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#### NOTE

From:	General Secretariat of the Council
To:	Delegations
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Subject:	Proposal for a Directive of the European Parliament and of the Council on the quality of water intended for human consumption (recast) – Revised Presidency compromise text

With a view to the Working Party on the Environment (WPE) meeting on 1 February 2019, delegations will find in the Annex a revised compromise text prepared by the Presidency based on the discussions held at the WPE meeting of 17 January 2019.

Changes to the Commission proposal are set out in **bold**, while strikethrough indicates deletions. Modifications to the previous document (5136/19) are marked in **bold underlined** (or underlined only when text from the original proposal is reinstated) and ~~strikethrough underlined~~.

Proposal for a  
**DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**  
**on the quality of water intended for human consumption (recast)**

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union and, in particular,  
Article 192(1) thereof,

Having regard to the proposal from the European Commission,

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

Having regard to the opinion of the European Economic and Social Committee <sup>1</sup>,

Having regard to the opinion of the Committee of the Regions <sup>2</sup>

Acting in accordance with the ordinary legislative procedure,

Whereas:

- (1) Council Directive 98/83/EC <sup>3</sup> has been substantially amended several times <sup>4</sup>. Since further amendments are to be made, that Directive should be recast in the interests of clarity.

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<sup>1</sup> OJ C [...], [...], p. [...].

<sup>2</sup> OJ C [...], [...], p. [...].

<sup>3</sup> Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption (OJ L 330 5.12.1998, p. 32).

<sup>4</sup> See Annex V.

- (2) Directive 98/83/EC set the legal framework to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean. This Directive should pursue the same objective. To that end, it is necessary to lay down at Union level the minimum requirements with which water intended for that purpose must comply. Member States should take the necessary measures to ensure that water intended for human consumption is free from any micro-organisms and parasites and from substances which, in certain cases, constitute a potential danger to human health, and that it meets those minimum requirements.
- (3) It is necessary to exclude from the scope of this Directive natural mineral waters and waters which are medicinal products, since these waters are respectively covered by Directive 2009/54/EC of the European Parliament and of the Council <sup>5</sup> and Directive 2001/83/EC of the European Parliament and of the Council <sup>6</sup>. However, Directive 2009/54/EC deals with both natural mineral waters and spring waters, and only the former category should be exempted from the scope of this Directive. In accordance with the third subparagraph of Article 9(4) of Directive 2009/54/EC, spring waters should comply with the provisions of this Directive. In the case of water intended for human consumption put into bottles or containers intended for sale or used in the manufacture, preparation or treatment of food, the water should comply with the provisions of this Directive until the point of compliance (i.e. the tap), and should afterwards be considered as food, in accordance with the second subparagraph of Article 2 of Regulation (EC) No 178/2002 of the European Parliament and of the Council <sup>7</sup>.

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<sup>5</sup> Directive 2009/54/EC of the European Parliament and of the Council of 18 June 2009 on the exploitation and marketing of natural mineral waters (Recast) (OJ L 164, 26.6.2009, p. 45).

<sup>6</sup> Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to medicinal products for human use (OJ L 311, 28.11.2001, p. 67).

<sup>7</sup> Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (OJ L 31, 1.2.2002, p. 1).

**In addition, ~~the obligations of~~ food business operators that have their own water source and use it for the specific purposes of their business ~~and act as water suppliers should be also clarified under this Directive~~, may be exempted from the provisions of this Directive provided they comply with relevant obligations regarding ~~having in view that~~ hazard analysis and critical control point principles and remedial actions ~~are already applicable to them~~ under relevant Union legislation on food.**

- (4) Following the conclusion of the European citizens' initiative on the right to water (Right2Water) <sup>8</sup>, a Union-wide public consultation was launched and a Regulatory Fitness and Performance (REFIT) Evaluation of Directive 98/83/EC was performed <sup>9</sup>. It became apparent from that exercise that certain provisions of Directive 98/83/EC needed to be updated. Four areas were identified as offering scope for improvement, namely the list of quality-based parametric values, the limited reliance on a risk-based approach, the imprecise provisions on consumer information, and the disparities between approval systems for materials in contact with water intended for human consumption. In addition, the European citizens' initiative on the right to water identified as a distinct problem the fact that part of the population, especially marginalised groups, has no access to water intended for human consumption, which is also a commitment under Sustainable Development Goal 6 of UN Agenda 2030. A final issue identified is the general lack of awareness of water leakages, which are driven by underinvestment in maintenance and renewal of the water infrastructure, as also pointed out in the European Court of Auditors' Special Report on water infrastructure <sup>10</sup>.

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<sup>8</sup> COM(2014) 177 final.

<sup>9</sup> SWD(2016) 428 final.

<sup>10</sup> Special report of the European Court of Auditors SR 12/2017: "*Implementing the Drinking Water Directive: water quality and access to it improved in Bulgaria, Hungary and Romania, but investment needs remains substantial*".

- (5) The World Health Organisation (WHO) Regional Office for Europe conducted a detailed review of the list of parameters and parametric values laid down in Directive 98/83/EC in order to establish whether there is a need to adapt it in light of technical and scientific progress. In view of the results of that review <sup>11</sup>, enteric pathogens and *Legionella* should be controlled, six chemical parameters or parameter groups should be added, and three representative endocrine disrupting compounds should be considered with precautionary benchmark values. **These three endocrine disrupting compounds and the group of per- and polyfluoroalkyl substances should be included in a watch list to be monitored with regard to their potential presence in water intended for human consumption.** For ~~four~~ ~~three~~ of the ~~six~~ new parameters, parametric values that are more stringent than the ones proposed by the WHO, yet still feasible, should be laid down in light of **recent scientific opinions of the European Food Safety Authority** and the precautionary principle. **For one of the new parameters the number of representative substances has been reduced and the value adapted.** For lead, the WHO noted that concentrations should be as low as reasonably practical, **therefore, a transitional period of fifteen years should apply before the values become more stringent.** ~~and f~~ For chromium, the value remains under WHO review; therefore, ~~for both parameters,~~ a transitional period of ~~ten~~ **fifteen** years should apply before the values become more stringent.
- (6) The WHO also recommended that three parametric values be made less stringent and five parameters be removed from the list. Nevertheless, not ~~those~~ **all of these** changes are ~~not~~ considered necessary as the risk-based approach introduced by Commission Directive (EU) 2015/1787 <sup>12</sup> allows water suppliers to remove a parameter from the list to be monitored under certain conditions. Treatment techniques to meet those parametric values are already in place.

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<sup>11</sup> Drinking Water Parameter Cooperation Project of the WHO Regional Office for Europe "Support to the revision of Annex I Council Directive 98/83/EC on the quality of water intended for human consumption (Drinking Water Directive) Recommendation", 11 September 2017.

