II

(Non-legislative acts)

DECISIONS

COMMISSION DECISION

of 20 September 2013

establishing, pursuant to Directive 2000/60/EC of the European Parliament and of the Council, the values of the Member State monitoring system classifications as a result of the intercalibration exercise and repealing Decision 2008/915/EC

(notified under document C(2013) 5915)

(Text with EEA relevance)

(2013/480/EU)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to 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 [1], and in particular Section 1.4.1(ix) of Annex V thereof,

Whereas:

(1) Article 4(1)(a)(ii) of Directive 2000/60/EC requires the Member States to protect, enhance and restore all bodies of surface water with the aim of achieving good surface water status at the latest 15 years after the date of entry into force of the Directive, subject to certain derogations in accordance with the provisions laid down in Annex V thereto. Article 4(1)(a)(iii) of Directive 2000/60/EC requires the Member States to protect and enhance all artificial and heavily modified bodies of water, with the aim of achieving good ecological potential and good surface water chemical status at the latest 15 years from the date of entry into force of the Directive, subject to certain derogations, in accordance with the provisions laid down in Annex V thereto. In accordance with Section 1.4.1(i) of Annex V to Directive 2000/60/EC the references to ecological status should be construed as references to ecological potential as regards artificial and heavily modified water bodies.

(2) The intercalibration exercise envisages a harmonised approach to define one of the main environmental objectives of Directive 2000/60/EC, namely good ecological status.

(3) Section 1.4.1 of Annex V to Directive 2000/60/EC provides a process to ensure the comparability between the biological monitoring results of Member States as a central part of the ecological status classification. This requires the Member States' biological monitoring results and their monitoring system classifications to be compared through an intercalibration network comprised of monitoring sites in each Member State and in each ecoregion of the Union. Directive 2000/60/EC requires the Member States to collect, as appropriate, the necessary information for the sites included in the intercalibration network, in order to enable the assessment of the consistency of the national monitoring system classifications with the normative definitions of Section 1.2 of Annex V to Directive 2000/60/EC and the comparability of the results of monitoring system classifications between the Member States.

(4) In order to carry out the intercalibration exercise Member States are organised in Geographical Intercalibration Groups, consisting of Member States sharing particular surface water body types, as defined in Section 2 of the Annex to Commission Decision 2005/646/EC of 17 August 2005 on the establishment of a register of sites to form the intercalibration network in accordance with Directive 2000/60/EC of the European Parliament and of the Council [2].

[1] OJ L 327, 22.12.2000, p. 1.

[2] OJ L 243, 19.9.2005, p. 1.

(5) Section 1.4.1 of Annex V to Directive 2000/60/EC specifies that the intercalibration exercise is to be carried out at biological element level, comparing the classification results of the national monitoring system for each biological element and for each common surface water body type among Member States in the same Geographical Intercalibration Group, and assessing the consistency of the results with the normative definitions set out in Section 1.2 of Annex V to Directive 2000/60/EC.

(6) The Commission has facilitated two phases of the intercalibration exercise through the Institute of Environment and Sustainability of the Joint Research Centre.

(7) Under the Water Framework Directive Common Implementation Strategy three Guidance Documents (No 6 [1] and 14 (two versions) [2]) were prepared to facilitate the intercalibration process. They provided an overview of the key principles of the intercalibration process and the options for carrying out the exercise including timescales and reporting requirements.

(8) By 2007 the Commission had received intercalibration results for a number of biological quality elements. They were included in Commission Decision 2008/915/EC of 30 October 2008 establishing, pursuant to Directive 2000/60/EC of the European Parliament and of the Council, the values of the Member State monitoring system classifications as a result of the intercalibration exercise [3], which sets out the values of the boundaries between classes that Member States should use in their national monitoring system classifications. The results of the first phase of the intercalibration exercise were incomplete, in so far as not all biological quality elements were covered. It was necessary however to adopt the available results of the intercalibration exercise to inform the development of the first river basin management plans and programmes of measures in accordance with Articles 11 and 13 of Directive 2000/60/EC.

(9) The results of this first phase of the intercalibration exercise were adopted in Decision 2008/915/EC. Those results were included on a provisional basis with an understanding that further results would be subject to a new Decision when the relevant information in accordance with Section 1.4.1 of Annex V to Directive 2000/60/EC would have been provided by the Member States.

(10) In order to close the gaps and improve the comparability of the intercalibration results in time for the second river basin management plans due in 2015, the Commission initiated a second phase of the intercalibration exercise.

(11) Annex I to this Decision sets out the results of the intercalibration exercise for which intercalibration is successfully achieved, within the limits of what is technically feasible at this point in time.

(12) Annex II to this Decision sets out the results of the intercalibration exercise for which intercalibration is partially achieved. The completion of all the necessary steps in the intercalibration exercise should be carried out in order for the results to be included in a new Decision. Accordingly, those results are provisional.

(13) Member States should complete the intercalibration exercise by 22 December 2016 to allow the Commission to move the results contained in Annexes I and II of this Decision to a sole Annex of a new Decision. This will allow for these results to be used in the third river basin planning cycle.

(14) The completion of all the necessary steps in the intercalibration exercise should also be carried out by 22 December 2016 for those Geographical Intercalibration Groups and biological quality elements where there are as yet no intercalibration results for inclusion in this Decision. This will also allow for these results to be included in a new Decision and to be used in the third river basin planning cycle.

(15) While Directive 2000/60/EC requires that intercalibration is to be carried out at biological quality element level, single parameters (e.g. chlorophyll –a concentration, or depth limits of macroalgae and angiosperms) are in some cases considered to be representative for a full biological quality element. In such cases, the results of the intercalibration exercise are set out in Annex I.

(16) There are cases where Member States have developed independent methods covering only a part of a biological quality element (e.g. independent method for macrophytes and phytobenthos for the quality element 'macrophytes and phytobenthos'). In cases where intercalibration for such sub- biological quality elements has been successfully completed the results of the intercalibration exercise are included in the Annexes and identified as a sub biological quality element.

[1] Common implementation strategy for the Water Framework Directive (2000/60/EC), Guidance Document No 6, Towards a Guidance on Establishment of the Intercalibration Network and the Process on the Intercalibration Exercise, European Communities, 2003. ISBN 92-894-5126-2

[2] Common implementation strategy for the Water Framework Directive (2000/60/EC), Guidance document No 14. Guidance document on the Intercalibration Process 2004-2006, ISBN 92-894-9471-9
Common implementation strategy for the Water Framework Directive (2000/60/EC), Guidance document No 14. Guidance document on the Intercalibration Process 2008-2011 ISBN: 978-92-79-18997-5

[3] OJ L 332, 10.12.2008, p. 20.

(17) The results of the intercalibration exercise should refer to the ecological status of water bodies. If water bodies corresponding to the intercalibrated types are designated as heavily modified water bodies in accordance with Article 4(3) of Directive 2000/60/EC, the results presented in Annex I and II to this Decision could be used to derive their good ecological potential, taking into account their physical modifications and their associated water use in accordance with the normative definitions in Section 1.2.5 of Annex V to Directive 2000/60/EC.

(18) Member States should apply the results of the intercalibration exercise to their national classification systems in order to set the boundaries between high and good status and between good and moderate status for all their national types.

(19) The information that is made available through the establishment of the monitoring programmes provided for in Article 8 of Directive 2000/60/EC and the review and update of the characteristics of river basin districts provided for in Article 5 of Directive 2000/60/EC could bring new evidence that may lead to the adaptation to scientific and technical progress of the Member States' monitoring and classification systems and eventually to a review of the results of the intercalibration exercise in order to improve their quality.

(20) Decision 2008/915/EC should therefore be repealed and replaced accordingly.

(21) The measures provided for in this Decision are in accordance with the opinion of the Committee referred to in Article 21(1) of Directive 2000/60/EC,

HAS ADOPTED THIS DECISION:

Article 1

1. For the purposes of section 1.4.1(iii) of Annex V to Directive 2000/60/EC, Member States shall use in their monitoring systems classification the values of the boundaries between classes that are set out in Annex I and II to this Decision.

2. Member States shall complete all the necessary steps in the intercalibration exercise for the results included in Annex II to this Decision by 22 December 2016.

Article 2

Decision 2008/915/EC is repealed.

Article 3

This Decision is addressed to the Member States.

Done at Brussels, 20 September 2013.

For the Commission

Janez POTOČNIK

Member of the Commission

ANNEX I

WATER CATEGORY: Rivers

GEOGRAPHICAL INTERCALIBRATION GROUP: Alpine

Description of common intercalibration types

Type	River characterisation	Catchment (km^2)	Altitude and geomorphology	Alkalinity	Flow regime
R-A1	Pre-Alpine, small to medium, high altitude calcareous	10-1 000	800-2 500 m (catchment), boulders/cobble	high (but not extremely high) alkalinity	
R-A2	Small to medium, high altitude, siliceous	10-1 000	500-1 000 m (max. altitude of catchment 3 000 m, mean 1 500 m), boulders	Non-calcareous (granite, metamorphic). medium to low alkalinity	nival-glacial flow regime

Countries sharing the types that have been intercalibrated:

Type R-A1: Germany, Austria, France, Italy, Slovenia

Type R-A2: Austria, France, Italy, Spain

ALPINE RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrate fauna

Ecological quality ratios of the national classification systems intercalibrated

Type and country	National classification systems intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Type R-A1			
Austria	Assessment of the biological quality elements - part benthic invertebrates [Erhebung der biologischen Qualitätselemente - Teil Makrozoobenthos (Detaillierte MZB-Methode)]	0,80	0,60
France	Classification française DCE Indice Biologique Global Normalisé (IBGN). AFNOR NF-T-90-350 and arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,93	0,79
Germany	PERLODES – Bewertungsverfahren von Fließgewässern auf Basis des Makrozoobenthos	0,80	0,60
Italy	MacrOper, based on STAR Intercalibration Common Metric Index (STAR_ICMi)	0,97	0,73
Slovenia	Metodologija vrednotenja ekološkega stanja rek z bentoškimi nevretenčarji v Sloveniji (Ecological status assessment system for rivers using benthic invertebrates in Slovenia)	0,80	0,60
Type R-A2			
Austria	Assessment of the biological quality elements - part benthic invertebrates [Erhebung der biologischen Qualitätselemente - Teil Makrozoobenthos (Detaillierte MZB-Methode)]	0,80	0,60

Type and country	National classification systems intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
France (Alps)	Classification française DCE Indice Biologique Global Normalisé (IBGN). AFNOR NF-T-90-350 and arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,93	0,71
France (Pyrenees)	Classification française DCE Indice Biologique Global Normalisé (IBGN). AFNOR NF-T-90-350 and arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,94	0,81
Italy	MacrOper, based on STAR Intercalibration Common Metric Index (STAR_ICMi)	0,95	0,71
Spain	Iberian BMWP (IBMWP)	0,83	0,53

