

# TRB report on environmental objectives and exemptions

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# Chapter 1 – Background

## Water Framework Directive

Water Framework Directive (Directive 2000/60/EC), as roof document, has purpose to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater, and prevent their further deterioration.

Within Article 4 of WFD environmental objectives for surface waters, groundwaters and protected areas have been given. Within section for groundwaters it is, inter alia, stated:

- i. Member States shall implement measures necessary to prevent or limit input of pollutants into groundwater and to prevent deterioration of the status of all bodies of groundwater, subject to the application of paragraphs 6 and 7 and without prejudice to paragraph 8 of this Article and subject to the application of Article 11(3)(j);
- ii. Member States shall protect, enhance and restore all bodies of groundwater, ensure a balance between abstraction and recharge of groundwater, with the aim of achieving good groundwater status at least 15 years after the date of entry into the force of this Directive, in accordance with the provisions laid down in Annex V, subject to the application of extensions determined in accordance with paragraph 4 and to the application of paragraphs 5, 6 and 7 without prejudice to paragraph 8 of this Article and subject to the application of Article 11(3)(j);
- iii. Member States shall implement the measures necessary to reverse any significant and sustained upward trend in concentration of any pollutant resulting from the impact of human activity in order progressively to reduce pollution of groundwater. Measures to achieve trend reversal shall be implemented in accordance with paragraphs 2, 3, 4 and 5 of Article 17, taking into account the applicable standards set out in relevant Community legislation, subject to application of paragraphs 6 and 7 and without prejudice to paragraph 8.

Having in mind that achieving of presented goals may be very costly and time consuming, within WFD exemptions for achieving of these goals are left as a possibility. Exemptions are defined within paragraphs 4 and 5 of the Article 4.

Paragraph 4.

The deadlines established under paragraph 1 may be extended for the purposes of phased achievement of the objectives for bodies of water, provided that no further deterioration occurs in the status of the affected body of water when all of the following conditions are met:

(a) Member States determine that all necessary improvements in the status of bodies of water cannot reasonably be achieved within the timescales set out in that paragraph for at least one of the following reasons:

- (i) the scale of improvements required can only be achieved in phases exceeding the timescale, for reasons of technical feasibility;
- (ii) completing the improvements within the timescale would be disproportionately expensive;
- (iii) natural conditions do not allow timely improvement in the status of the body of water.

(b) Extension of the deadline, and the reasons for it, are specifically set out and explained in the river basin management plan required under Article 13.

(c) Extensions shall be limited to a maximum of two further updates of the river basin management plan except in cases where the natural conditions are such that the objectives cannot be achieved within this period.

(d) A summary of the measures required under Article 11 which are envisaged as necessary to bring the bodies of water progressively to the required status by the extended deadline, the reasons for any significant delay in making these measures operational, and the expected timetable for their implementation are set out in the river basin management plan. A review of the implementation of these measures and a summary of any additional measures shall be included in updates of the river basin management plan.

#### Paragraph 5

Member States may aim to achieve less stringent environmental objectives than those required under paragraph 1 for specific bodies of water when they are so affected by human activity, as determined in accordance with Article 5(1), or their natural condition is such that the achievement of these objectives would be infeasible or disproportionately expensive, and all the following conditions are met:

(a) the environmental and socioeconomic needs served by such human activity cannot be achieved by other means, which are a significantly better environmental option not entailing disproportionate costs;

(b) Member States ensure,

- for surface water, the highest ecological and chemical status possible is achieved, given impacts that could not reasonably have been avoided due to the nature of the human activity or pollution,
- for groundwater, the least possible changes to good groundwater status, given impacts that could not reasonably have been avoided due to the nature of the human activity or pollution;

(c) no further deterioration occurs in the status of the affected body of water;

(d) the establishment of less stringent environmental objectives, and the reasons for it, are specifically mentioned in the river basin management plan required under Article 13 and those objectives are reviewed every six years.

## Groundwater Directive

In order to further institutionalize and organize protection of groundwater bodies, Groundwater Directive has been adopted in 2006 (Directive 2006/118/EC). This Directive defines procedures for assessing groundwater chemical status, identification of significant and sustained upward trends and definition of starting points for trend reversal and measures to prevent or limit inputs of pollutants into groundwater. All mentioned activities cannot be performed without results of groundwater monitoring, so that monitoring represents the basic „tool“ for all further activities on protection of groundwaters.

