be proportionate to the scope of the request, and of the possible need of additional processing of the data requested.

5 In cases where the data request by other end-users of scientific data than those referred to in paragraph 3 or other interested parties requires additional processing of already collected data, Member States may charge the requesting party the actual costs of the additional processing of data needed before their transmission.

6 In duly justified cases, the Commission may authorise the extension of the deadline referred to in paragraph 3.

7 Where detailed data are requested for scientific publication, Member States may, in order to protect the professional interests of data collectors designated by the body in charge of the implementation of the national work plan, require that the publication of data be delayed by 3 years from the date to which the data refer. Member States shall inform the end-users of scientific data and the Commission of any such decision and of the reasons therefor.

Article 18

Compatible data storage and exchange systems

1 With a view to reducing costs and facilitating access to detailed and aggregated data for end-users of scientific data and other interested parties, Member States, the Commission, scientific advisory bodies and any relevant end-users of scientific data shall cooperate to develop compatible data storage and exchange systems, taking into account the provisions of Directive 2007/2/EC. Those systems shall also facilitate dissemination of information to other interested parties. Such systems may take the form of regional databases. Regional work plans referred to in Article 9(8) of this Regulation may serve as a basis for agreement on such systems.

2 The Commission shall be empowered to adopt implementing acts laying down rules on procedures, formats, codes and timetables to be used to ensure the compatibility of data storage and exchange systems, and to establish safeguards, where appropriate, in the event that the data storage and exchange systems referred to in paragraph 1 of this Article include information relating to identified or identifiable natural persons. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 25(2).

Article 19

Review of refusal to provide data

If a Member State refuses to provide data under Article 17(7), the end-user of scientific data may request the Commission to review the refusal. If the Commission finds that the refusal is not duly justified, it may require the Member State to supply the data to the end-user of scientific data within 1 month.

Article 20

Obligations for end-users of scientific data and other interested parties

- 1 The end-users of scientific data and other interested parties shall:
- a use the data only for the purpose stated in their information request in accordance with Article 17;
 - b duly acknowledge the data sources;
 - c be responsible for correct and appropriate use of the data with regard to scientific ethics;
 - d inform the Commission and the Member States concerned of any suspected problems with the data;
 - e provide the Member States concerned and the Commission with references to the results of the use of the data;
 - f not forward the requested data to third parties without consent from the Member State concerned;
 - g not sell the data to any third party.
- 2 The Member States shall inform the Commission of any non-compliance by the end-users of scientific data or other interested parties.

3 Where the end-users of scientific data or other interested parties fail to comply with any of the requirements set out in paragraph 1, the Commission may allow the Member State concerned to limit or refuse those data users' access to the data.

CHAPTER IV

SUPPORT FOR SCIENTIFIC ADVICE

Article 21

Participation in meetings of international bodies

Member States shall ensure that their national experts participate in relevant meetings of regional fisheries management organisations to which the Union is contracting party or observer and of international scientific bodies.

Article 22

International coordination and cooperation

1 Member States and the Commission shall coordinate their efforts and cooperate in order to further improve the quality, timeliness and coverage of data enabling further improvement of the reliability of scientific advice, the quality of the work plans and the working methods of the regional fisheries management organisations to which the Union is contracting party or observer and of international scientific bodies.

2 Such coordination and cooperation shall take place without prejudice to open scientific debate and shall aim to promote impartial scientific advice.

CHAPTER V

FINAL PROVISIONS

Article 23

Monitoring

1 The Commission, in association with STECF, shall monitor the progress of the work plans in the Committee for fisheries and aquaculture referred to in Article 25.

2 By 11 July 2020, the Commission shall submit to the European Parliament and to the Council a report on the implementation and functioning of this Regulation.

Article 24

Exercise of the delegation

1 The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2 The power to adopt delegated acts referred to in Article 4(1) shall be conferred on the Commission for a period of 3 years from 10 July 2017. The Commission shall draw up a report in respect of the delegation of power not later than 9 months before the end of the 3-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than 3 months before the end of each period.

3 The delegation of power referred to in Article 4(1) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the powers specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

4 Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.

5 As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

6 A delegated act adopted pursuant to Article 4(1) shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of 2 months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by 2 months at the initiative of the European Parliament or of the Council.

Article 25

Committee procedure

1 When implementing this Regulation the Commission shall be assisted by the Committee for fisheries and aquaculture established by Article 47 of Regulation (EU) No 1380/2013. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.