ALPINE RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Phytobenthos

Ecological quality ratios of the national classification systems intercalibrated

Type and country	National classification systems intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Type R-A1			
Austria	Assessment of the biological quality elements - part phytobenthos [Leitfaden zur Erhebung der biologischen Qualitätselemente, Teil A3 - Fließgewässer/ Phytobenthos]	0,88	0,56
France	IBD 2007 (Coste et al, Ecol. Ind. 2009). AFNOR NF-T-90-354, December 2007. Arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,94	0,78
Germany	Verfahrensanleitung für die ökologische Bewertung von Fließgewässern zur Umsetzung der EG-Wasserrahmenrichtlinie: Makrophyten und Phytobenthos (Phylib), Modul Diatomeen	0,735	0,54
Italy	ICMi (Intercalibration Common Metric) Index (Mancini & Sollazzo, 2009, Phytobenthos Intercalibration Common Metric (pICM: Kelly et al., 2009)	0,87	0,70
Slovenia	Metodologija vrednotenja ekološkega stanja rek s fitobentosom in makrofiti v Sloveniji; fitobentos (Ecological status assessment system for rivers using phytobenthos and macrophytes in Slovenia; Phytobenthos)	0,80	0,60

Type and country	National classification systems intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Type R-A2			
Austria	Assessment of the biological quality elements - part phytobenthos [Leitfaden zur Erhebung der biologischen Qualitätselemente, Teil A3 - Fließgewässer/ Phytobenthos]	0,88	0,56
France	IBD 2007 (Coste et al, Ecol. Ind. 2009). AFNOR NF-T-90-354, December 2007. Arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,94	0,78
Spain	IPS (Coste in Cemagref, 1982)	0,94	0,74
Italy	ICMi (Intercalibration Common Metric) Index (Mancini & Sollazzo, 2009, Phytobenthos Intercalibration Common Metric (pICM: Kelly et al., 2009)	0,85	0,64

ALPINE RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Macrophytes

NOT APPLICABLE

WATER CATEGORY: Rivers

GEOGRAPHICAL INTERCALIBRATION GROUP: Central/Baltic

Description of common intercalibration types

Type	River characterisation	Catchment (km^2)	Altitude & geomorphology	Alkalinity (meq/l)
R-C1	Small lowland siliceous sand	10-100	lowland, dominated by sandy substrate (small particle size), 3-8 m width (bankfull size)	> 0,4
R-C2	Small lowland siliceous - rock	10-100	lowland, rock material 3-8 m width (bankfull size)	< 0,4
R-C3	Small mid-altitude siliceous	10-100	mid-altitude, rock (granite) - gravel substrate, 2-10 m width (bankfull size)	< 0,4
R-C4	Medium lowland mixed	100-1 000	lowland, sandy to gravel substrate, 8-25 m width (bankfull size)	> 0,4
R-C5	Large lowland mixed	1 000-10 000	lowland, barbel zone, variation in velocity, max. altitude in catchment: 800 m, > 25 m width (bankfull size)	> 0,4
R-C6	Small, lowland, calcareous	10-300	lowland, gravel substrate (limestone), width 3-10 m (bankfull size)	> 2

Countries sharing the types that have been intercalibrated:

Type R-C1: Belgium (Flanders), Belgium (Wallonia), Germany, Denmark, France, Italy, Lithuania, the Netherlands, Poland, Sweden, United Kingdom

Type R-C2: Spain, France, Ireland, Portugal, Sweden, United Kingdom

Type R-C3: Austria, Belgium (Wallonia), Czech Republic, Germany, Poland, Portugal, Spain, Sweden, France, Latvia, Luxembourg, United Kingdom

Type R-C4: Belgium (Flanders), Belgium (Wallonia), Czech Republic, Germany, Denmark, Estonia, Spain, France, Ireland, Italy, Lithuania, Luxembourg, the Netherlands, Poland, Sweden, United Kingdom

Type R-C5: Belgium (Wallonia), Czech Republic, Estonia, France, Germany, Spain, Ireland. Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Sweden, United Kingdom

Type R-C6: Belgium (Wallonia), Denmark, Estonia, Spain, France, Ireland, Italy, Poland, Lithuania, Luxembourg, Sweden, United Kingdom

CENTRAL-BALTIC RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrate fauna

Ecological quality ratios of the national classification system intercalibrated

The following results apply to all types as described above.

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Austria	Assessment of the biological quality elements - part benthic invertebrates	0,80	0,60
Belgium (Flanders)	Multimetric Macroinvertebrate Index Flanders (MMIF)	0,90	0,70
Belgium (Wallonia)	Indice Biologique Global Normalisé (IBGN) (Norme AFNOR NF T 90 350, 1992) and Arrêté du Gouvernement wallon du 13 septembre 2012 relatif à l'identification, à la caractérisation et à la fixation des seuils d'état écologique applicables aux masses d'eau de surface et modifiant le Livre II du Code de l'Environnement, contenant le Code de l'Eau. Moniteur belge 12.10.2012	0,97 (types R-C3,, R-C5, R-C6) 0,94 (type R-C1)	0,74 (types R-C3,, R-C5, R-C6) 0,75 (type R-C1)
Czech Republic	Czech system for ecological status assessment of rivers using benthic macroinvertebrates	0,80	0,60
Denmark	Danish Stream Fauna Index (DSFI)	1,00	0,71
Estonia	Estonian surface water ecological quality assessment – river macroinvertebrates	0,90	0,70
Germany	PERLODES – Bewertungsverfahren von Fließgewässern auf Basis des Makrozoobenthos	0,80	0,60
France	Classification française DCE Indice Biologique Global Normalisé (IBGN). AFNOR NF-T-90-350 and arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,94	0,80
Ireland	Quality Rating System (Q-value)	0,85	0,75
Italy	MacrOper, based on STAR_ICM index calculation	0,96	0,72
Luxembourg	Classification luxembourgeoise DCE Indice Biologique Global Normalisé (IBGN) 1992, AFNOR NF-T-90-350 et circulaire DCE 2007/22 MEDD/DE/MAGE/BEMA 07/n° 4 du 11 avril 2007	0,96	0,72

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Netherlands	KRW-maatlat	0,80	0,60
Poland	$RIVECO_{macro}$ for ecological status assessment of rivers using benthic macroinvertebrates (Multimetric Macroinvertebrate Index, based on STAR_ICM)	0,91(type RC1)	0,72 (type RC1)
Spain	METI	0,93	0,70
Sweden	DJ-index (Dahl & Johnson 2004)	0,80	0,60
United Kingdom	River Invertebrate Classification Tool (RICT)- WHPT	0,97	0,86

CENTRAL-BALTIC RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Macrophytes

Ecological quality ratios of the national classification system intercalibrated

Country	National classification system intercalibrated	Type	Ecological Quality Ratios	
			High-Good boundary	Good-Moderate boundary
Austria	AIM for Rivers (Austrian Index Macrophytes for rivers)	RC-3	0,875	0,625
Belgium (Flanders)	MAFWAT - Flemish macrophyte assessment system	R-C1	0,80	0,60
Belgium (Wallonia)	IBMR-WL - Biological Macrophyte Index for Rivers (Arrêté du Gouvernement wallon du 13 septembre 2012 relatif à l'identification, à la caractérisation et à la fixation des seuils d'état écologique applicables aux masses d'eau de surface et modifiant le Livre II du Code de l'Environnement, contenant le Code de l'Eau. Moniteur belge 12.10.2012)	R-C3	0,925	0,607
Denmark	DSPI - Danish Stream Plant Index	R-C1	0,70	0,50
		R-C4	0,70	0,50
Germany	Verfahrensanleitung für die ökologische Bewertung von Fließgewässern zur Umsetzung der EG-Wasserrahmenrichtlinie: Makrophyten und Phytobenthos (Phylib), Modul Makrophyten	R-C1	0,745	0,495
		R-C3	0,80	0,55
		R-C4	0,575	0,395
France	French standard NF T90-395 (2003-10-01). Qualité de l'eau - Détermination de l'indice biologique macrophytique en rivière (IBMR)	R-C3	0,93	0,79
		R-C4	0,905	0,79
Ireland	MTR – IE - Mean Trophic Ranking	R-C4	0,74	0,62

Country	National classification system intercalibrated	Type	Ecological Quality Ratios	
			High-Good boundary	Good-Moderate boundary
Italy	IBMR – IT - Biological Macrophyte Index for Rivers	R-C1	0,90	0,80
		R-C4	0,90	0,80
Luxembourg	IBMR – LU - Biological Macrophyte Index for Rivers	R-C3	0,89	0,79
		R-C4	0,89	0,79
Poland	MIR - Macrophyte Index for Rivers	R-C1	0,90	0,65
		R-C3	0,91	0,684
		R-C4	0,90	0,65
United Kingdom	LEAFPACS - Ecological Classification of Rivers using Macrophytes	R-C1	0,80	0,60
		R-C3	0,80	0,60
		R-C4	0,80	0,60

CENTRAL-BALTIC RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Phytobenthos

Ecological quality ratios of the national classification system intercalibrated

Country	National classification system intercalibrated	Type	Ecological Quality Ratios	
			High-Good boundary	Good-Moderate boundary
Austria	Assessment of the biological quality elements - part Phytobenthos [Leitfaden zur Erhebung der biologischen Qualitätselemente, Teil A3 -Fließgewässer/Phytobenthos]	All types, altitude < 500 m	0,70	0,42
		All types, altitude > 500 m	0,71	0,43
Belgium (Flanders)	Proportions of Impact-Sensitive and Impact-Associated Diatoms (PISIAD)	All types	0,80	0,60
Belgium (Wallonia)	IPS (Coste, in CEMAGREF, 1982; Lenoir & Coste, 1996 and Arrêté du Gouvernement wallon du 13 septembre 2012 relatif à l'identification, à la caractérisation et à la fixation des seuils d'état écologique applicables aux masses d'eau de surface et modifiant le Livre II du Code de l'Environnement, contenant le Code de l'Eau. Moniteur belge 12.10.2012)	All types	0,98	0,73
Estonia	Indice de Polluosensibilité Spécifique (IPS)	All types	0,85	0,70
France	IBD 2007 (Coste et al, Ecol. Ind. 2009). AFNOR NF-T-90-354, December 2007. Arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	All types	0,94	0,78

Country	National classification system intercalibrated	Type	Ecological Quality Ratios	
			High-Good boundary	Good-Moderate boundary
Germany	Verfahrensanleitung für die ökologische Bewertung von Fließgewässern zur Umsetzung der EG-Wasserrahmenrichtlinie: Makrophyten und Phytobenthos (Phylib), Modul Diatomeen	R-C1	0,67	0,43
		R-C3	0,67	0,43
		R-C4	0,61	0,43
		R-C5	0,73	0,55
Ireland	Revised form of Trophic Diatom Index (TDI)	All types	0,93	0,78
Italy	ICMi (Intercalibration Common Metric) Index (Mancini & Sollazzo, 2009, Phytobenthos Intercalibration Common Metric (pICM: Kelly et al., 2009)	All types	0,84	0,65
Luxembourg	Indice de Polluosensibilité Spécifique (IPS)	All types	0,90	0,70
Netherlands	KRW Maatlat	All types	0,80	0,60
Poland	Indeks Okrzemkowy IO dla rzek (Diatom Index for rivers)	All types	0,80	0,58
Spain	Diatom multimetric (MDIAT)	R-C2, R-C3, R-C4	0,93	0,70
Sweden	Swedish assessment methods, Swedish EPA regulations (NFS 2008:1) based on Indice de Polluosensibilité Spécifique (IPS)	All types	0,89	0,74
United Kingdom	Diatom Assessment for River Ecological Status (DARLEQ2)	All types	1,00	0,75