<sup>12</sup> Commission Directive (EU) 2015/1787 of 6 October 2015 amending Annexes II and III to Council Directive 98/83/EC on the quality of water intended for human consumption (OJ L 260, 7.10.2015, p. 6).

- (6a) The parametric values are based on the scientific knowledge available and the precautionary principle and are selected to ensure that water intended for human consumption can be consumed safely on a life-long basis, thus ensuring a high level of health protection;**
- (6b) A balance should be struck to prevent both microbiological and chemical risks and to that end, in the light of a future review of the parametric values, the establishment of parametric values applicable to water intended for human consumption should be based on public-health considerations and on a method of assessing risk;**
- (7) Where necessary to protect human health within their territories, Member States should be required to set values for additional parameters not included in Annex I .
- (7a) Safe drinking water means not only absence of harmful microorganisms and substances, but also the presence of certain amounts of natural minerals and essential elements, taking into consideration that long-term consumption of demineralized water or water very low in essential elements such as calcium and magnesium may compromise human health. Certain amount of these minerals is also vital in order to reduce ensure the water is neither aggressive nor corrosive ~~corrosion or aggression~~ and to improve taste of water. Minimum concentrations of these minerals in softened or demineralised water could be considered in accordance with local conditions.

- (8) Preventive safety planning and risk-based elements were only considered to a limited extent in Directive 98/83/EC. The first elements of a risk-based approach were already introduced in 2015 with Directive (EU) 2015/1787, which amended Directive 98/83/EC so as to allow Member States to derogate from the monitoring programmes they have established, provided credible risk assessments are performed, which may be based on the WHO's Guidelines for Drinking Water Quality <sup>13</sup>. Those Guidelines, laying down the so-called "Water Safety Plan" approach, together with standard EN 15975-2 concerning security of drinking water supply, are internationally recognised principles on which the production, distribution, monitoring and analysis of parameters in water intended for human consumption are based. They should be maintained in this Directive. To ensure that those principles are not limited to monitoring aspects, to focus time and resources on risks that matter and on cost-effective source measures, and to avoid analyses and efforts on non-relevant issues, it is appropriate to introduce a complete risk-based approach **to water safety, throughout that covers the whole** the supply chain, from the **catchment area**, abstraction ~~area~~, **treatment, storage and to** distribution ~~until the tap~~ **to the point of compliance**. That approach should consist of three components: first, an assessment by the Member State of the hazards associated with **bodies of water used for** the abstraction area ("**identification of hazard and hazardous events assessment**"), in line with the WHO's Guidelines and Water Safety Plan Manual <sup>14</sup>; second, a possibility for the water supplier to adapt monitoring to the main risks **and take the necessary measures to manage the risks identified in the supply chain** ("supply risk assessment **and management**"); and third, an assessment by the Member State of the possible risks stemming from the domestic distribution systems (e.g. *Legionella* or lead) ("domestic distribution risk assessment"). **Risk management measures should be established in relation to all three previously mentioned components**. Those assessments should be regularly reviewed, *inter alia*, in response to threats from climate-related extreme weather events, known changes of human activity in the abstraction area or in response to source-related incidents. The risk-based approach ensures a continuous exchange of information between competent authorities and water suppliers.

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<sup>13</sup> Guidelines for drinking water quality, Fourth Edition, World Health Organisation, 2011  
[http://www.who.int/water\\_sanitation\\_health/publications/2011/dwq\\_guidelines/en/index.html](http://www.who.int/water_sanitation_health/publications/2011/dwq_guidelines/en/index.html).

<sup>14</sup> Water Safety Plan Manual: step-by-step risk management for drinking water suppliers, World Health Organisation, 2009,  
[http://apps.who.int/iris/bitstream/10665/75141/1/9789241562638\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/75141/1/9789241562638_eng.pdf).

- (9) The **identification of hazard and hazardous events assessment** should be geared towards reducing the level of treatment required for the production of water intended for human consumption, for instance by reducing the pressures causing the pollution of water bodies used for abstraction of water intended for human consumption. To that end, Member States should **identify characterize the catchment areas and identify hazards and hazardous events that could deteriorate the quality of water, and** possible pollution sources associated with those water bodies and monitor pollutants which they identify as relevant, for instance because of the hazards identified (e.g. microplastics, nitrates, pesticides or pharmaceuticals identified under Directive 2000/60/EC of the European Parliament and of the Council <sup>15</sup>), because of their natural presence in the abstraction area (e.g. arsenic), or because of information from the water suppliers (e.g. sudden increase of a specific parameter in raw water). Those parameters should be used as markers that trigger action by competent authorities to reduce the pressure on the water bodies, such as prevention or mitigating measures (including research to understand impacts on health where necessary) **and mapping of the safeguard zones for groundwater and surface water, where those zones have been established according to Article 7(3) of the Directive 2000/60/EC**, to protect those water bodies and address the pollution source, in cooperation with water suppliers and stakeholders. **Where a Member States finds, via the identification of hazards and hazardous events assessment, that a parameter is not present in a given abstraction area (for instance because that substance never occurs in groundwaters or surface waters), then the Member State should inform the relevant water suppliers and may allow them to decrease the monitoring frequency for that parameter, or remove that parameter from the list of parameters to be monitored, without carrying out a supply risk assessment.**

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<sup>15</sup> Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1).



- (10) As regards the **identification of hazards and hazardous events assessment**, Directive 2000/60/EC requires Member States to identify water bodies used for the abstraction of water intended for human consumption, monitor them, and take the necessary measures to avoid deterioration in their quality in order to reduce the level of purification treatment required in the production of water that is fit for human consumption. To avoid any duplication of obligations, Member States should, when carrying out the **identification of hazards and hazardous events assessment**, ~~make use of~~ the monitoring carried out under Articles 7 and 8 of Directive 2000/60/EC and Annex V to that Directive and of the measures included in their programmes of measures pursuant to Article 11 of Directive 2000/60/EC.

- (11) The parametric values used to assess the quality of water intended for human consumption are to be complied with at the point where water intended for human consumption is made available to the appropriate user. However, the quality of water intended for human consumption can be influenced by the domestic distribution system. The WHO notes that, in the Union, *Legionella* causes the highest health burden of all waterborne pathogens. It is transmitted by warm water systems through inhalation, for instance during showering. It is therefore clearly linked to the domestic distribution system. Since imposing a unilateral obligation to monitor all private and public premises for this pathogen would lead to unreasonably high costs, a domestic distribution risk assessment is therefore more suited to address this issue. In addition, the potential risks stemming from products and materials in contact with water intended for human consumption should also be considered in the domestic distribution risk assessment. The domestic distribution risk assessment should therefore include, *inter alia*, focusing monitoring on priority premises **as identified by Member States (such as hospitals, healthcare institutions, childcare facilities, schools, educational institutions, buildings with a lodging facility, restaurants, bars, sports and shopping centers, penal institutions and campgrounds)**, assessing the risks stemming from the domestic distribution system and related products and materials, ~~and verifying the performance of construction products in contact with water intended for human consumption on the basis of their declaration of performance in accordance with Regulation (EU) No 305/2011 of the European Parliament and of the Council<sup>16</sup>. The information referred to in Articles 31 and 33 of Regulation (EC) No 1907/2006 of the European Parliament and of the Council<sup>17</sup> is also to be supplied together with the declaration of performance.~~ On the basis of this assessment, Member States should take all necessary measures to ensure, *inter alia*, that appropriate control and management measures (e.g. in case of outbreaks) are in place, in line with the guidance of the WHO<sup>18</sup>, and that the migration from construction products does not