2 Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

Article 26

Repeal and transitional provisions

1 Regulation (EC) No 199/2008 is repealed with effect from 10 July 2017.

2 Notwithstanding paragraph 1:

- a the repealed provisions shall remain applicable for national programmes approved before 10 July 2017;
- b the multiannual Union programme in force on 10 July 2017, as referred to in Article 3 of Regulation (EC) No 199/2008, shall remain applicable for the period of its duration or until a new multiannual Union programme has been adopted under this Regulation, whichever occurs first.

Status: This is the original version (as it was originally adopted).

3 References to the repealed Regulation shall be construed as references to this Regulation and shall be read in accordance with the correlation table set out in the Annex hereto.

Article 27

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Strasbourg, 17 May 2017.

For the European Parliament

The President

A. TAJANI

For the Council

The President

C. ABELA

Status: This is the original version (as it was originally adopted).

ANNEX
CORRELATION TABLE

Regulation (EC) No 199/2008	This Regulation
Article 1(1)	Article 1(1)
Article 1(2)	Article 1(1)
—	Article 1(2)
—	Article 1(3)
Article 1(3)	Article 2
Article 2(a), (c) to (h)	Article 3(1) to (7)
Article 2(b), (i), (j), (k)	—
—	Article 3(8) and (9)
Article 3	Articles 4 and 5
Article 4	Article 6
Article 5	Articles 8 and 9
—	Article 7
Article 6	Article 10
Article 7	Article 11
Article 8	—
Article 9	—
Article 10	Article 12(1)
Article 11	Article 12(2) and (3)
Article 12	Article 5(1)(b) and (5)
Article 13	Article 13
Article 14	Article 14
Article 15	—
Article 16	Article 15
Article 17	Article 16
Articles 18, 19 and 20	Article 17
Article 21	Article 19
Article 22	Article 20
Article 23	Article 21
Article 24	Article 22
Articles 25 and 27	Articles 24 and 25
Article 26	Article 23(1)

Status: This is the original version (as it was originally adopted).

—	Article 23(2)
Article 28	Article 26
Article 29	Article 27
Annex	Annex

- (1) [OJ C 13, 15.1.2016, p. 201.](#)
- (2) [OJ C 120, 5.4.2016, p. 40.](#)
- (3) Position of the European Parliament of 16 March 2017 (not yet published in the Official Journal) and decision of the Council of 25 April 2017.
- (4) Council Regulation (EC) No 199/2008 of 25 February 2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy ([OJ L 60, 5.3.2008, p. 1.](#))
- (5) Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC ([OJ L 354, 28.12.2013, p. 22.](#))
- (6) Regulation (EU) No 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund and repealing Council Regulations (EC) No 2328/2003, (EC) No 861/2006, (EC) No 1198/2006 and (EC) No 791/2007 and Regulation (EU) No 1255/2011 of the European Parliament and of the Council ([OJ L 149, 20.5.2014, p. 1.](#))
- (7) Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) ([OJ L 164, 25.6.2008, p. 19.](#))
- (8) Regulation (EC) No 1921/2006 of the European Parliament and of the Council of 18 December 2006 on the submission of statistical data on landings of fishery products in Member States and repealing Council Regulation (EEC) No 1382/91 ([OJ L 403, 30.12.2006, p. 1.](#))
- (9) Regulation (EC) No 295/2008 of the European Parliament and of the Council of 11 March 2008 concerning structural business statistics ([OJ L 97, 9.4.2008, p. 13.](#))
- (10) Regulation (EC) No 762/2008 of the European Parliament and of the Council of 9 July 2008 on the submission by Member States of statistics on aquaculture and repealing Council Regulation (EC) No 788/96 ([OJ L 218, 13.8.2008, p. 1.](#))
- (11) Regulation (EC) No 216/2009 of the European Parliament and of the Council of 11 March 2009 on the submission of nominal catch statistics by Member States fishing in certain areas other than those of the North Atlantic ([OJ L 87, 31.3.2009, p. 1.](#))
- (12) Regulation (EC) No 217/2009 of the European Parliament and of the Council of 11 March 2009 on the submission of catch and activity statistics by Member States fishing in the north-west Atlantic ([OJ L 87, 31.3.2009, p. 42.](#))
- (13) Regulation (EC) No 218/2009 of the European Parliament and of the Council of 11 March 2009 on the submission of nominal catch statistics by Member States fishing in the north-east Atlantic ([OJ L 87, 31.3.2009, p. 70.](#))
- (14) Regulation (EU) No 1236/2010 of the European Parliament and of the Council of 15 December 2010 laying down a scheme of control and enforcement applicable in the area covered by the Convention on future multilateral cooperation in the North-East Atlantic fisheries and repealing Council Regulation (EC) No 2791/1999 ([OJ L 348, 31.12.2010, p. 17.](#))
- (15) Regulation (EU) No 1343/2011 of the European Parliament and of the Council of 13 December 2011 on certain provisions for fishing in the GFCM (General Fisheries Commission for the Mediterranean) Agreement area and amending Council Regulation (EC) No 1967/2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea ([OJ L 347, 30.12.2011, p. 44.](#))
- (16) Regulation (EU) 2016/2336 of the European Parliament and of the Council of 14 December 2016 establishing specific conditions for fishing for deep-sea stocks in the north-east Atlantic and provisions for fishing in international waters of the north-east Atlantic and repealing Council Regulation (EC) No 2347/2002 ([OJ L 354, 23.12.2016, p. 1.](#))
- (17) Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy ([OJ L 327, 22.12.2000, p. 1.](#))
- (18) Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds ([OJ L 20, 26.1.2010, p. 7.](#))