WATER CATEGORY: Rivers

GEOGRAPHICAL INTERCALIBRATION GROUP: Eastern Continental

Description of common intercalibration types

Type	River characterisation	Ecoregion	Catchment (km^2)	Altitude (m)	Geology	Substrate
R-E1a	Carpathians: small to medium, mid-altitude	10	10 – 1 000	500 – 800	mixed	
R-E1b	Carpathians: small to medium, mid-altitude	10	10 – 1 000	200 – 500	mixed	
R-E2	Plains: medium-sized, lowland	11 and 12	100 – 1 000	< 200	mixed	sand and silt
R-E3	Plains: large, lowland	11 and 12	> 1 000	< 200	mixed	sand, silt and gravel
R-E4	Plains: medium-sized, mid-altitude	11 and 12	100 – 1 000	200 – 500	mixed	sand and gravel
R-EX4	Large, mid-altitude	10, 11 and 12	> 1 000	200 – 500	mixed	gravel and boulder
R-EX5	Plains: small lowland	11 and 12	10 – 100	< 200	mixed	sand and silt

Type	River characterisation	Ecoregion	Catchment (km^2)	Altitude (m)	Geology	Substrate
R-EX6	Plains: small, mid-altitude	11 and 12	10 - 100	200 - 500	mixed	gravel
R-EX7	Balkan: small, calcareous, mid-altitude	5	10-100	200-500	calcareous	gravel
R-EX8	Balkan: small to medium-sized, calcareous karst spring	5	10-1 000		calcareous	gravel, sand and silt

Countries sharing the types that have been intercalibrated:

Type R-E1a: Bulgaria, Czech Republic, Romania, Slovakia

Type R-E1b: Bulgaria, Czech Republic, Hungary, Romania, Slovakia

Type R-E2: Bulgaria, Czech Republic, Hungary, Romania, Slovakia

Type R-E3: Bulgaria, Czech Republic, Hungary, Romania, Slovakia

Type R-E4: Austria, Bulgaria, Hungary, Romania, Slovakia, Slovenia

Type R-EX4: Czech Republic, Romania, Slovakia

Type R-EX5: Bulgaria, Hungary, Romania, Slovenia, Slovakia

Type R-EX6: Bulgaria, Hungary, Romania, Slovenia

Type R-EX7: Slovenia

Type R-EX8: Bulgaria, Slovenia

EASTERN CONTINENTAL RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrate fauna

Ecological quality ratios of the national classification systems intercalibrated

Country	National classification system intercalibrated	Type	Ecological Quality Ratios	
			High-Good boundary	Good-Moderate boundary
Austria	Assessment of the biological quality elements - part benthic invertebrates	R-E4	0,80	0,60
Bulgaria	Irish biotic index	R-E1a, R-E1b	0,86	0,67
Czech Republic	Czech system for ecological status assessment of rivers using benthic macroinvertebrates	R-E1a, R-E1b, R-E2, R-E3	0,80	0,60
Hungary	Hungarian Multimetric Macroinvertebrate Index	R-E1b, R-E3, R-E4, R-EX5, R-EX6	0,80	0,60
Romania	Assessment method for ecological status of water bodies based on macroinvertebrates	R-E1a, R-E1b, R-E3, R-EX4	0,74	0,58
Slovenia	Metodologija vrednotenja ekološkega stanja rek z bentoškimi nevretenčarji v Sloveniji	R-E4, R-EX5, R-EX6	0,80	0,60
Slovakia	Slovak assessment of benthic invertebrates in rivers	R-E1a, R-E1b, R-E2, R-E3, R-E4, R-EX4	0,80	0,60

EASTERN CONTINENTAL RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Macrophytes

Ecological quality ratios of the national classification systems intercalibrated

Country	National classification system intercalibrated	Type	Ecological Quality Ratios	
			High-Good boundary	Good-Moderate boundary
Austria	AIM for Rivers (Austrian Index Macrophytes for rivers)	R-E4	0,875	0,625
Bulgaria	Reference Index	R-E2, R-E3	0,570	0,370
Bulgaria	Reference Index	R-E4	0,510	0,270
Hungary	Reference Index	R-E2, R-E3	0,700	0,370
Slovenia	River Macrophyte Index	R-E2, R-E3, R-E4	0,800	0,600
Slovakia	Biological Macrophyte Index for Rivers	R-E2, R-E3, R-E4	0,800	0,600

EASTERN CONTINENTAL RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Phytobenthos

Ecological quality ratios of the national classification systems intercalibrated

Country	National classification system intercalibrated	Type	Ecological Quality Ratios	
			High-Good boundary	Good-Moderate boundary
Austria	Assessment of the biological quality elements - part phytobenthos	R-E4	0,70	0,42
Bulgaria	Ecological status assessment of rivers in Bulgaria based on IPS diatom index	R-E1a, R-E1b, R-E3	0,87 (national type R2, R4) 0,85 (national type R7, R8)	0,66 (national type R2, R4) 0,64 (national type R7, R8)
Czech Republic	Assessment system for rivers using phyto-benthos	R-E1a, R-E1b, R-E2, R-E3, R-EX4	0,80	0,60
Hungary	Ecological status assessment for rivers based on diatoms	R-E2, R-E3, R-EX5	0,80	0,60
Slovenia	Metodologija vrednotenja ekološkega stanja rek s fitobentosom in makrofiti v Sloveniji; fitobentos (Ecological status assessment system for rivers using phytobenthos and macrophytes in Slovenia; Phytobenthos)	R-E4, R-EX5, R-EX6, R-EX7, R-EX8	0,80	0,60
Slovakia	Ecological status assessment system for rivers using phytobenthos	R-E1a, R-E1b, R-E2, R-E3, R-E4, R-EX4	0,90	0,70

WATER CATEGORY: Rivers

GEOGRAPHICAL INTERCALIBRATION GROUP: Mediterranean

Description of common intercalibration types

Type	River characterisation	Catchment (km^2)	Geology	Flow regime
R-M1	Small mediterranean streams	< 100	Mixed (except silicious)	Highly seasonal
R-M2	Medium mediterranean streams	100-1 000	Mixed (except silicious)	Highly seasonal
R-M4	Mediterranean mountain streams		Non-silicious	Highly seasonal
R-M5	Temporaty streams			Temporary

Countries sharing the types that have been intercalibrated:

Type R-M1: France, Greece, Italy, Portugal, Slovenia, Spain

Type R-M2: France, Greece, Italy, Portugal, Slovenia, Spain

Type R-M4: Cyprus, France, Greece, Italy, Spain

Type R-M5: Cyprus, Italy, Portugal, Slovenia, Spain

MEDITERRANEAN RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrate fauna

Results: Ecological quality ratios of the national classification systems intercalibrated

Type and country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
R-M1			
France	Classification française DCE Indice Biologique Global Normalisé (IBGN). AFNOR NF-T-90-350 and arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,940	0,700
Italy	MacrOper (based on STAR Intercalibration Common Metric Index ICMi)	0,970	0,720
Portugal	Rivers Biological Quality Assessment Method-Benthic Invertebrates (IptIN, IptIS)	0,870 (type 1) 0,850 (type 3)	0,678 (type 1) 0,686 (type 3)
Slovenia	Metodologija vrednotenja ekološkega stanja rek z bentoškimi nevretenčarji v Sloveniji (Ecological status assessment system for rivers using benthic invertebrates in Slovenia)	0,800	0,600
Spain	Iberian Biological Monitoring Working Party (IBMWP)	0,845	0,698
Spain	Iberian Mediterranean Multimetric Index—using quantitative data (IMMi-T)	0,811	0,707

Type and country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
R-M2			
France	Classification française DCE Indice Biologique Global Normalisé (IBGN). AFNOR NF-T-90-350 and arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,940	0,700
Italy	MacrOper (based on STAR Intercalibration Common Metric Index ICMi)	0,940	0,700
Portugal	Rivers Biological Quality Assessment Method-Benthic Invertebrates (IptIN, IptIS)	0,830 (type 2) 0,880 (type 4)	0,693 (type 2) 0,676 (type 4)
Slovenia	Metodologija vrednotenja ekološkega stanja rek z bentoškimi nevretenčarji v Sloveniji (Ecological status assessment system for rivers using benthic invertebrates in Slovenia)	0,800	0,600
Spain	Iberian Biological Monitoring Working Party (IBMWP)	0,845	0,698
Spain	Iberian Mediterranean Multimetric Index—using quantitative data (IMMi-T)	0,811	0,707
R-M4			
France	Classification française DCE Indice Biologique Global Normalisé (IBGN). AFNOR NF-T-90-350 and arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,940	0,700
Cyprus	STAR Intercalibration Common Metric Index (STAR_ICMi)	0,972	0,729
Italy	MacrOper (based on STAR Intercalibration Common Metric Index ICMi)	0,940	0,700
Spain	Iberian Biological Monitoring Working Party (IBMWP)	0,840	0,700
Spain	Iberian Mediterranean Multimetric Index—using quantitative data (IMMi-T)	0,850	0,694
R-M5			
Cyprus	STAR Intercalibration Common Metric Index (STAR_ICMi)	0,982	0,737
Italy	MacrOper (based on STAR Intercalibration Common Metric Index ICMi)	0,970	0,730
Portugal	Rivers Biological Quality Assessment Method-Benthic Invertebrates (IptIN, IptIS)	0,973 (type 5) 0,961 (type 6)	0,705 (type 5) 0,708 (type 6)
Slovenia	Metodologija vrednotenja ekološkega stanja rek z bentoškimi nevretenčarji v Sloveniji (Ecological status assessment system for rivers using benthic invertebrates in Slovenia)	0,800	0,600

Type and country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Spain	Iberian Biological Monitoring Working Party (IBMWP)	0,830	0,630
Spain	Iberian Mediterranean Multimetric Index—using quantitative data (IMMi-T)	0,830	0,620

MEDITERRANEAN RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Macrophytes

Results: Ecological quality ratios of the national classification systems intercalibrated

Type and country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
R-M1, 2, 4			
Cyprus	IBMR – Biological Macrophyte Index for Rivers	0,795	0,596
France	French standard NF T90-395 (2003-10-01) Qualité de l'eau - Détermination de l'indice biologique macrophytique en rivière (IBMR)	0,930	0,745
Greece	IBMR – Biological Macrophyte Index for Rivers	0,750	0,560
Italy	IBMR – Biological Macrophyte Index for Rivers	0,900	0,800
Portugal	IBMR – Biological Macrophyte Index for Rivers	0,920	0,690
Slovenia	RMI – River Macrophyte Index	0,800	0,600
Spain	IBMR – Biological Macrophyte Index for Rivers	0,950	0,740

MEDITERRANEAN RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Phytobenthos

Results: Ecological quality ratios of the national classification systems intercalibrated

Type and country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
R-M1			
France	IBD 2007 (Coste et al, Ecol. Ind. 2009). AFNOR NF-T-90-354, December 2007. Arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,940	0,780
Italy	ICMi (Intercalibration Common Metric) Index (Mancini & Sollazzo, 2009)	0,800	0,610