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<sup>16</sup> ~~Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC (OJ L 88, 4.4.2011, p. 5).~~

<sup>17</sup> ~~Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1).~~

<sup>18</sup> "Legionella and the prevention of Legionellosis", World Health Organisation, 2007, [http://www.who.int/water\\_sanitation\\_health/emerging/legionella.pdf](http://www.who.int/water_sanitation_health/emerging/legionella.pdf)

endanger human health. ~~However, without prejudice to Regulation (EU) No 305/2011, where these measures would imply limits to the free movement of products and materials in the Union, these limits need to be duly justified and strictly proportionate, and not constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States.~~

- (12) The provisions of Directive 98/83/EC on quality assurance of treatment, equipment and materials did not succeed in addressing obstacles to the internal market when it comes to the free circulation of construction products in contact with water intended for human consumption. National product approvals are still in place, with different requirements from one Member State to another. This renders it difficult and costly for manufacturers to market their products all over the Union. The removal of technical barriers may only be effectively achieved by establishing harmonised **minimum requirements for materials** ~~technical specifications for construction products~~ in contact with water intended for human consumption **in this Directive** ~~under Regulation (EU) No 305/2011~~. That Regulation allows for the development of European standards harmonising the assessment methods for construction products in ~~contact with water intended for human consumption and for threshold levels and classes to be set in relation to the performance level of an essential characteristic~~. To that end, a standardisation request specifically requiring standardisation work on hygiene and safety for products and materials in contact with water intended for human consumption under Regulation (EU) No 305/2011 has been included in the 2017 standardisation Work Programme<sup>19</sup>, and a standard is to be issued by 2018. The publication of this harmonised standard in the Official Journal of the European Union will ensure a rational decision-making for placing or making available on the market safe construction products in contact with water intended for human consumption. As a consequence, the provisions on equipment and material in contact with water intended for human consumption should be deleted, partly replaced by provisions related to the domestic distribution risk assessment and complemented by relevant harmonised standards under Regulation (EU) No 305/2011.

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<sup>19</sup> SWD(2016) 185 final.

**(12a) The nature of materials in contact with water intended for human consumption can have an impact on quality of such water by leaching toxic substances, enhancing microbial growth and by influencing odour, colour or taste of such water. The evaluation of Directive 98/83/EC found that the Article on quality assurance of treatment, equipment and materials provided too much legal flexibility that led to different national approval systems of materials that come into contact with water intended for human consumption across the EU territory. Therefore, there is a need to establish more specific minimum hygiene requirements for materials that are intended to be used in existing installations in case of repair works or reconstruction or new installations for the abstraction, treatment or distribution of water intended for human consumption in order to guarantee that they do not compromise either directly or indirectly human health, affect adversely the colour, odour or taste of the water, enhance microbial growth in the water or leach contaminants into the water at levels that are higher than necessary in view of the intended purpose.**

**For this purpose, this Directive should set out minimum hygiene requirements for such materials and substances to be used in such materials by establishing European positive lists of substances, by developing procedure to add or remove a substance from European positive lists of substances and by establishing a common methodology for assessing the groups of materials (organic, cementitious, metallic, enamels and ceramic) and substances used in such materials. Such methodology should consist of reference to the European positive lists of substances, testing methods to identify acceptable migration limits for the release of substances into the water, procedure for approval of materials or any other acceptance criteria, where appropriate, such as pass and fail criteria for example or conditions for application and use. Member States should ensure that materials approved in accordance with minimum hygiene requirements are accompanied by appropriate technical documentation declaring their compliance with requirements set out in this Directive. Such documentation should be made available by request.**

Furthermore, no later than 7 years after the date of transposition of this Directive, the functioning of this system should be reviewed in order to assess whether the protection of human health is ensured throughout the Union and whether proper functioning of the internal market for materials in contact with water intended for human consumption is ensured. In addition, it should be assessed whether any further legislative proposal on the matter is needed, taking into account in particular the outcome of the evaluation of Regulation (EU) No 1935/2004 and Regulation (EU) No 305/2011.

**(12b) With the aim to minimise the potential presence of lead content in water intended for human consumption, components made of lead in domestic distribution systems can be substituted whenever it is economically and technically feasible, in particular in case of repair or reconstruction works in existing installations. These components could be substituted by materials which comply with the minimum requirements for materials that come into contact with water as established by this Directive. In order to accelerate this process, Member States could envisage programmes of measures for the substitution of components made of lead in existing domestic distribution systems or take other appropriate measure to raise awareness about the risks identified .**

(13) Each Member State should ensure that monitoring programmes are established to check that water intended for human consumption meets the requirements of this Directive. Most of the monitoring carried out for the purposes of this Directive is performed by water suppliers. A certain flexibility should be granted to water suppliers as regards the parameters they monitor for the purposes of the supply risk assessment. If a parameter is not detected, water suppliers should be able to decrease the monitoring frequency or stop monitoring that parameter altogether. The supply risk assessment should be applied to most parameters. However, a core list of parameters should always be monitored with a certain minimum frequency. This Directive mainly sets provisions on monitoring frequency for the purposes of compliance checks and only limited provisions on monitoring for operational purposes. Additional monitoring for operational purposes may be necessary to ensure the correct functioning of water treatment, at the discretion of water suppliers. In that regard, the water suppliers may refer to the WHO's Guidelines and Water Safety Plan Manual.

- (14) The risk-based approach should gradually be applied by all water suppliers, including small water suppliers, as the evaluation of Directive 98/83/EC showed deficiencies in its implementation by those suppliers, which were sometimes due to the cost of performing unnecessary monitoring operations. When applying the risk-based approach, security concerns should be taken into account.
- (15) In the event of non-compliance with the standards imposed by this Directive the Member State concerned should immediately investigate the cause and ensure that the necessary remedial action is taken as soon as possible to restore the quality of the water. In cases where the water supply constitutes a potential danger to human health, the supply of such water should be prohibited or its use restricted. ~~In addition, it is important to clarify that failure to meet the minimum requirements for values relating to microbiological and chemical parameters should automatically be considered by Member States as a potential danger to human health.~~ In cases where remedial action is necessary to restore the quality of water intended for human consumption, in accordance with Article 191(2) of the Treaty, priority should be given to action which rectifies the problem at source.