- (19) Council Regulation (EC) No 2347/2002 of 16 December 2002 establishing specific access requirements and associated conditions applicable to fishing for deep-sea stocks ([OJ L 351, 28.12.2002, p. 6](#)).
- (20) Council Regulation (EC) No 812/2004 of 26 April 2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98 ([OJ L 150, 30.4.2004, p. 12](#)).
- (21) Council Regulation (EC) No 1967/2006 of 21 December 2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea, amending Regulation (EEC) No 2847/93 and repealing Regulation (EC) No 1626/94 ([OJ L 409, 30.12.2006, p. 11](#)).
- (22) Council Regulation (EC) No 1100/2007 of 18 September 2007 establishing measures for the recovery of the stock of European eel ([OJ L 248, 22.9.2007, p. 17](#)).
- (23) Council Regulation (EC) No 1006/2008 of 29 September 2008 concerning authorisations for fishing activities of Community fishing vessels outside Community waters and the access of third country vessels to Community waters, amending Regulations (EEC) No 2847/93 and (EC) No 1627/94 and repealing Regulation (EC) No 3317/94 ([OJ L 286, 29.10.2008, p. 33](#)).
- (24) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora ([OJ L 206, 22.7.1992, p. 7](#)).
- (25) Council Decision 2010/717/EU of 8 November 2010 on the approval, on behalf of the European Union, of the Amendment to the Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries ([OJ L 321, 7.12.2010, p. 1](#)).
- (26) Commission Implementing Regulation (EU) 2017/218 of 6 February 2017 on the Union fishing fleet register ([OJ L 34, 9.2.2017, p. 9](#)).
- (27) Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Union control system for ensuring compliance with the rules of the common fisheries policy, amending Regulations (EC) No 847/96, (EC) No 2371/2002, (EC) No 811/2004, (EC) No 768/2005, (EC) No 2115/2005, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007, (EC) No 676/2007, (EC) No 1098/2007, (EC) No 1300/2008, (EC) No 1342/2008 and repealing Regulations (EEC) No 2847/93, (EC) No 1627/94 and (EC) No 1966/2006 ([OJ L 343, 22.12.2009, p. 1](#)).
- (28) Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics and repealing Regulation (EC, Euratom) No 1101/2008 of the European Parliament and of the Council on the transmission of data subject to statistical confidentiality to the Statistical Office of the European Communities, Council Regulation (EC) No 322/97 on Community Statistics, and Council Decision 89/382/EEC, Euratom establishing a Committee on the Statistical Programmes of the European Communities ([OJ L 87, 31.3.2009, p. 164](#)).
- (29) Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC ([OJ L 41, 14.2.2003, p. 26](#)).
- (30) Regulation (EC) No 1367/2006 of the European Parliament and of the Council of 6 September 2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies ([OJ L 264, 25.9.2006, p. 13](#)).
- (31) Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data ([OJ L 281, 23.11.1995, p. 31](#)).
- (32) Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data ([OJ L 8, 12.1.2001, p. 1](#)).
- (33) Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) ([OJ L 108, 25.4.2007, p. 1](#)).
- (34) [OJ L 123, 12.5.2016, p. 1](#).
- (35) Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers ([OJ L 55, 28.2.2011, p. 13](#)).