Type and country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Portugal	IPS (Coste in Cemagref, 1982)	0,970 (type 1) 0,910 (type 3)	0,730 (type 1) 0,680 (type 3)
Slovenia	Metodologija vrednotenja ekološkega stanja rek s fitobentosom in makrofiti v Sloveniji; fitobentos (Ecological status assessment system for rivers using phytobenthos and macrophytes in Slovenia; Phytobenthos)	0,800	0,600
Spain	IPS (Coste in Cemagref, 1982)	0,937	0,727
R-M2			
France	IBD 2007 (Coste et al, Ecol. Ind. 2009). AFNOR NF-T-90-354, December 2007. Arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,940	0,780
Italy	ICMi (Intercalibration Common Metric) Index (Mancini & Sollazzo, 2009)	0,800	0,610
Portugal	IPS (Coste in Cemagref, 1982)	0,910 (type 2) 0,970 (type 4)	0,680 (type 2) 0,730 (type 4)
Slovenia	Metodologija vrednotenja ekološkega stanja rek s fitobentosom in makrofiti v Sloveniji; fitobentos (Ecological status assessment system for rivers using phytobenthos and macrophytes in Slovenia; Phytobenthos)	0,800	0,600
Spain	IPS (Coste in Cemagref, 1982)	0,938	0,727
R-M4			
Cyprus	IPS (Coste in Cemagref, 1982)	0,910	0,683
France	IBD 2007 (Coste et al, Ecol. Ind. 2009) AFNOR NF-T-90-354, December 2007 Arrêté ministériel du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	0,940	0,780
Italy	ICMi (Intercalibration Common Metric) Index (Mancini & Sollazzo, 2009)	0,800	0,610
Spain	IPS (Coste in Cemagref, 1982)	0,935	0,727
R-M5			
Cyprus	IPS (Coste in Cemagref, 1982)	0,958	0,718
Italy	ICMi (Intercalibration Common Metric) Index (Mancini & Sollazzo, 2009)	0,880	0,650
Portugal	IPS (Coste in Cemagref, 1982)	0,940	0,700
Slovenia	Metodologija vrednotenja ekološkega stanja rek s fitobentosom in makrofiti v Sloveniji; fitobentos (Ecological status assessment system for rivers using phytobenthos and macrophytes in Slovenia; Phytobenthos)	0,800	0,600
Spain	IPS (Coste in Cemagref, 1982)	0,935	0,700

WATER CATEGORY: Rivers

GEOGRAPHICAL INTERCALIBRATION GROUP: Northern

Description of common intercalibration types

Type	River characterisation	Catchment area (of stretch)	Altitude & geomorphology	Alkalinity (meq/l)	Organic material (mg Pt/l)
R-N1	Small lowland siliceous moderate alkalinity	10-100 km^2	< 200 m or below the highest coastline	0,2 - 1	< 30 (< 150 in Ireland)
R-N3	Small/medium lowland organic low alkalinity	10-1 000 km^2		< 0,2	> 30
R-N4	Medium lowland siliceous moderate alkalinity	100-1 000 km^2		0,2 - 1	< 30
R-N5	Small mid-altitude siliceous low alkalinity	10-100 km^2	Between lowland and highland	< 0,2	< 30

Countries sharing the types that have been intercalibrated:

Type R-N1: Finland, Ireland, Norway, Sweden, United Kingdom

Type R-N3: Finland, Ireland, Norway, Sweden, United Kingdom

Type R-N4: Finland, Norway, Sweden, United Kingdom

Type R-N5: Finland, Norway, Sweden, United Kingdom

NORTHERN RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrate fauna (methods sensitive for organic enrichment and general degradation)

Results: ecological quality ratios of national classification systems intercalibrated

The following results apply to all types as described above

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Finland	Multimetric system, first version established	0,80	0,60
Ireland	Quality Rating System (Q-value)	0,85	0,75
Norway	ASPT	0,99	0,87
Sweden	DJ-index (Dahl & Johnson 2004)	0,80	0,60
United Kingdom	River Invertebrate Classification Tool (RICT)- WHPT	0,97	0,86

NORTHERN RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrate fauna (methods sensitive for acidification)

Results: ecological quality ratios of national classification systems intercalibrated

The following results apply to clear, low alkalinity river types

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Norway	AcidIndex2 (Modified Raddum index2) (river acidification)	0,675	0,515
United Kingdom - Scotland	WFD-AWICsp: WFD Acid Water Indicator Community species	0,910	0,830
United Kingdom – England and Wales	WFD-AWICsp: WFD Acid Water Indicator Community species	0,980	0,890

Results: ecological quality ratios of national classification systems intercalibrated

The following results apply to humic, low alkalinity river types

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Sweden	MISA: Multimetric Invertebrate Stream Acidification index	0,550	0,400
United Kingdom	WFD-AWICsp: WFD Acid Water Indicator Community species	0,930	0,830

NORTHERN RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Phytobenthos

Results: Ecological quality ratios of the national classification systems intercalibrated

The following results apply to all types as described above

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Finland	Indice de Polluosensibilité Spécifique (IPS)	0,91	0,80
Sweden	Indice de Polluosensibilité Spécifique (IPS)	0,89	0,74
Ireland	Revised form of Trophic Diatom Index (TDI)	0,93	0,78
United Kingdom	DARLEQ 2	1,00	0,75
Norway	Periphyton Index of Trophic Status (PIT)	0,99 (Ca ≤ 1 mg/L) 0,95 (Ca > 1 mg/L)	0,83

NORTHERN RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Macrophytes

INTERCALIBRATION NOT COMPLETED

WATER CATEGORY: Rivers

GEOGRAPHICAL INTERCALIBRATION GROUPS: All

BIOLOGICAL QUALITY ELEMENT: Fish fauna

Overview of regional groups that have been established for the river fish intercalibration:

Lowland-Midland group – Belgium (Flanders), Belgium (Wallonia), France, Germany, Netherlands, Lithuania, Luxembourg, UNITED KINGDOM (England and Wales), Poland, Latvia, Estonia, Denmark, Hungary

Nordic group – Finland, Ireland, Sweden, UNITED KINGDOM (Scotland and Northern Ireland), Norway

Alpine-type Mountains group – Austria, France, Germany, Slovenia

Mediterranean South Atlantic group – Portugal, Spain, Italy, Greece

Danubian group – Czech Republic, Romania, Slovakia, Bulgaria

Results: Ecological quality ratios of the national classification systems intercalibrated

Lowland-midland group

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Belgium Flanders	Upstream and Lowland IBI	0,850	0,650
Belgium Wallonia	IBIP (Arrêté du Gouvernement wallon du 13 septembre 2012 relatif à l'identification, à la caractérisation et à la fixation des seuils d'état écologique applicables aux masses d'eau de surface et modifiant le Livre II du Code de l'Environnement, contenant le Code de l'Eau. Moniteur belge 12.10.2012)	0,958	0,792
France	Classification française DCE Indice Poissons Rivière (IPR). AFNOR NF-T-90-344. Arrêté du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	1,131	0,835
Germany	FIBS – fischbasiertes Bewertungssystem für Fließgewässer zur Umsetzung der EG-Wasserrahmenrichtlinie in Deutschland	1,086	0,592
Luxembourg	Classification française DCE Indice Poissons Rivière (IPR). AFNOR NF-T-90-344. Arrêté du 25 janvier 2010 modifié relatif aux méthodes et critères d'évaluation de l'état écologique {…} des eaux de surface	1,131	0,835
Netherlands	NLFISR	0,800	0,600
Lithuania	LZI	0,940	0,720

Nordic group

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Finland	Finnish Fish Index (FiFi) – type L2	0,665	0,499
Finland	Finnish Fish Index (FiFi) – type L3	0,658	0,493
Finland	Finnish Fish Index (FiFi) – type M1	0,709	0,532
Finland	Finnish Fish Index (FiFi) – type M2	0,734	0,550
Finland	Finnish Fish Index (FiFi) – type M3	0,723	0,542
Ireland	FCS2 IRELAND	0,845	0,540
Sweden	Swedish method VIX	0,739	0,467
United Kingdom – Northern Ireland	IR_FCS2	0,845	0,540
United Kingdom –Scotland	FCS2 Scotland	0,850	0,600

Mediterranean group

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Portugal	F_IBIP	0,850	0,675
Spain	IBIMED – type T2	0,816	0,705
Spain	IBIMED – type T3	0,929	0,733
Spain	IBIMED – type T4	0,864	0,758
Spain	IBIMED – type T5	0,866	0,650
Spain	IBIMED – type T6	0,916	0,764

Danubian group

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Czech Republic	Czech multimetric method CZI	0,780	0,585
Romania	EFI+ European Fish index (cyprinid_wading type)	0,939	0,700
Romania	EFI+ European Fish index (salmonid type)	0,911	0,755
Slovakia	Fish Index of Slovakia FIS	0,710	0,570

Alpine group

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good	Good-Moderate
Austria	FIA	0,875	0,625
France	FBI	1,131	0,876
Germany	FIBS – fischbasiertes Bewertungssystem für Fließgewässer zur Umsetzung der EG-Wasserrahmenrichtlinie in Deutschland	1,086	0,592
Slovenia	SIFAIR	0,800	0,600

WATER CATEGORY: Rivers

GEOGRAPHICAL INTERCALIBRATION GROUPS: All – Very Large Rivers

Description of common intercalibration types

Type	River characterisation	Catchment area (of stretch)	Alkalinity (meq/l)
R-L1	Very large low alkalinity rivers	> 10 000 km^2	< 0,5
R-L2	Very large medium to high alkalinity rivers	> 10 000 km^2	> 0,5

Countries sharing the types that have been intercalibrated:

Type R-L1: Finland, Norway, Sweden

Type R-L2: Austria, Belgium (Flanders), Bulgaria, Croatia, Czech Republic, Estonia, France, Germany, Greece, Hungary, Italy, Latvia, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden

VERY LARGE RIVERS GEOGRAPHICAL INTERCALIBRATION GROUP

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Phytobenthos

Results: ecological quality ratios of national classification systems intercalibrated

The following results apply to low alkalinity very large rivers (type R-L1)

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Finland	Indice de Polluosensibilité Spécifique (Specific Pollution Sensitivity Index SPI)	0,80	0,60
Sweden	Benthic algae in running water - diatom analysis	0,89	0,74

The following results apply to medium to high alkalinity very large rivers (type R-L2)

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Austria	Assessment of the Biological Quality Elements - part phytobenthos	0,85	0,57
Czech Republic	Assessment system for rivers using phytobenthos	0,80	0,60

Country	National classification system intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Estonia	Estonian surface water ecological quality assessment – river phytobenthos	0,83	0,64
Germany	Verfahrensanleitung für die ökologische Bewertung von Fließgewässern zur Umsetzung der EG-Wasserrahmenrichtlinie: Makrophyten und Phytobenthos (Phylib), Modul Diatomeen	0,725	0,545
Hungary	Ecological status assessment for rivers based on diatoms	0,762	0,60
Netherlands	WFD-metrics for natural water types	0,80	0,60
Slovakia	Ecological status assessment system for rivers using phytobenthos	0,90	0,70
Slovenia	Metodologija vrednotenja ekološkega stanja rek s fitobentosom in makrofiti v Sloveniji; fitobentos (Ecological status assessment system for rivers using phytobenthos and macrophytes in Slovenia; Phytobenthos)	0,80	0,60

WATER CATEGORY: Rivers

GEOGRAPHICAL INTERCALIBRATION GROUP: All - Very Large Rivers

BIOLOGICAL QUALITY ELEMENTS: Macrophytes, Phytoplankton, Fish, Benthic Invertebrates

INTERCALIBRATION NOT COMPLETED

WATER CATEGORY: Lakes

GEOGRAPHICAL INTERCALIBRATION GROUP: Alpine

Description of common intercalibration types

Type	Lake characterisation	Altitude (m above sea level)	Mean depth (m)	Alkalinity (meq/l)	Lake size (km^2)
L-AL3	Lowland or mid-altitude, deep, moderate to high alkalinity (alpine influence), large	50 - 800	> 15	> 1	> 0,5
L-AL4	Mid-altitude, shallow, moderate to high alkalinity (alpine influence), large	200 - 800	3 - 15	> 1	> 0,5