**(15 bis)** ~~(16) Member States should no longer be authorised to grant derogations from this Directive. Derogations were initially used to allow Member States up to nine years to resolve a non-compliance with a parametric value. This procedure proved to be burdensome for Member States and Commission alike. In addition, in some cases, it led to delays in remedial actions being taken, as the possibility for derogation was considered as a transitional period. The provision on derogations should therefore be deleted. For reasons of protection of human health, when parametric values are exceeded, the provisions related to remedial actions should apply immediately without the possibility of granting a derogation from the parametric value.~~

**Member States should be authorised, under certain conditions, to continue to grant derogations from this Directive and in this regard it is necessary to establish a proper framework for such derogations, provided that they must not constitute a potential danger to human health and provided that the supply of water intended for human consumption in the area concerned cannot otherwise be maintained by any other reasonable means.** Derogations granted by Member States pursuant to Article 9 of Directive 98/83/EC and still applicable at the date of entry into force of this Directive should, however, continue to apply until the end of the derogation but should not be **and renewed under this Directive only where the second derogation has not yet been granted.**

**(16)** The Commission, in its reply to the European citizens' initiative 'Right2Water' in 2014<sup>20</sup>, invited Member States to ensure access to a minimum water supply for all citizens, in accordance with the WHO recommendations. It also committed to continue to "*improve access to safe drinking water [...] for the whole population through environmental policies*"<sup>21</sup>. This is in line with UN Sustainable Development Goal 6 and the associated target to "*achieve universal and equitable access to safe and affordable drinking water for all*". The European Parliament, in its Resolution on the "follow-up to the European citizens' initiative Right2Water" <sup>22</sup>, "*requested that Member States should pay special attention to the needs of vulnerable groups in society*" <sup>23</sup>. ~~The concept of equitable access covers a wide array of aspects such as availability (due for instance to geographic reasons, lack of infrastructure or the specific situation of certain parts of the populations), quality, acceptability, or financial affordability. Concerning affordability of water, it is important to recall that, when setting water tariffs in accordance with the principle of recovery of costs set out in Directive 2000/60/EC, Member States may have regard to the variation in the economic and social conditions of the population and may therefore adopt social tariffs or take measures safeguarding populations at a socio-economic disadvantage. This Directive deals, in particular, with the aspects of access to water which are related to quality and availability. To address those aspects, as part of the reply to the European citizens' initiative and to contribute to the implementation of Principle 20 of the European Pillar of Social Rights<sup>24</sup> that states that "everyone has the right to access essential services of good quality, including water", Member States should be required to tackle the issue of access to water at national level whilst enjoying some discretion as to the exact type of measures to be implemented. This can be done through actions aimed, *inter alia*, at improving access to water intended for human consumption for all, for instance with freely accessible fountains in cities, and promoting its use by encouraging the free provision of water intended for human consumption in public buildings and restaurants.~~

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<sup>20</sup> COM(2014)177 final.

<sup>21</sup> COM(2014)177 final, p. 12.

<sup>22</sup> P8\_TA(2015)0294.

<sup>23</sup> P8\_TA(2015)0294, paragraph 62.

<sup>24</sup> ~~Interinstitutional Proclamation on the European Pillar of Social Rights (2017/C 428/09) of 17 November 2017 (OJ C 428, 13.12.2017, p. 10).~~



(17) The Union and the Member States have committed themselves, within their respective competences, to the Sustainable Development Goals, whilst recognising the primary responsibility of Member States in the follow-up and review at national, regional and global levels of progress towards the SDGs. Some of the SDGs, including the right to water, do not fall within the Union's environment policy or the Union's social policy, which is limited and complementary in nature. Whilst bearing in mind the limits of Union competence, it is nevertheless appropriate to ensure that MS' continued commitment to the right to water should be in accordance with this Directive, whilst respecting the principle of subsidiarity.

In this regard, Member States currently undertake considerable efforts to improve access to water intended for human consumption. In addition, many Member States are also parties to the Protocol on Water and Health of the UNECE Water Convention and WHO EURO, which aims to protect human health by better water management and by reducing water-related diseases. Member States could make use of the guidance documents developed under the remit of this Protocol to assess the policy background<sup>25</sup> and the baseline situation on access to water<sup>26</sup> and define the necessary actions<sup>27</sup> to improve equitable access to all.

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<sup>25</sup> [https://www.unece.org/env/water/publications/ece\\_mp.wh\\_6.html](https://www.unece.org/env/water/publications/ece_mp.wh_6.html)

<sup>26</sup> [https://www.unece.org/env/water/publications/ece\\_mp.wh\\_8.html](https://www.unece.org/env/water/publications/ece_mp.wh_8.html)

<sup>27</sup> <https://www.unece.org/environmental-policy/conventions/water/envwaterpublicationspub/brochuresabout-the-protocol-on-water-and-health/2016/guidance-note-on-the-development-of-action-plans-toensure-equitable-access-to-water-and-sanitation/doc.html>

~~(18) The European Parliament, in its Resolution on the "follow-up to the European citizens' initiative Right2Water"<sup>28</sup>, "requested *that Member States should pay special attention to the needs of vulnerable groups in society*"<sup>29</sup>. The specific situation of minority cultures, such as Roma, Sinti, Travellers, Kalé, Gens du voyage etc., whether sedentary or not—in particular their lack of access to drinking water—was also acknowledged in the Commission Report on the implementation of the EU Framework for National Roma Integration Strategies<sup>30</sup> and the Council Recommendation on effective Roma integration measures in the Member States<sup>31</sup>. In light of that general context, it is appropriate that Member States pay particular attention to vulnerable and marginalised groups by taking the necessary measures to ensure that those groups have access to water. Without prejudice to the right of the Member States to define those groups, they should at least include refugees, nomadic communities, homeless people and minority cultures such as Roma, Sinti, Travellers, Kalé, Gens du voyage, etc., whether sedentary or not. Such measures to ensure access, left to the appreciation of the Member States, might for example include providing alternative supply systems (individual treatment devices), providing water via tankers (trucks and cisterns) and ensuring the necessary infrastructure for camps.~~

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<sup>28</sup>—P8\_TA(2015)0294.

<sup>29</sup>—P8\_TA(2015)0294, paragraph 62.

<sup>30</sup>—COM(2014) 209 final.

<sup>31</sup>—Council Recommendation (2013/C 378/01) of 9 December 2013 on effective Roma integration measures in the Member States (OJ C 378, 24.12.2013, p. 1).