## Introduction – 1<sup>st</sup> TRBM, and other background studies

The 1<sup>st</sup> Integrated Tisza River Basin Management Plan (ITRBMP) was adopted in 2011. Plan was based on data provided by Tisza countries (Ukraine, Slovakia, Romania, Hungary and Serbia). The reference year was 2007 (The first Tisza Analyses Report – TAR was developed).

The development of a river basin management plan at the sub-basin scale (e.g., Tisza River Basin) added values in comparison with Danube River Basin Management Plan since it provides more details and assesses water management issues at the more comprehensive scale. In comparison with the DRBM Plan, the ITRBM Plan includes rivers with catchment size larger than 1000 km<sup>2</sup> instead

4000 km<sup>2</sup>, natural lakes >10 km<sup>2</sup> instead 100 km<sup>2</sup>, main canals and groundwater bodies >1000 km<sup>2</sup> and of basin-wide importance.

This means that in compared to the 11 identified transboundary groundwater bodies or groups of groundwater bodies of the Danube Basin-wide importance (so called “Roof level”, presented in the DRBMPs), the Tisza countries have collected and evaluated information related to:

- 85 national and transboundary groundwater bodies of importance to the Tisza River Basin, according to agreed criteria for importance (all GW bodies >1,000 km<sup>2</sup> and those TB GW bodies <1,000 km<sup>2</sup> considered to be of basin-wide importance);
- The assessment of pressures on the quantity of the groundwater bodies of basin-wide importance showed:
  - That over-abstraction prevents the achievement of good quantitative status for twelve groundwater bodies;
  - For ten groundwater bodies, the most significant pressure on quantity is illegal abstractions and indirect abstractions, by drainage or gravel pits (in Hungary);
  - Other significant pressures include abstraction for agriculture, public water supply and industry.

## Exemptions reported in 2010.

### Ukraine

Ukraine reported 9 groundwater bodies in 2010. No exemptions according to Articles 4.4 and 4.5 were reported in 2010.

### Romania

Romania reported 11 groundwater bodies in 2010. No exemptions according to Articles 4.4 and 4.5 were reported in 2010.

### Slovakia

Slovakia reported 7 groundwater bodies in 2010. No exemptions according to Articles 4.4 and 4.5 were reported in 2010.

### Hungary

Hungary reported 44 groundwater bodies in 2010. From 44 groundwater bodies exemptions according to Articles 4.4 and 4.5 were reported for 14 GWBs. According to Article 4.4 13 cases of GWBs were reported, 7 due to quantity, 3 due to quality and 3 due to both reasons. By Article 4.5 2 cases were reported regarding quantitative status.

### Serbia

Serbia reported 14 groundwater bodies in 2010. Since Serbia did not have a methodology for status assessment in 2010, no exemptions could be reported according to Article 4.4 and 4.5.

## What data and information are expected to be reported in 2017?

The table *JOINTISZA template for GWB data collection Act.4.1.xls* need to be checked/updated and completed.

**Please check, correct and complete all the fields and indicate in colour if pre-filled entries have been changed.**

TRB Groundwater bodies' data collection template will provide:

- The overview table will be in the main part of the Summary Report;
- **For each country: Please indicate number of monitoring sites for quantitative and chemical monitoring of GWB**
- For each country: Please indicate the reasons and the parameters for the risk of failing good CHEMICAL/QUANTITATIVE status in 2021 for the national shares of TRB GW-bodies;
- For each national share: Please provide the further characterisation of the national shares of TRB GW-bodies. The descriptive text (characterisation, methodology etc.) of the 2004 Article 5 report (Annex 12 of the Roof Report) might need to be updated as size, pressures and characteristics of GWB might have changed;
- For each national share: Please indicate the most important significant pressures on the national shares of TRB GW-bodies posing risk of failing good status in 2021.

**For missing data/information please insert NA (not available).**

*Please provide short overview on data collection, underline any relevant for GWBs in this template and/or insert figures maximum 10 pages.*

## GIS Data

It is necessary to update and verify the GIS data (shape files) on the DanubeGIS for the GW-bodies and monitoring stations, please consider the following:

- GIS data should be uploaded in the DanubeGIS in the WGS84/ETRS89 reference system or at least provide information about:
  - Name of Reference System;
  - Projection;
  - Ellipsoid must be added.
- For point features provide position information in coordinates not in decimal notation (latitude and longitude).