Countries sharing types that have been intercalibrated:

Types L-AL3: Austria, France, Germany, Italy and Slovenia

Types L-AL4: Austria, France, Germany, Italy

ALPINE LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Phytoplankton

Member State	National classification systems intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Austria	Evaluation of the biological quality elements, Part B2 – phytoplankton	0,80	0,60

Member State	National classification systems intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Germany	PSI (Phyto-Seen-Index) - Bewertungsverfahren für Seen mittels Phytoplankton zur Umsetzung der EG-Wasserrahmenrichtlinie in Deutschland	0,80	0,60
Italy	Italian Phytoplankton Assessment Method (IPAM)	0,80	0,60
Slovenia	Metodologija vrednotenja ekološkega stanja jezer s fitoplanktonom v Sloveniji (Ecological status assessment system for lakes using phytoplankton in Slovenia)	0,80	0,60

ALPINE LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Macrophytes

Member State	National classification systems intercalibrated		Ecological Quality Ratios	
			High-good boundary	Good-moderate boundary
Austria	AIM for Lakes (Austrian Index Macrophytes for lakes)	L-AL3+ L-AL4	0,80	0,60
France	IBML (French Macrophyte Index for Lakes)	L-AL3+ L-AL4	0,92	0,72
Germany	PHYLIB for Lakes (German Assessment system for Macrophytes & Phytobenthos for lakes for implementation of the WFD): Module Macrophytes	L-AL3+ L-AL4	0,76	0,51
Germany	PHYLIB for Lakes (German Assessment system for Macrophytes & Phytobenthos for lakes for implementation of the WFD): Modules Macrophytes & Phytobenthos	LAL4	0,74	0,47
Italy	MacroIMMI (Macrophytic index for the evaluation of the ecological quality of the Italian lakes)	L-AL3+ L-AL4	0,80	0,60
Slovenia	SMILE (Slovenian macrophyte-based index for lake ecosystems)	L-AL3	0,80	0,60

ALPINE LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrates

Member State	National classification systems intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Slovenia	Metodologija vrednotenja ekološkega stanja jezer z bentoškimi nevretenčarji v Sloveniji (Ecological status assessment system for lakes using benthic invertebrates in Slovenia)	0,80	0,60
Germany	AESHNA - Bewertungsverfahren für das eulitorale Makrozoobenthos in Seen zur Umsetzung der EG-Wasserrahmenrichtlinie in Deutschland	0,80	0,60

ALPINE LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Fish fauna

Results: Ecological quality ratios of national classification systems intercalibrated

Member State	National classification systems intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Austria	ALFI (Austrian lake fish index): A multimetric index to assess the ecological status of alpine lakes based on fish fauna.	0,80	0,60
Germany	DELAFI_SITE - Deutsches probennahmestandort-spezifisches Bewertungsverfahren für Fische in Seen zur Umsetzung der EG-Wasserrahmenrichtlinie	0,85	0,69
Italy	Lake Fish Index (LFI)	0,82	0,64

WATER CATEGORY: Lakes

GEOGRAPHICAL INTERCALIBRATION GROUP: Central / Baltic

Description of common intercalibration types

Type	Lake characterisation	Altitude (m above sea level)	Mean depth (m)	Alkalinity (meq/l)	Residence time (years)
L-CB1	Lowland, shallow, calcareous	< 200	3 - 15	> 1	1 - 10
L-CB2	Lowland, very shallow, calcareous	< 200	< 3	> 1	0,1 - 1

Countries sharing types that have been intercalibrated:

Types L-CB1: Belgium, Germany, Denmark, Estonia, Ireland, Lithuania, Latvia, Netherlands, Poland, United Kingdom

Types L-CB2: Belgium, Germany, Denmark, Estonia, Ireland, Lithuania, Latvia, Netherlands, Poland, United Kingdom

CENTRAL / BALTIC LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Phytoplankton

Results: Ecological quality ratios of national classification systems intercalibrated

	National classification systems intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Belgium (Flanders)	Flemish phytoplankton assessment method for lakes	0,80	0,60
Germany	PSI (Phyto-See-Index) - Bewertungsverfahren für Seen mittels Phytoplankton zur Umsetzung der EG-Wasserrahmenrichtlinie in Deutschland - German Phyto-Lake-Index (Phyto-See-Index)	0,80	0,60
Denmark	Danish Phytoplankton Index	0,80	0,60
Estonia	Estonian surface water ecological quality assessment – lake phytoplankton	0,80	0,60

	National classification systems intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Ireland	IE Lake Phytoplankton Index	0,80	0,60
Netherlands	WFD- metrics for natural watertypes	0,80	0,60
Poland	Phytoplankton method for Polish Lakes (PMPL)	0,80	0,60
United Kingdom	Phytoplankton Lakes Assessment Tool (PLUTO)	0,80	0,60

CENTRAL / BALTIC LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Macrophytes

Results: Ecological quality ratios of national classification systems intercalibrated

Member State	National classification systems intercalibrated	IC Type	Ecological Quality Ratios	
			High-good boundary	Good-moderate boundary
Belgium (Flanders)	Flemish macrophyte assessment system	All types	0,80	0,60
Denmark	Danish Lake Macrophytes Index	All types	0,80	0,60
Estonia	Estonian surface water ecological quality assessment – lake macrophytes	LCB1	0,78	0,52
		LCB2	0,76	0,50
Germany	Verfahrensanleitung für die ökologische Bewertung von Seen zur Umsetzung der EG-Wasserrahmenrichtlinie: Makrophyten und Phytobenthos (Phylib), Modul Makrophyten	All types	0,80	0,60
Lithuania	Lithuanian macrophyte assessment method	All types	0,75	0,50
Latvia	Latvian macrophyte assessment method	All types	0,80	0,60
Netherlands	WFD-metrics for natural water types	All types	0,80	0,60
Poland	Macrophyte based indication method for lakes - Ecological Status Macrophyte Index ESMI (multimetric)	All types	0,68	0,41
United Kingdom	LEAFPACS lake macrophyte classification tool (*)	All types	0,80	0,66

(*) Will be used in England, Wales and Scotland

CENTRAL / BALTIC LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrates

Results: Ecological quality ratios of national classification systems intercalibrated

Member State	National classification systems intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate
Belgium (Flanders)	Multimetric Macroinvertebrate Index Flanders (MMIF)	0,90	0,70

Member State	National classification systems intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate
Germany	AESHNA - Bewertungsverfahren für das eulitorale Makrozoobenthos in Seen zur Umsetzung der EG-Wasserrahmenrichtlinie in Deutschland	0,80	0,60
Estonia	Estonian surface water ecological quality assessment – lake macroinvertebrates	0,86	0,70
Lithuania	Lithuanian Lake Macroinvertebrate Index	0,74	0,50
Netherlands	WFDi - Metric for Natural Watertypes	0,80	0,60
United Kingdom	Chironomid Pupal Exuvial Technique (CPET)	0,77	0,64

CENTRAL / BALTIC LAKES GEOGRAPHICAL INTERCALIBRATION GROUP

Biological Quality Element: Fish fauna

INTERCALIBRATION NOT COMPLETED

EASTERN / CONTINENTAL LAKES GEOGRAPHICAL INTERCALIBRATION GROUP

Biological Quality Element: Phytoplankton

INTERCALIBRATION NOT COMPLETED

EASTERN CONTINENTAL LAKES GEOGRAPHICAL INTERCALIBRATION GROUP

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Macrophytes

INTERCALIBRATION NOT COMPLETED

EASTERN CONTINENTAL LAKES GEOGRAPHICAL INTERCALIBRATION GROUP

Biological Quality Element: Benthic invertebrates

INTERCALIBRATION NOT COMPLETED

EASTERN CONTINENTAL LAKES GEOGRAPHICAL INTERCALIBRATION GROUP

Biological Quality Element: Fish fauna

INTERCALIBRATION NOT COMPLETED

WATER CATEGORY: Lakes

GEOGRAPHICAL INTERCALIBRATION GROUP: Mediterranean

Description of common intercalibration types

Type	Lake characterization	Altitude (m)	Annual mean precipitation (mm) and T (°C)	Mean depth (m)	Area (km^2)	Catchment (km^2)	Alkalinity (meq/l)
L-M5/7	Reservoirs, deep, large, **siliceous, "wet"** areas	< 1 000	> 800 and /or < 15	> 15	0,5-50	< 20 000	< 1
L-M8	Reservoirs, deep, large, **calcareous**	< 1 000	—	> 15	0,5-50	< 20 000	> 1

Countries sharing types that have been intercalibrated:

Types L-M5/7: Greece, France, Italy, Portugal, Romania, Spain

Types L-M8: Cyprus, France, Italy, Romania, Spain

MEDITERRANEAN LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Phytoplankton

Results: Ecological quality ratios of national classification systems intercalibrated

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good	Good-moderate
LM 5/7			
Spain	Mediterranean Assessment System for Reservoirs Phytoplankton (MASRP).	n.d. (*)	0,58
Portugal	Reservoirs Biological Quality Assessment Method – Phytoplankton (New Mediterranean Assessment System for Reservoirs Phytoplankton: NMASRP).	n.d.	0,60
Italy	New Italian Method (NITMET)	n.d.	0,60
L-M8			
Spain	Mediterranean Assessment System for Reservoirs Phytoplankton (MASRP).	n.d.	0,60
Cyprus	New Mediterranean Assessment System for Reservoirs Phytoplankton (NMASRP).	n.d.	0,60
Italy	New Italian Method (NITMET)	n.d.	0,60

(*) High-Good boundary is not defined for reservoirs (both LM5/7 and LM8 types are reservoirs)

MEDITERRANEAN LAKES GEOGRAPHICAL INTERCALIBRATION GROUP

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Macrophytes

INTERCALIBRATION NOT COMPLETED

MEDITERRANEAN LAKES GEOGRAPHICAL INTERCALIBRATION GROUP

Biological Quality Element: Benthic invertebrates

INTERCALIBRATION NOT COMPLETED

MEDITERRANEAN LAKES GEOGRAPHICAL INTERCALIBRATION GROUP

Biological Quality Element: Fish fauna

INTERCALIBRATION NOT COMPLETED

WATER CATEGORY: Lakes

GEOGRAPHICAL INTERCALIBRATION GROUP: Northern

NORTHERN LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Phytoplankton

Description of common intercalibration types

Type	Lake characterisation	Altitude (m above sea level)	Mean depth (m)	Alkalinity (meq/l)	Colour (mg Pt/l)
L-N1	Lowland, shallow, moderate alkalinity, clear	< 200	3 - 15	0,2 - 1	< 30
L-N2a	Lowland, shallow, low alkalinity, clear	< 200	3 - 15	< 0,2	< 30
L-N2b	Lowland, deep, low alkalinity, clear	< 200	> 15	< 0,2	< 30
L-N3a	Lowland, shallow, low alkalinity, meso-humic	< 200	3 - 15	< 0,2	30 - 90
L-N5	Mid-altitude, shallow, low alkalinity, clear	200-800	3 - 15	< 0,2	< 30
L-N6a	Mid-altitude, shallow, low alkalinity, meso-humic	200-800	3 - 15	< 0,2	30 - 90
L-N8a	Lowland, shallow, moderate alkalinity, meso-humic	< 200	3 - 15	0,2 - 1	30 - 90

Countries sharing types that have been intercalibrated:

Types L-N1, L-N2a, L-N3a, LN-8a: Ireland, Finland, Norway, Sweden, United Kingdom.