(19) The 7<sup>th</sup> Environment Action Programme to 2020 ‘Living well, within the limits of our planet’ <sup>32</sup>, requires that the public have access to clear environmental information at national level. Directive 98/83/EC only provided for passive access to information, meaning that Member States merely had to ensure that information was available. Those provisions should therefore be replaced to ensure that up-to-date information **on the quality of water** is easily accessible, for instance on a website whose link should be actively distributed **or by other means as appropriate**. The up-to-date information should ~~not only~~ include, **as a minimum the price or cost of water supplied per litre or cubic metre, as well as** results from the monitoring programmes, **types of water treatment and disinfection applied, information on exceedance of the parametric values relevant for human health, summary of the relevant supply risk assessment, advice on how to reduce water consumption and avoid health risks due to stagnant water**, but also additional information that the public may find useful, such as information on indicators (iron, hardness, minerals, etc.), which often influence consumers' perception of tap water. **In addition, as a response to consumers interests on water issues, they should be given access, upon request, to available historical data on monitoring results and types of treatment.** ~~To that end, the indicator parameters of Directive 98/83/EC that did not provide health-related information should be replaced by on-line information on those parameters. For very large water suppliers, additional information on, *inter alia*, energy efficiency, management, governance, cost structure, and treatment applied, should also be available on-line.~~ It is assumed that better consumer knowledge and improved transparency will contribute to increasing citizens' confidence in the water supplied to them. This in turn is expected to lead to increased use of tap water, thereby contributing to reduced plastic litter and greenhouse gas emissions, and a positive impact on climate change mitigation and the environment as a whole.

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<sup>32</sup> Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 ‘Living well, within the limits of our planet’ (OJ L 354, 28.12.2013, p. 171).

~~(20) For the same reasons, and in order to make consumers more aware of the implications of water consumption, they should also receive information (for instance on their invoice or by smart applications) on the volume consumed, the cost structure of the tariff charged by the water supplier, including variable and fixed costs, as well as on the price per litre of water intended for human consumption, thereby allowing a comparison with the price of bottled water. **on how to reduce water consumption or avoid health risks due to stagnant water.**~~

~~(21) The principles to be considered in the setting of water tariffs, namely recovery of costs for water services and polluter pays, are set out in Directive 2000/60/EC. However, the financial sustainability of the provision of water services is not always ensured, sometimes leading to under investment in the maintenance of water infrastructure. With the improvement of monitoring techniques, leakage rates — mainly due to such under investment — have become increasingly apparent and reduction of water losses should be encouraged at Union level to improve the efficiency of water infrastructure. In line with the principle of subsidiarity, that issue should be addressed by increasing transparency and consumer information on leakage rates and energy efficiency.~~

- (22) Directive 2003/4/EC of the European Parliament and of the Council <sup>33</sup> aims at guaranteeing the right of access to environmental information in the Member States in line with the Aarhus Convention. It encompasses broad obligations related both to making environmental information available upon request and actively disseminating such information. Directive 2007/2/EC of the European Parliament and of the Council <sup>34</sup> is also of broad scope, covering the sharing of spatial information, including data-sets on different environmental topics. It is important that provisions of this Directive related to access to information and data-sharing arrangements complement those Directives and do not create a separate legal regime. Therefore, the provisions of this Directive on information to the public and on information on monitoring of implementation should be without prejudice to Directives 2003/4/EC and 2007/2/EC.
- (23) Directive 98/83/EC did not set out reporting obligations for small water suppliers. To remedy this, and to address the need for implementation and compliance information, a new system should be introduced, whereby Member States are required to set up, keep up-to-date and make accessible to the Commission and the European Environmental Agency data sets containing only relevant data, such as exceedances of parametric values and incidents of a certain significance. This should ensure that the administrative burden on all entities remains as limited as possible. To ensure the appropriate infrastructure for public access, reporting and data-sharing between public authorities, Member States should base the data specifications on Directive 2007/2/EC and its implementing acts.

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<sup>33</sup> Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC (OJ L 41, 14.2.2003, p. 26).

<sup>34</sup> Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) (OJ L 108, 25.4.2007, p. 1).

- (24) Data reported by Member States is not only necessary for the purposes of compliance checking but is also essential to enable the Commission to monitor and assess the performance of the legislation against the objectives it pursues in order to inform any future evaluation of the legislation in accordance with paragraph 22 of the Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on Better Law-Making of 13 April 2016 <sup>35</sup>. In that context, there is a need for relevant data that will allow better assessment of the efficiency, effectiveness, relevance, and EU value added of the Directive, hence the necessity to ensure appropriate reporting mechanisms that can also serve as indicators for future evaluations of this Directive.
- (25) Pursuant to paragraph 22 of the Interinstitutional Agreement on Better Law-Making, the Commission should carry out an evaluation of this Directive within a certain period of time from the date set for its transposition. That evaluation should be based on experience gathered and data collected during the implementation of the Directive, on relevant scientific, analytical, epidemiological data, and on any available WHO recommendations.
- (26) This Directive respects the fundamental rights and observes the principles recognised by the Charter of Fundamental Rights of the European Union. In particular, this Directive seeks to promote the principles relating to health care, access to services of general economic interest, environmental protection and consumer protection.

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<sup>35</sup> OJ L 123, 12.5.2016, p. 1.

(27) **The aim of this Directive is to protect human health and the environment.** As the Court of Justice has held on numerous occasions, it would be incompatible with the binding effect which the third paragraph of Article 288 of the Treaty ascribes to a Directive to exclude, in principle, the possibility of an obligation imposed by a Directive from being relied on by persons concerned. That consideration applies particularly in respect of a Directive which has the objective of protecting human health from the adverse effects of any contamination of water intended for human consumption. ~~Therefore, in accordance with the Aarhus Convention on access to information, public participation in decision-making and access to justice in environmental matters<sup>36</sup>, members of the public concerned should have access to justice in order to contribute to the protection of the right to live in an environment which is adequate for personal health and well-being. In addition, where a large number of persons are in a 'mass harm situation', due to the same illegal practices relating to the violation of rights granted by this Directive, they should have the possibility to use collective redress mechanisms, where such mechanisms have been established by Member States in line with Commission Recommendation 2013/396/EU<sup>37</sup>.~~

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<sup>36</sup> — OJ L 124, 17.5.2005, p. 4.

<sup>37</sup> — ~~Commission Recommendation of 11 June 2013 on common principles for injunctive and compensatory collective redress mechanisms in the Member States concerning violations of rights granted under Union law (OJ L 201, 26.7.2013, p. 60).~~

- (28) In order to adapt this Directive to scientific and technical progress or to specify monitoring requirements for the purposes of the hazard and domestic distribution risk assessments, the power to adopt acts in accordance with Article 290 of the Treaty should be delegated to the Commission to amend Annexes ~~III I to IV~~ to this Directive. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts. In addition, the empowerment laid down in Annex I, part C, Note 10, of Directive 98/83/EC, to set monitoring frequencies and monitoring methods for radioactive substances has become obsolete due to the adoption of Council Directive 2013/51/Euratom <sup>38</sup> and should therefore be deleted. The empowerment laid down in the second subparagraph of part A of Annex III to Directive 98/83/EC concerning amendments of the Directive is no longer necessary and should be deleted.
- (29) In order to ensure uniform conditions for the implementation of this Directive, implementing powers should be conferred on the Commission ~~for the adoption of the format of, and modalities to present, the information on water intended for human consumption to be provided to all persons supplied, as well as~~ for the adoption of the format of, and modalities to present, the information to be provided by Member States and compiled by the European Environmental Agency on the implementation of this Directive. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council <sup>39</sup>.