Please attach exported GIS maps (in digital formats such as .JPG or .TIFF).



## Chapter 2- Information and data sets reported in 2017

Data and information presented in this synthesis report on monitoring results are based on TRB countries reports.

### Country reports

#### Ukraine

Ukraine reported 9 groundwater bodies in 2010. No exemptions according to Articles 4.4 and 4.5 were reported in 2010. Same situation was in 2017. 9 GWBs reported, no exemptions according to Articles 4.4 and 4.5.

#### Romania

In 2017. Romania reported exemptions according to Articles 4.4 for groundwater bodies. Exemptions are reported in total for 3 cases of GWBS. According to Article 4.4 3 GWBs were reported all due to quality reasons. By Article 4.5 no cases were reported. Comparison exemptions according to Articles 4.4 and 4.5 within the TRB in Romania is presented in Table IV.2.

*Table IV.2: Exemptions according to Articles 4.4 and 4.5 in Romania 2010. – 2017.*

Romania	Exemptions 2010	Exemptions 2017
Art 4.4 Quantity	0	0
Art 4.4 Quality	0	3
Art 4.4 Both	0	0
Art 4.5 Quantity	0	0
Art 4.5 Quality	0	0
Art 4.5 Both	0	0

As it can be seen from presented data, there has been increase in number of exemption cases between 2010 and 2017. In 2010 there were no exemptions reported for GWBs and in 2017 there are 3 GWBs with reported exemptions according to Article 4.4.

#### Slovakia

Slovakia reported 7 groundwater bodies in 2010. No exemptions according to Articles 4.4 and 4.5 were reported in 2010. In 2017. Slovakia reported 8 GWBs, and same as in 2010 no exemptions according to Articles 4.4 and 4.5 were reported.

#### Hungary

In 2017 for 51 GWB's Hungary reported exemptions according to Articles 4.4 and 4.5 for groundwater bodies. Exemptions are reported in total for 29 cases of GWBS. According to Article 4.4 28 cases of GWBs were reported, 17 due to quantity, 6 due to quality and 5 due to both reasons. By

Article 4.5 4 cases were reported regarding quantitative status. Comparison exemptions according to Articles 4.4 and 4.5 within the TRB in Hungary is presented in Table IV.1.

*Table IV.1: Exemptions according to Articles 4.4 and 4.5 in Hungary 2010. – 2017.*

Hungary	Exemptions 2010	Exemptions 2017
Art 4.4 Quantity	7	17
Art 4.4 Quality	3	6
Art 4.4 Both	3	5
Art 4.5 Quantity	2	4
Art 4.5 Quality	0	0
Art 4.5 Both	0	0

As it can be seen from presented data, there has been increase in number of exemption cases between 2010 and 2017. In 2010. Exemptions were reported for 14 GWBs, and in 2017. 28 GWBs were reported with exemptions according to Articles 4.4 and/or 4.5.

## Serbia

Serbia reported 14 groundwater bodies in 2010. No exemptions according to Articles 4.4 and 4.5 were reported in 2010 having in mind that methodology for status assessment was not developed at the time. In 2017. Situation was unchanged, 14 GWBs were reported, but no exemptions according to Articles 4.4 and 4.5 were reported.

## Abbreviations

ITRBMP	Integrated Tisza River Basin Management Plan
GWB	Groundwater Body
WFD	Water Framework Directive

## References

Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy:

[http://ec.europa.eu/environment/water/water-framework/index\\_en.html](http://ec.europa.eu/environment/water/water-framework/index_en.html)

Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:372:0019:0031:EN:PDF>

Integrated Tisza River Basin Management Plan (ITRBM Plan) Data Collection -  
Groundwater

Implementation of the Joint Tisza Programme of Measures in the groundwater sector 2010.

<https://www.icpdr.org/main/danube-basin/tisza-basin>

JOINTISZA – Report for GWBs data collection – Ukraine

JOINTISZA – Report for GWBs data collection – Romania

JOINTISZA – Report for GWBs data collection – Slovakia

JOINTISZA – Report for GWBs data collection – Hungary

JOINTISZA – Report for GWBs data collection – Serbia