Types LN-2b: Norway, Sweden, United Kingdom

Types LN-5, LN-6a: Norway, Sweden

Results: Ecological quality ratios of national classification systems intercalibrated

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good	Good-moderate
Finland	Finnish phytoplankton assessment method for lakes	0,80	0,60
Ireland	IE Lake Phytoplankton Index	0,80	0,60
Norway	Lake phytoplankton ecological status classification method	0,80	0,60
Sweden	Ecological assessment methods for lakes. quality factor phytoplankton	0,80	0,60
United Kingdom	Phytoplankton Lakes Assessment Tool (PLUTO)	0,80	0,60

NORTHERN LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Macrophytes

Description of common intercalibration types

Type	Lake characterisation	Alkalinity (meq/l)	Color (mg Pt/l)
L-N-M 101	Low alkalinity, clear	0,05 - 0,2	< 30

Type	Lake characterisation	Alkalinity (meq/l)	Color (mg Pt/l)
L-N-M 102	Low alkalinity, humic	0,05 - 0,2	> 30
L-N-M 201	Moderate alkalinity, clear	0,2 - 1,0	< 30
L-N-M 202	Moderate alkalinity, humic	0,2 - 1,0	> 30
L-N-M 301a	High alkalinity, clear, atlantic subtype	> 1,0	< 30
L-N-M 302a	High alkalinity, humic, atlantic subtype	> 1,0	> 30

Countries sharing types that have been intercalibrated:

Types 101, 102, 201 and 202: Ireland, Finland, Norway, Sweden, United Kingdom.

Type 301a: Ireland, United Kingdom.

Type 302a: Ireland, United Kingdom

Results: Ecological quality ratios of national classification systems intercalibrated

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate
Finland	Finnish macrophyte classification system (Finnmac)	0,8 (all types)	0,6 (all types)
Ireland	Free Macrophyte Index	0,9 (all types)	0,68 (all types)
Norway	National macrophyte index (Trophic Index – TIc)	Type 101: 0,98 Type 102: 0,96 Type 201: 0,95 Type 202: 0,99	Type 101: 0,87 Type 102: 0,87 Type 201: 0,75 Type 202: 0,77
Sweden	Trophic Macrophyte Index (TMI)	Type 101: 0,93 Type 102: 0,93 Type 201: 0,89 Type 202: 0,91	Type 101: 0,80 Type 102: 0,83 Type 201: 0,78 Type 202: 0,78
United Kingdom	LEAFPACS lake macrophyte classification tool (*)	0,8 (all types)	0,66 (all types)
United Kingdom	Free Macrophyte Index (**)	0,9 (all types)	0,68 (all types)

(*) Will be used in England, Wales and Scotland
(**) Will be used also in the United Kingdom (Northern Ireland)

NORTHERN LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrates

Description of common intercalibration types

Type	Lake characterisation	Ecoregion	Altitude (m absl)	Alkalinity (meq/l)	Colour (mg Pt/l)
Lake littoral acidification					
L-N-BF1	Lowland/mid-altitude, low alkalinity, clear	n.d.	< 800	0,05 - 0,2	< 30
Lake profundal eutrophication					
L-N-BF2	Ecoregion 22, low alkalinity, clear and humic	22	Area > 1 km^2, max depth > 6 m	< 0,2	n.d.

Countries sharing types that have been intercalibrated:

Types L-N-BF1: Norway, Sweden, United Kingdom, Ireland, Finland

Types L-N-BF2: Finland, Sweden

Results: Ecological quality ratios of national classification systems intercalibrated

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good	Good-moderate
Lake littoral acidification			
Sweden	MILA: Multimetric Invertebrate Lake Acidification index	0,85	0,60
United Kingdom	LAMM (Lake Acidification Macroinvertebrate Metric)	0,86	0,70
Norway	MultiClear: Multimetric Invertebrate Index for Clear Lakes	0,95	0,74
Lake profundal eutrophication			
Sweden	BQI (Benthic Quality Index)	0,84	0,67
Finland	BQI (Benthic Quality Index)	0,75	0,63

NORTHERN LAKES GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Fish fauna

Description of common intercalibration types

Type	Lake characterisation	Lake area km^2	Alkalinity (meq/l)	Colour (mg Pt/l)
L-N-F1	Dimictic clear water lakes	< 40	< 0,2	< 30
L-N-F2	Dimictic humic lakes	< 5	< 0,2	30-90

Countries sharing types that have been intercalibrated:

Types L-N-F1: Ireland, Finland, Norway, Sweden, United Kingdom

Types L-N-F2: Ireland, Finland, Norway, Sweden, United Kingdom

Results: Ecological quality ratios of national classification systems intercalibrated

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Finland	EQR4	0,80	0,60
Ireland	FIL2	0,76	0,53
United Kingdom (Northern Ireland)	FIL2	0,76	0,53

WATER CATEGORY: Lakes

GEOGRAPHICAL INTERCALIBRATION GROUP: Cross-GIG Phytobenthos

Description of common intercalibration types

Type	Lake characterisation	Alkalinity (meq/l)	Ecoregions
HA	High alkalinity lakes	> 1	Central-Baltic, Mediterranean
MA	Moderate alkalinity lakes	0,2-1	Central-Baltic, Northern
LA	Low alkalinity lakes	< 0,2	Northern

Countries sharing types that have been intercalibrated:

Types HA: Belgium, Germany, Hungary, Ireland, Italy, Poland, Sweden, Slovenia, United Kingdom

Types MA: Belgium, France, Finland, Ireland, Sweden, United Kingdom

Types LA: Finland, Ireland, Sweden, United Kingdom

CROSS-GIG LAKES INTERCALIBRATION RESULTS

Biological Quality Element: Macrophytes and Phytobenthos

Sub-Biological Quality Element: Phytobenthos

Results: Ecological quality ratios of national classification systems intercalibrated

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
HA type			
Belgium (Flanders)	Proportions of Impact-Sensitive and Impact-Associated Diatoms (PISIAD)	0,80	0,60
Germany	Verfahrensanleitung für die ökologische Bewertung von Seen zur Umsetzung der EG-Wasserrahmenrichtlinie: Makrophyten und Phytobenthos (Phylib), Modul Phytobenthos	0,80	0,55
Hungary	MIL- Multimetric Index for Lakes	0,80	0,69
Ireland	Lake Trophic Diatom Index (IE)	0,90	0,63
Poland	PL IOJ (Multimetryczny Indeks Okrzemkowy dla Jezior = Multimetric Diatom Index for Lakes)	0,91	0,76
Sweden	IPS	0,89	0,74
Slovenia	Trophic Index (TI)	0,80	0,60
United Kingdom	DARLEQ 2	0,92	0,70
MA type			
Belgium (Flanders)	Proportions of Impact-Sensitive and Impact-Associated Diatoms (PISIAD)	0,80	0,60
Finland	IPS	0,80	0,64

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Ireland	Lake Trophic Diatom Index (IE)	0,90	0,63
Sweden	IPS	0,89	0,74
United Kingdom	DARLEQ 2	0,93	0,66
LA type			
Ireland	Lake Trophic Diatom Index (IE)	0,90	0,66
United Kingdom	DARLEQ 2	0,92	0,70

WATER CATEGORY: Coastal and transitional

GEOGRAPHICAL INTERCALIBRATION GROUP: Baltic Sea GIG

Description of common intercalibration types

Type	Surface salinity Psu	Bottom salinity	Exposure	Ice days	Other Characteristics
BT 1	0-8 Oligohaline	0 - 8	Very sheltered	—	Polish Vistula lagoon and Lithuanian Curonian lagoon.
BC1	0,5 - 6 Oligohaline	1 - 6	Exposed	90 - 150	Sites in the Quark and the Bothnian Sea, extending to the Archipelago Sea (for phytoplankton the latter is excluded and integrated in type BC9) Influence of humic substances
BC3	3 - 6 Oligohaline	3 - 6	Sheltered	90 - 150	Finnish and Estonian coasts of Gulf of Finland
BC4	5 - 8 Lower mesohaline	5 - 8	Sheltered	< 90	Sites of Estonia and Latvia in the Gulf of Riga
BC5	6 - 8 Lower mesohaline	6 - 12	Exposed	< 90	Sites in the southeastern Baltic Sea along the coast of Latvia, Lithuania and Poland
BC6	8 - 12 Mid mesohaline	8 -12	Sheltered	< 90	Sites along the Western Baltic Sea at the southern Swedish coast and the south-eastern Danish coast
BC7	6 - 8 Mid mesohaline	8 - 11	Exposed	< 90	Western Polish coast and eastern German coast
BC8	13 -18 Upper mesohaline	18 -23	Sheltered	< 90	Danish and German coasts in the Western Baltic Sea
BC9	3 - 6 Lower mesohaline	3 - 6	Moderately exposed to exposed	90 - 150	Sites in the western Gulf of Finland, Archipelago Sea and Asko archipelago (only for phytoplankton)

Countries sharing types that have been intercalibrated:

Coastal waters

Type BC1: Finland, Sweden.

Type BC3: Finland, Estonia

Type BC4: Estonia, Latvia

Type BC5: Lithuania, Latvia, Poland.

Type BC6: Sweden, Denmark.

Type BC7: Germany, Poland.

Type BC8: Germany, Denmark.

Type BC9: Finland, Sweden, Estonia (type only relevant for phytoplankton)

Transitional waters

Type BT1: Lithuania, Poland.