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<sup>38</sup> Council Directive 2013/51/Euratom of 22 October 2013 laying down requirements for the protection of the health of the general public with regard to radioactive substances in water intended for human consumption (OJ L 296, 7.11.2013, p. 12).

<sup>39</sup> Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by the Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).



(30) Without prejudice to the requirements of Directive 2008/99/EC of the European Parliament and of the Council <sup>40</sup>, Member States should lay down rules on penalties applicable to infringements of the provisions of this Directive and ensure that they are implemented. The penalties should be effective, proportionate and dissuasive.

**(30bis) In order for water suppliers to have a full set of data available when they start applying the supply risk assessment, a transition period of 3 years should be introduced for new parameters. This will allow Member States to carry out the identification of hazards and hazardous events assessment during those first 3 years after application date of this Directive, thereby already providing data to water suppliers on these new parameters, and avoiding any unnecessary monitoring by water suppliers, if it is found that a parameter does not need to be monitored via this first identification of hazards and hazardous events assessment. During those initial 3 years, water suppliers should nevertheless carry out the supply risk assessment (or use existing risk assessments already carried out under Directive (EU) 2015/1787) for those parameters that were part of Annex I to Directive 98/83/EC, given that data will already be available for those parameters when this Directive enters into force.**

(31) Directive 2013/51/Euratom lays down specific arrangements for the monitoring of radioactive substances in water intended for human consumption. Therefore, this Directive should not set out parametric values on radioactivity.

(32) Since the objective of this Directive, namely the protection of human health, cannot be sufficiently achieved by the Member States but can rather, by reason of the scale and effects of the action, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on the European Union. In accordance with the principle of proportionality as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

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<sup>40</sup> Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law (OJ L 328, 6.12.2008, p. 28).

- (33) The obligation to transpose this Directive into national law should be confined to those provisions which represent a substantive amendment as compared to the earlier Directives. The obligation to transpose the provisions which are unchanged arises under the earlier Directives.
- (34) This Directive should be without prejudice to the obligations of the Member States relating to the time-limits for the transposition into national law of the Directives set out in Annex V, Part B,

HAVE ADOPTED THIS DIRECTIVE:

*Article 1*

*Objective*

1. This Directive concerns the quality of water intended for human consumption.
2. The objective of this Directive shall be to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.

*Article 2*

*Definitions*

For the purposes of this Directive:

1. 'water intended for human consumption' shall mean:
  - a) all water either in its original state or after treatment, intended for drinking, cooking, food preparation ~~or production~~, or other domestic purposes in both public and private premises, regardless of its origin and whether it is supplied from a distribution network, supplied from a tanker or, ~~for spring waters~~, put in bottles **or containers, including spring waters.**
  - b) **all water used in any food business-production undertaking for the manufacture, processing, preservation or marketing of products or substances intended for human consumption unless the competent national authorities are satisfied that the quality of the water cannot affect the wholesomeness of the foodstuff in its finished form.**

2. 'domestic distribution system' shall mean the pipework, fittings and appliances which are installed between the taps that are normally used for human consumption in both public and private premises and the distribution network but only if they are not the responsibility of the water supplier, in its capacity as a water supplier, according to the relevant national law.
3. 'water supplier' shall mean an entity supplying ~~at least 10 m<sup>3</sup> of~~ water intended for human consumption ~~a day as an average~~.
4. 'small water supplier' shall mean a water supplier supplying less than ~~500~~ **1000** m<sup>3</sup> per day **as an average** or serving less than 5 000 people.
5. 'large water supplier' shall mean a water supplier supplying at least ~~500~~ **1000** m<sup>3</sup> per day **as an average** or serving at least 5 000 people.
6. 'very large water supplier' shall mean a water supplier supplying at least ~~5 000~~ **10000** m<sup>3</sup> per day **as an average** or serving at least 50 000 people.
7. 'priority premises' shall mean large premises ~~for public use~~ with many users potentially exposed to water-related risks, **in particular large premises for public use**, such as hospitals, healthcare institutions, buildings with a lodging facility, penal institutions and ~~campgrounds~~, as identified by Member States.
- ~~8. 'vulnerable and marginalised groups' shall mean people isolated from society, as a result of discrimination or of a lack of access to rights, resources, or opportunities, and who are potentially more vulnerable and/or are more exposed to a range of possible risks relating to their water-related health, safety, lack of education, engagement in harmful practices, or other risks, compared to the rest of society due to a continuous lack of access to safe water intended for human consumption.~~
8. 'substance' for the purpose of Article 10a shall mean starting substance used for the production of organic materials, composition list of metallic materials and other substances used in enamels, cementitious, ceramic or other materials referred to in Art 10a(1).

9. ‘the European positive lists of substances’ shall mean the lists of substances that can be used in materials referred to in Article 10a(1) and that have been established in accordance with Article 10a(3).
10. ‘food business’ shall mean food business as defined in Article 3(2) of Regulation 178/2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety
11. ‘food business operator’ shall mean food business operator as defined in Article 3 (3) of Regulation 178/2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety
- 12. ‘hazard’ shall mean biological, chemical, physical or radiological agent in, or condition of water, with the potential to cause harm to public health**
- 13. ‘hazardous event’ shall mean event that introduces hazards to, or fails to remove them from, the drinking water supply system**
- 14. ‘risk’ shall mean combination of the likelihood of a hazardous event and the severity of consequences, if the hazard occurs in the drinking water supply system**

### *Article 3*

#### *Exemptions*

1. This Directive shall not apply to:
- (a) natural mineral waters recognised as such by the responsible authority, as referred to in Directive 2009/54/EC;
  - (b) waters which are medicinal products within the meaning of Directive 2001/83/EC.

2. Member States may exempt from the provisions of this Directive:
- (a) water intended exclusively for those purposes for which the competent authorities are satisfied that the quality of the water has no influence, either directly or indirectly, on the health of the consumers concerned;
  - (b) water intended for human consumption from an individual supply providing less than 10 m<sup>3</sup> a day as an average or serving fewer than 50 persons, unless the water is supplied as part of a commercial or public activity.
3. Member States that have recourse to the exemptions provided for in paragraph 2(b) shall ensure that the population concerned is informed thereof and of any action that can be taken to protect human health from the adverse effects resulting from any contamination of water intended for human consumption. In addition, when a potential danger to human health arising out of the quality of such water is apparent, the population concerned shall promptly be given appropriate advice.
4. ~~**Food business operators as defined under Article 3(3) of Regulation (EC) No 178/2002 that act as water suppliers and using the water in the food production shall only be subject to Articles 1, 2, 3, 4, 5, 6, and 11 and 12bis of this Directive, provided their water supply is subject to relevant obligations under the procedures on hazard analysis and critical control point principles and remedial actions under relevant Union legislation on food.**~~ Member States may exempt food business operators from the provisions of this Directive, as regards the water used for the specific purposes of the food business, if the competent national authorities are satisfied that the quality of that water cannot affect the safety of the foodstuff in its finished form and provided their water supply complies with relevant obligations under the procedures on hazard analysis and critical control point principles and remedial actions under relevant Union legislation on food.

- 5. Water suppliers supplying less than 10m<sup>3</sup> a day as an average or servicing fewer than 50 persons as part of a commercial or public activity shall only be subject to Articles 1, 2, 3, 4, 5, 6, 8, ~~9~~, 11, ~~and~~ 12 and 12bis of this Directive, as well as relevant Annexes.**

*Article 4*

*General obligations*

1. Without prejudice to their obligations under other Union provisions, Member States shall take the measures necessary to ensure that water intended for human consumption is wholesome and clean. For the purposes of the minimum requirements of this Directive, water intended for human consumption shall be wholesome and clean if it meets all the following conditions :
  - (a) it is free from any micro-organisms and parasites and from any substances which, in numbers or concentrations, constitute a potential danger to human health;
  - (b) it meets the minimum requirements set out in Annex I, Parts A, ~~and B and D~~;
  - (c) Member States have taken all other measures necessary to comply with the requirements set out in Articles 5 to 12 of this Directive.

**The minimum requirements set out in Annex I, Part A, do not apply to bottled spring water as referred to in Directive 2009/54/EC.**

2. Member States shall ensure that the measures taken to implement this Directive in no circumstances have the effect of allowing, directly or indirectly, any deterioration of the present quality of water intended for human consumption or any increase in the pollution of waters used for the production of water intended for human consumption.

- 3. ~~In addition,~~ Member States shall take all measures necessary to ensure that, where disinfection forms part of the preparation or distribution of water intended for human consumption, the efficiency of the disinfection treatment applied is verified, and that any contamination from disinfection by-products is kept as low as possible without compromising the disinfection and that, where treatment chemicals are used in the preparation of water intended for human consumption they comply with the relevant provisions of Regulation 528/2012 concerning the making available on the market and use of biocidal products, as well as the relevant EU chemicals legislation, and that, any contamination from treatment chemicals is kept as low as possible and any substances remaining in the water do not jeopardise the achievement of the general obligations set out in this Article.**

*Article 5*

*Quality standards*

1. Member States shall set values applicable to water intended for human consumption for the parameters set out in Annex I, **Part A, B, ~~and C~~ and D**, which shall not be less stringent than the values set out therein.
2. **As regards the parameters set out in Annex I, Part C, the values need be fixed only for monitoring purposes and for the fulfilment of the obligations imposed in Article 12.**
3. A Member State shall set values for additional parameters not included in Annex I where the protection of human health within its national territory or part of it so requires. The values set shall, as a minimum, satisfy the requirements of Article 4(1)(a).



*Article 6*  
*Point of compliance*

1. The parametric values set in accordance with Article 5 ~~for the parameters listed in Annex I, parts A and B,~~ shall be complied with:
  - (a) in the case of water supplied from a distribution network, at the point, within premises or an establishment, at which it emerges from the taps that are normally used for human consumption;
  - (b) in the case of water supplied from a tanker, at the point at which it emerges from the tanker;
  - (c) in the case of waters, **including spring waters, put into bottles or containers,** at the point at which the water is put into the bottles **or containers.**
  - (d) **in the case of water used in a food ~~production undertaking~~ business, at the point where the water is used in the ~~undertaking~~ business.**
- 2. In the case of water covered by paragraph 1(a), Member States shall be deemed to have fulfilled their obligations under this Article and under Articles 4 and 12(2) where it can be established that non-compliance with the parametric values set in accordance with Article 5 is due to the domestic distribution system or the maintenance thereof except in priority premises covered by Article 10.]**
3. **Where paragraph 2 applies and there is a risk that water covered by paragraph 1(a) would not comply with the parametric values established in accordance with Article 5, Member States shall nevertheless ensure that:**
  - (a) **appropriate measures are taken to reduce or eliminate the risk of non-compliance with the parametric values, such as advising property owners of any possible remedial action they could take, and/or**

if necessary, other measures, such as appropriate treatment techniques, are taken to change the nature or properties of the water before it is supplied so as to reduce or eliminate the risk of the water not complying with the parametric values after supply;

and

- (b) the consumers concerned are duly informed and advised of any possible additional remedial action that they should take.

#### *Article 7*

##### *Risk-based approach to water safety*

1. Member States shall ensure that the supply, treatment and distribution of water intended for human consumption is subject to a risk-based approach **that covers the whole supply chain from the catchment area, abstraction, treatment, storage and distribution of water to the point of compliance specified in Article 6.**

**The risk-based approach shall entail** ~~composed of~~ the following elements:

- a) **the identification of hazards and hazardous events in a hazard assessment of** ~~a hazard assessment of~~ bodies of water used for the abstraction of water intended for human consumption **and their management**, in accordance with Article 8;
- b) a supply risk assessment **and management** carried out by the water suppliers ~~for the purposes of monitoring the quality of the water they supply~~, in accordance with Article 9 and Annex II, part C;
- c) a domestic distribution risk assessment, in accordance with Article 10;
- d) ~~the establishment of risk management measures in relation to points (a), (b) and (c) as set out in Article 8(5), 9(5) and 10(2) respectively.~~

The risk based approach shall be based on the european standard EN 15975-2 concerning ‘security of drinking water supply, guidelines for risk and crisis management’ or other international corresponding standards or guidelines such as the Water Safety Plans of the WHO<sup>41</sup>.

2. **The first identification of hazards and hazardous events** ~~hazard assessments~~ shall be carried out by ~~[3 years after the end date for the transposition of this Directive]~~ **4 years after the review and update of river basin management plans in accordance with Article 13 of the Directive 2000/60/EC**. ~~It~~ They shall be reviewed ~~every 3 years at regular intervals of no longer than 6 years, and updated where necessary.~~
3. **The first supply risk assessments** shall be carried out by ~~very large water suppliers and large water suppliers by [4 years after the end date for transposition of this Directive]~~ **4 years after the review and update of river basin management plans in accordance with Article 13 of the Directive 2000/60/EC**, and by ~~small water suppliers by [6 years after the end date for transposition of this Directive]~~ **6 years after the review and update of river basin management plans in accordance with Article 13 of the Directive 2000/60/EC**. They shall be reviewed at regular intervals of no longer than 6 years, and updated where necessary.
4. **The first domestic distribution risk assessments** shall be carried out by ~~[3 4 years after the end-date for transposition of this Directive]~~. They shall be reviewed every 3 years, and updated where necessary.
5. **Risk management measures referred to in paragraph 1 (d) shall be put in place on the basis of the risk assessment performed under paragraphs 2, 3 and 4. Those measures shall be regularly updated, taking into account:**
  - a) **the outcomes of monitoring and the analyses of pressures and impacts, including the status of water body, conducted pursuant to articles 5, 7 and 8 of the Directive 2000/60/EC;**