BALTIC SEA GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrate fauna

Results: Ecological quality ratios of the national classification systems intercalibrated

Coastal waters

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
BC1			
Finland	BBI- Finnish Brackish water Benthic Index	0,96	0,56
Sweden	BQI–Swedish multimetric biological quality index (soft sediment infauna)	0,77	0,31
BC3			
Estonia	ZKI – Estonian coastal water macrozoobenthos community index	0,39	0,24
Finland	BBI - Finnish Brackish water Benthic Index	0,94	0,56
BC6			
Denmark	DKI ver2 - Danish Quality Index version 2	0,84	0,68
Sweden	BQI–Swedish multimetric biological quality index (soft sediment infauna)	0,76	0,27
BC8			
Denmark	DKI ver2 - Danish Quality Index version 2	0,86	0,72
Germany	MarBIT - Marine Biotic Index Tool	0,8	0,6

Transitional waters:

INTERCALIBRATION NOT COMPLETED

BALTIC SEA GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Phytoplankton

Results: Ecological quality ratios of the national classification systems intercalibrated

Coastal waters

Member State	National classification methods intercalibrated	Ecological Quality Ratios of the national classification systems	
		High-good boundary	Good-moderate boundary
BC7			
Germany	German coastal phytoplankton method	0,8	0,6
Poland	Polish coastal phytoplankton method	0,8	0,6
BC8			
Denmark	Danish coastal phytoplankton method	0,8	0,6
Germany	German coastal phytoplankton method	0,8	0,6

Results for parameter indicative of biomass (Chlorophyll a): SEE ANNEX II

Transitional waters:

INTERCALIBRATION NOT COMPLETED

BALTIC SEA GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macroalgae and Angiosperms

Coastal waters

Ecological quality ratios of the national classification systems intercalibrated

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
BC3			
Estonia	EPI- Estonian coastal water phytobenthos Index (macroalgae and angiosperms)	0,98	0,86
Finland	Fucus depth limit (macroalgae)	0,92	0,79

Ecological quality ratios and parameter values for parameter indicative of abundance (Depth limit of Eelgrass *Zostera marina*): Ecological quality ratios and parameter values

Type and country	Ecological Quality Ratios for the national classification systems		Parameter values/ranges Depth limit (m) Eelgrass Zostera marina	
	High-Good boundary	Good-Moderate boundary	High-Good boundary	Good-Moderate boundary
BC8				
Denmark and Germany Open coast	0,90	0,74	8,5	7

Transitional waters:

INTERCALIBRATION NOT COMPLETED

WATER CATEGORY: Coastal and transitional

GEOGRAPHICAL INTERCALIBRATION GROUP: North East Atlantic

Description of common intercalibration types

Type	Characterisation	Salinity (psu) Tidal Range(m) Depth (m)	Current Velocity (knots) Exposure	Mixing Residence Time
Type for opportunistic blooming macroalgae, seagrasses, saltmarshes and benthic invertebrate fauna				
NEA1/26	Open oceanic or enclosed seas, exposed or sheltered, euhaline, shallow	> 30 Mesotidal 1 – 5 < 30	Medium 1 – 3 Exposed or sheltered	Fully mixed Days (to weeks in the Wadden Sea)
Subtypes for intertidal macroalgae				
NEA1/26 A2	Open oceanic, exposed or sheltered, euhaline, shallow Temperate waters (mainly, > 13 °C) and high irradiance (mainly, PAR > 29 Mol/m^2 day)	> 30 Mesotidal 1–5 < 30	Medium 1 – 3 Exposed or sheltered	Fully mixed Days
NEA1/26 B21	Open oceanic or enclosed seas, exposed or sheltered, euhaline, shallow Cool waters (mainly, < 13 °C) and medium irradiance (mainly, PAR < 29 Mol/m^2 day)	> 30 Mainly mesotidal 1–5 < 30	Medium 1 – 3 Exposed or sheltered	Fully mixed Days
Subtypes for phytoplankton				
NEA1/26a	Open oceanic, exposed or sheltered, euhaline, shallow	> 30 Mesotidal 1 – 5 < 30	Medium 1 – 3 Exposed or sheltered	Fully mixed Days
NEA1/26b	Enclosed seas, exposed or sheltered, euhaline, shallow	> 30 Mesotidal 1 – 5 < 30	Medium 1 – 3 Exposed or sheltered	Fully mixed Days
NEA1/26c	Enclosed seas, enclosed or sheltered, partly stratified	> 30 Microtidal/Mesotidal < 1 – 5 < 30	Medium 1 – 3 Exposed or sheltered	Partly stratified Days to weeks
NEA1/26d	Scandinavian coast, exposed or sheltered, shallow	> 30 Microtidal < 1 < 30	Low < 1 Exposed or moderately exposed	Partly stratified Days to weeks
NEA1/26e	Areas of upwelling, exposed or sheltered, euhaline, shallow	> 30 Mesotidal 1 – 5 < 30	Medium 1 – 3 Exposed or sheltered	Fully mixed Days
Types for phytoplankton, macroalgae, seagrasses, saltmarshes, benthic invertebrate fauna and fish (transitional waters)				
NEA3/4	Polyhaline, Exposed or moderately exposed (Wadden Sea type)	Polyhaline 18 - 30 Mesotidal 1 - 5 < 30	Medium 1 - 3 Exposed or moderately exposed	Fully mixed Days
NEA7	Deep fjordic and sea loch systems	> 30 Mesotidal 1 -5 > 30	Low < 1 Sheltered	Fully mixed Days

Type	Characterisation	Salinity (psu) Tidal Range(m) Depth (m)	Current Velocity (knots) Exposure	Mixing Residence Time
NEA8a	Skagerrak Inner Arc Type, polyhaline, microtidal, moderately exposed, shallow	Polyhaline 25 - 30 Microtidal < 1 > 30	Low < 1 Moderately exposed	Fully mixed Days to weeks
NEA8b	Skagerrak Inner Arc Type, polyhaline, microtidal, moderately sheltered, shallow	Polyhaline 10 - 30 Microtidal < 1 < 30	Low < 1 Sheltered to moderately exposed	Partly stratified Days to weeks
NEA9	Fjord with a shallow sill at the mouth with a very deep maximum depth in the central basin with poor deepwater exchange	Polyhaline 25 - 30 Microtidal < 1 > 30	Low < 1 Sheltered	Partly stratified Weeks
NEA10	Skagerrak Outer Arc Type, polyhaline, microtidal, exposed, deep	Polyhaline 25 - 30 Microtidal < 1 > 30	Low < 1 Exposed	Partly stratified Days
NEA11	Transitional Waters	Oligohaline 0 - 35 Micro to macrotidal < 30	Variable Sheltered or moderately exposed	Partly permanently stratified Days to weeks

Countries sharing the types that have been intercalibrated:

Coastal waters

Type NEA1/26 opportunistic blooming macroalgae, seagrasses, saltmarshes: Belgium, France, Germany, Ireland, Netherlands, Portugal, Spain, United Kingdom

Type NEA1/26 A2 intertidal macroalgae: France, Spain, Portugal

Type NEA1/26 B21 intertidal macroalgae: France, Ireland, Norway, United Kingdom

Type NEA1/26a phytoplankton: Spain, France, Ireland, Norway, United Kingdom

Type NEA1/26b phytoplankton: Belgium, France, Netherlands, United Kingdom

Type NEA1/26c phytoplankton: Germany, Denmark

Type NEA1/26d phytoplankton: Denmark

Type NEA1/26e phytoplankton: Portugal, Spain

Type NEA3/4: Germany, Netherlands

Type NEA7: Norway, United Kingdom

Type NEA8a: Norway, Sweden

Type NEA8b: Denmark, Sweden

Type NEA9: Norway, Sweden

Type NEA10: Norway, Sweden

Transitional waters

Type NEA11: Belgium, Germany, Spain, France, Ireland, Netherlands, Portugal, United Kingdom

NORTH EAST ATLANTIC GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrate fauna

Results: Ecological quality ratios of the national classification systems intercalibrated

The results are applicable to soft sediment habitats only (subtidal mud/sand habitats).

Coastal waters

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Type NEA8b			
Denmark	DKI	0,84	0,68
Sweden	BQI	0,71	0,54
Types NEA8a/9/10			
Norway	NQI	0,82	0,63
Sweden	BQI	0,71	0,54

Results for coastal waters, Types NEA 1/26 AND NEA7: SEE ANNEX II

Transitional waters:

INTERCALIBRATION NOT COMPLETED

NORTH EAST ATLANTIC GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Phytoplankton

Coastal waters

Phytoplankton: parameter indicative of biomass parameter (Chlorophyll a)

Results: Ecological quality ratios and parameter values

Parameter values are expressed in µg/l as the 90 %ile value calculated over the defined growing season in a six year period. The results relate to geographic areas within the types as described in the technical report.

Member State	Ecological Quality Ratios		Values (µg/l, 90 %ile)	
	High-good	Good-moderate	High-good	Good-moderate
NEA1/26c				
Denmark	0,67	0,44	5	7,5
Germany	0,67	0,44	5	7,5

Results for coastal waters, Types NEA 1/26a, NEA 1/26b, NEA1/26e, NEA 3/4, NEA9, NEA10: SEE ANNEX II

Transitional waters:

INTERCALIBRATION NOT COMPLETED

NORTH EAST ATLANTIC GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macroalgae and angiosperms

Coastal waters

Results: Macroalgae - parameter intertidal or subtidal macroalgae rocky bottom

Coastal waters

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Type NEA1/26 A2 intertidal macroalgae			
France	CCO - Cover, Characteristic species, Opportunistic species on intertidal rocky bottoms	0,80	0,60
Portugal	PMarMAT - Marine Macroalgae Assessment Tool	0,80	0,61
Spain	CFR – Quality of Rocky Bottoms	0,81	0,60
Spain	RICQI - Rocky Intertidal Community Quality Index	0,82	0,60
Spain	RSL - Reduced Species List	0,75	0,48
Type NEA1/26 B21 intertidal macroalgae			
Ireland	RSL - Rocky Shore Reduced Species List	0,80	0,60
Norway	RSLA - Rocky Shore Reduced Species List	0,80	0,60
United Kingdom	RSL - Rocky Shore Reduced Species List	0,80	0,60
Type NEA7 intertidal macroalgae			
Norway	RSLA - Rocky Shore Reduced Species List with Abundance	0,80	0,60
United Kingdom	RSL - Rocky Shore Reduced Species List	0,80	0,60
Type NEA8a/9/10 subtidal macroalgae			
Norway	MSMDI – Multi Species Maximum Depth Index	0,80	0,60
Sweden	MSMDI – Multi Species Maximum Depth Index	0,80	0,60

Results for Macroalgae – parameter intertidal blooming macroalgae Type NEA1/26: SEE ANNEX II

Transitional waters:

Results for Macroalgae – parameter intertidal blooming macroalgae - NEA11: SEE ANNEX II

Results: Angiosperms - subBQE indicative of seagrasses

Results: Ecological quality ratios of the national classification systems intercalibrated

Coastal waters

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Type NEA3/4			
Germany	SG - Bewertungssystem für Makroalgen und Seegräser der Küsten- und Übergangsgewässer zur Umsetzung der EG-Wasserrahmenrichtlinie in Deutschland	0,80	0,60
Netherlands	Monitoring beds of SG per waterbody using arial photographs, ground truth and specifyting surface & density per species	0,80	0,60

Results for Angiosperms (subBQE indicative of seagrasses) Type 1/26: SEE ANNEX II

Transitional waters:

Results for Angiosperms (subBQE indicative of seagrasses) NEA11: SEE ANNEX II

NORTH EAST ATLANTIC GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Fish (Transitional Waters)

Results: Ecological quality ratios of the national classification systems intercalibrated

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Belgium	EBI – Zeeschelde Estuarine Biotic Index	0,85	0,615
France	ELFI – Estuarine and Lagoon Fish Index	0,91	0,675
Germany	FAT – TW - Fischbasiertes Bewertungswerkzeug für Übergangsgewässer der norddeutschen Ästuare	0,84	0,62
Ireland	TFCI – Transitional Fish Classification Index	0,81	0,58
Netherlands	FAT – TW – WFD Fish index for transitional waters, type O2	0,80	0,60
Portugal	EFAI – Estuarine Fish Assessment Index	0,865	0,70
Spain	AFI – AZTI's Fish Index	0,78	0,55
Spain	TFCI – Transitional Fish Classification Index	0,90	0,65
United Kingdom (Northern Ireland)	TFCI – Transitional Fish Classification Index	0,81	0,58

WATER CATEGORY: Coastal and transitional

GEOGRAPHICAL INTERCALIBRATION GROUP: Mediterranean Sea

Typology with regional common intercalibration types has been defined for phytoplankton only (see below).

For benthic invertebrate fauna, macroalgae and seagrasses the intercalibration results apply to the entire Mediterranean Sea covered by the Member States.

MEDITERRANEAN GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrate fauna

Results: Ecological quality ratios of national classification systems

Coastal waters

The following results apply to soft sediments only

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Methods including diversity parameter			
Italy	M-AMBI	0,81	0,61
Slovenia	M-AMBI	0,83	0,62
Methods not including diversity parameter			
Cyprus	Bentix	0,75	0,58
France	AMBI	0,83	0,58
Greece	Bentix	0,75	0,58
Spain	BOPA	0,95	0,54
Spain	MEDOCC	0,73	0,47

Transitional waters:

INTERCALIBRATION NOT COMPLETED

MEDITERRANEAN SEA GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Phytoplankton

Description of types for coastal waters that have been intercalibrated (applicable for phytoplankton only)

Type	Description	Density (kg/m^3)	Annual mean salinity (psu)
Type I	Highly influenced by freshwater input	< 25	< 34,5
Type IIA, IIA Adriatic	Moderately influenced by freshwater input (continent influence)	25-27	34,5-37,5
Type IIIW	Continental coast, not influenced by freshwater input (Western Basin).	> 27	> 37,5
Type IIIE	Not influenced by freshwater input (Eastern Basin)	> 27	> 37,5
Type Island-W	Island coast (Western Basin)	All range	All range

Countries sharing the types that have been intercalibrated:

Type I: France, Italy

Type IIA: France, Spain, Italy

Type IIA Adriatic: Italy, Slovenia

Type Island-W: France, Spain, Italy

Type IIIW: France, Spain, Italy

Type IIIE: Greece, Cyprus

Coastal waters

Results for parameter indicative of biomass (Chlorophyll a): SEE ANNEX II

Transitional waters:

INTERCALIBRATION NOT COMPLETED

MEDITERRANEAN SEA GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macroalgae and Angiosperms

Coastal waters

Macroalgae: sub-BQE indicative of Macroalgae and Angiosperms

Results: Ecological quality ratios of national classification systems intercalibrated

The following results apply to the upper infralittoral zone (3,5 – 0,2 m depth) in rocky coasts:

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Cyprus	EEI-c - Ecological Evaluation Index	0,76	0,48
France	CARLIT - Cartography of Littoral and upper-sublittoral rocky-shore communities	0,75	0,60
Greece	EEI-c - Ecological Evaluation Index	0,76	0,48
Italy	CARLIT - Cartography of Littoral and upper-sublittoral rocky-shore communities	0,75	0,60
Slovenia	EEI-c - Ecological Evaluation Index	0,76	0,48
Spain	CARLIT - Cartography of Littoral and upper-sublittoral rocky-shore communities	0,75	0,60

Seagrasses: sub-BQE indicative of Macroalgae and Angiosperms

Results: Ecological quality ratios of national classification systems intercalibrated

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
Cyprus	PREI - Posidonia oceanica Rapid Easy Index	0,775	0,55
France	PREI - Posidonia oceanica Rapid Easy Index	0,775	0,55
Italy	PREI - Posidonia oceanica Rapid Easy Index	0,775	0,55
Spain	POMI - Posidonia oceanica Multivariate Index	0,775	0,55
Spain	Valencian-CS	0,775	0,55

Macroalgae and Angiosperms

Transitional waters:

Results: Ecological quality ratios of national classification systems intercalibrated

Member State	National classification methods intercalibrated	Ecological Quality Ratios	
		High-good boundary	Good-moderate boundary
France	Exclame	0,80	0,60
Greece	EEI-c - Ecological Evaluation Index	0,70	0,40
Italy	MaQI – Macrophyte Quality Index	0,80	0,60

WATER CATEGORY: Coastal and transitional

GEOGRAPHICAL INTERCALIBRATION GROUP: Black Sea

Description of common intercalibration types

Type	Description
CW-BL1	Coastal waters Mesohaline, microtidal (< 1 m), shallow (< 30 m), moderately exposed, mixed substratum

Countries sharing the types that have been intercalibrated:

Bulgaria and Romania

BLACK SEA GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Phytoplankton

Coastal waters

Results: Ecological quality ratios of the national classification systems intercalibrated

Country	National classification systems intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Bulgaria	IBI	0,80	0,63
Romania	IBI	0,80	0,63

ANNEX II

WATER CATEGORY: Coastal and transitional

GEOGRAPHICAL INTERCALIBRATION GROUP: Baltic Sea GIG

BALTIC SEA GEOPGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Phytoplankton

Results for parameter indicative of biomass (Chlorophyll a): Ecological quality ratios and parameter values

The following results refer to summer mean May/June – September

Coastal waters

Member State	Ecological Quality Ratios for the national classification systems		Parameter values / ranges Chlorophyll-a (µg/l)	
	High-good boundary	Good-moderate boundary	High-good boundary	Good-moderate boundary
BC1				
Finland	0,76	0,59	1,7	2,2
Sweden	0,87	0,65	1,5	2,0
BC9				
Estonia	0,82	0,67	2,2	2,7
Finland	0,79	0,65	1,9	2,3
Sweden	0,80	0,67	1,5	1,8

WATER CATEGORY: Coastal and transitional

GEOGRAPHICAL INTERCALIBRATION GROUP: North East Atlantic

NORTHEAST ATLANTIC GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Benthic invertebrate fauna

Results: Ecological quality ratios of the national classification systems intercalibrated

The results are applicable to soft sediment habitats only (subtidal mud/sand habitats).

Coastal waters

Types NEA 1/26 and NEA7

Country	National classification systems intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Types NEA1/26 and NEA 7 (Indices responsive primarily to organic enrichment and toxic pollution pressures in soft sediment habitats)			
Denmark	DKI	0,67	0,53
France	M-AMBI	0,77	0,53
Germany	M-AMBI	0,85	0,70
Ireland	IQI	0,75	0,64

Country	National classification systems intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Netherlands	BEQI2	0,78	0,58
Norway	NQI	0,92	0,81
Portugal	P-BAT	0,79	0,58
Spain	M-AMBI	0,77	0,53
Spain	BO2A	0,78	0,44
United Kingdom	IQI	0,75	0,64
Types NEA1/26 (Index responsive to multiple pressures in multiple habitats)			
Belgium	BEQI	0,80	0,60

NORTHEAST ATLANTIC GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Phytoplankton

Coastal waters

Phytoplankton: parameter indicative of biomass parameter (Chlorophyll a)

Results: Ecological quality ratios and parameter values

Parameter values are expressed in µg/l as the 90 %ile value calculated over the defined growing season in a six year period. The results relate to geographic areas within the types as described in the technical report.

Type	Ecological Quality Ratios		Values (µg/l, 90 %ile)	
	High-Good	Good-Moderate	High-Good	Good-Moderate
NEA 1/26a				
France	0,67	0,33	5	10
Ireland	0,67	0,33	5	10
Norway	0,67	0,33	2,5	5
Spain South	0,67	0,33	5	10
Spain North East Cantabrian	0,67	0,33	1,5	3
Spain North Central Cantabrian	0,67	0,33	3	6
United Kingdom	0,67	0,33	5	10
NEA1/26b				
Belgium	0,67	0,44	10	15
France	0,67	0,44	10	15
Netherlands	0,67	0,44	10	15
United Kingdom	0,67	0,44	10	15
NEA3/4				
Germany	0,66	0,44	7-10	11-15

Type	Ecological Quality Ratios		Values (µg/l, 90 %ile)	
	High-Good	Good-Moderate	High-Good	Good-Moderate
Netherlands	0,66	0,44	10-14	15-21
NEA1/26e				
Portugal	0,67	0,44	6 – 8	9 – 12
Spain	0,67	0,44	6 – 8	9 – 12
NEA9				
Norway	0,67	0,33	2,5	5
Sweden	0,67	0,33	2,5	5
NEA10				
Norway	0,67	0,33	3	6
Sweden	0,67	0,33	3	6

NORTH EAST ATLANTIC GEOGRAPHICAL INTERCALIBRATION GROUP RESULTS

Biological Quality Element: Macroalgae and Angiosperms

Macroalgae: parameter intertidal blooming macroalgae soft bottom, indicative of abundance

Results: Ecological quality ratios of national parameter intercalibrated

Coastal waters

Country	National classification systems intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Type NEA1/26			
Germany	Bewertungssystem für opportunistische Makroalgen auf eulitoralen Weichböden der Küstengewässer	0,80	0,60
Ireland	OGA Tool - Opportunistic Green Macroalgal Abundance	0,80	0,60
United Kingdom	Opportunistic Macroalgae Blooming Tool OMBT	0,80	0,60

Transitional waters

Country	National classification systems intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Type NEA11			
Ireland	OGA Tool - Opportunistic Green Macroalgal Abundance	0,80	0,60
Portugal	BMI – Blooming Macroalgal Index (Assessment of blooming macroalgae)	0,80	0,60
United Kingdom	Opportunistic Macroalgae Blooming Tool OMBT	0,80	0,60

Results: Angiosperms – sub-BQE indicative of Macroalgae and Angiosperms

Coastal waters:

Results: Ecological quality ratios of the national classification systems intercalibrated

Country	National classification systems intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Type NEA1/26			
France	SBQ – Seagrass beds quality in coastal and transitional water bodies	0,80	0,60
Germany	SG - Bewertungssystem für Makroalgen und Seegräser der Küsten- und Übergangsgewässer zur Umsetzung der EG-Wasserrahmenrichtlinie in Deutschland	0,80	0,60
Ireland	Intertidal Seagrass Abundance and Species Composition	0,80	0,63

Transitional waters:

Results: Ecological quality ratios of the national classification systems intercalibrated

Type and country	National parameter intercalibrated	Ecological Quality Ratios	
		High-Good boundary	Good-Moderate boundary
Type NEA11			
France	SBQ – Seagrass beds quality in coastal and transitional water bodies	0,80	0,60
Germany	SG - Bewertungssystem für Makroalgen und Seegräser der Küsten- und Übergangsgewässer zur Umsetzung der EG-Wasserrahmenrichtlinie in Deutschland	0,80	0,60
Ireland	Intertidal Seagrass Abundance and Species Composition	0,83	0,70
Netherlands	Monitoring beds of SG per waterbody using arial photographs, ground truth and specifying surface & density per species	0,80	0,60
Portugal	SQI – Seagrass quality index for intertidal TW	0,80	0,60

WATER CATEGORY: Coastal and transitional

GEOGRAPHICAL INTERCALIBRATION GROUP: Mediterranean

Biological Quality Element: Phytoplankton

Phytoplankton: parameter indicative of biomass: (Chlorophyll –a)

Coastal waters

Results: Ecological quality ratios and parameter values

Parameter values are expressed in µg/l of Chlorophyll *a*, for the 90th percentile calculated over the year in at least a five year period. The results relate to geographic areas within the types as described in the technical report.

Type	Ecological Quality Ratios		Values (µg/l, 90 %ile)	
	High-Good	Good-Moderate	High-Good	Good-Moderate
Type II-A				
France	0,80	0,53	2,38	3,58
Spain	0,80	0,53	2,38	3,58
Italy (Tyrrhenian)	0,76	0,59	1,06	2,19
Type II-A Adriatic				
Italy	0,75	0,58	1,58	3,81
Slovenia	0,75	0,58	1,58	3,81
Type Island - W				
France	0,80	0,50	0,75	1,20
Spain	0,80	0,50	0,75	1,20
Type III-W				
France	0,80	0,50	1,13	1,80
Spain	0,80	0,50	1,13	1,80
Type III-E				
Cyprus	0,80	0,20	0,10	0,40
Greece	0,80	0,20	0,10	0,40