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<sup>41</sup> [https://www.who.int/water\\_sanitation\\_health/publications/drinking-water-quality-guidelines-4-including-1st-addendum/en/](https://www.who.int/water_sanitation_health/publications/drinking-water-quality-guidelines-4-including-1st-addendum/en/)

- b) ~~the information gathered according to Articles 8, 9 and 10 of this Directive;~~
- c) ~~the provisions laid down according to Article 10a of this Directive.~~

## *Article 8*

### ***Identification of hazards and hazardous events in ~~Hazard assessment of bodies of water used for the abstraction of water intended for human consumption~~ and their management***

1. Without prejudice to Articles 6 and 7 of Directive 2000/60/EC, Member States shall ensure that ~~a hazard assessment~~ **an identification of hazards and hazardous events** is performed covering the bodies **or part of bodies** of water used for the abstraction of water intended for human consumption that provide more than 10 m<sup>3</sup> a day as an average. The ~~hazard assessment~~ **identification of hazards and hazardous events** shall include the following elements:

- (a) ~~determination of the specific bodies or part of bodies of water by considering in particular the abstraction area(s), including interconnections, runoff and recharge processes and details of land-use.~~

#### **(a) characterisation of the catchment area(s) including:**

- (i) **identification and mapping of the catchment area(s);**
- (ii) **mapping of the safeguard zones when those zones have been established in accordance with Article 7(3) of Directive 2000/60/EC,**
- (iii) **geo-references ~~for~~ of all abstraction points in the catchment area(s);**
- (iv) **details of land-use, runoff, interconnections and recharge processes in the catchment areas(s).**

**To that end, Member States may use information collected in accordance to Articles 5 and 7 of Directive 2000/60/EC;**

~~(b) — identification of and geo-references for all abstraction points in the bodies or part of bodies of water covered by the hazard assessment and identification of concentrations or emissions of relevant pollutants and substances of anthropogenic origin that may constitute or indicate a hazard for human health through water intended for human consumption, and their possible sources. To that end, Member States may use information gathered pursuant to Directive 2000/60/EC;~~

~~(b) — mapping of the safeguard zones, where those zones have been established in accordance with Article 7(3) of Directive 2000/60/EC, and the protected areas referred to in Article 6 of that Directive;~~

**(b e) identification of hazards and hazardous events and their possible consequences that might deteriorate the quality affecting the bodies or part of bodies of water in the catchment area body of water or part thereof covered by the hazard assessment to the extent that it may constitute a risk for human health through water consumption or may lead to unacceptable deterioration of the water quality of water intended for human consumption, considering the level of purification treatment used or needed in the production of water intended for human consumption.** To that end, Member States may use the review of the impact of human activity undertaken in accordance with Article 5 of Directive 2000/60/EC and information on significant pressures collected in accordance with points 1.4 and 2.3 to 2.5 of Annex II to that Directive;

(~~c~~ **d**) regular monitoring in the bodies **or part of bodies** of water covered by the **identification of hazards assessment and hazardous events** of relevant **parameters, substances or** pollutants selected from the following lists:

- (i) parameters listed in parts A and B of Annex I to this Directive;
- (ii) groundwater pollutants listed in Annex I to Directive 2006/118/EC of the European Parliament and of the Council<sup>42</sup>, and pollutants and indicators of pollution for which threshold values have been established by Member States in accordance with Annex II to that Directive;
- (iii) priority substances and certain other pollutants listed in Annex I to Directive 2008/105/EC of the European Parliament and of the Council<sup>43</sup>;
- (iv) other relevant pollutants, such as ~~microplastics, or~~ river basin specific pollutants established by Member States on the basis of the review of the impact of human activity undertaken in accordance with Article 5 of Directive 2000/60/EC and information on significant pressures collected in accordance with point 1.4 of Annex II to that Directive. **For certain endocrine disrupting compounds including Beta-estradiol (50-28-2), Bisphenol A and Nonylphenol known to be present in surface waters, Member States shall put in place monitoring requirements with regard to their potential presence in water intended for human consumption. The results of analysis should be communicated to the Commission in accordance with Article 15(1)(b).**

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<sup>42</sup> 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 (OJ L 372, 27.12.2006, p. 19).

<sup>43</sup> Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council (OJ L 348, 24.12.2008, p. 84).

**(v) ~~any other parameters of natural origin~~ naturally occurring substances that may pose a hazard for human health through water intended for human consumption.**

Member States shall select from points (i) to (iv) for monitoring the parameters, substances or pollutants that are considered relevant in light of the hazards identified under point (c) or in light of the information provided by the water suppliers in accordance with paragraph 2.

**For parameters listed in Part E of Annex I to this Directive, Member States shall put in place monitoring requirements with regard to their potential presence in raw water intended for human consumption. For the establishment of these monitoring requirements, Member States may use the technical guidelines as referred to in Art.11 (6).~~The results of analysis should be communicated to the Commission in accordance with Article 15(1)(b).~~**

For the purpose of the regular monitoring, Member States may use available ~~the~~ monitoring carried out in accordance with Articles 7 and 8 of Directive 2000/60/EC or other Union legislation.

2. ~~Those W~~ water suppliers that monitor their raw water ~~for the purposes of operational monitoring~~ shall be required to inform the competent authorities of trends and of unusual concentrations of monitored parameters, substances or pollutants.
3. Member States shall **ensure that water suppliers and competent authorities have access to the available information specified in paragraphs 1 and 2, and that relevant** ~~inform water supplier using the body or part of body of water suppliers~~ **are informed of have access to** ~~covered by the hazard assessment of the results of the monitoring results obtained~~ carried out under paragraph 1(~~d~~ **c**) and may, on the basis of those monitoring results:
  - (a) require water suppliers to carry out additional monitoring ~~or treatment of certain~~ of **relevant** parameters;

(b) allow water suppliers to decrease the monitoring frequency of certain parameters, **or remove a parameter from the list of parameters to be monitored by the water supplier** without being required to carry out a supply risk assessment, provided that:

(i) they are not core parameters within the meaning of Annex II, part B, point 1, and ~~provided that~~

(ii) no factor that can be reasonably anticipated is likely to cause deterioration of the quality of the water.

4. In such cases where a water supplier is allowed to decrease the monitoring frequency **or remove a raw water derived parameter from the list of parameters to be monitored** as referred to in paragraph 2 3(b), Member States shall **ensure that** ~~continue to~~ regularly monitoring **ing of** those parameters **continues** in the **determined bodies or part of bodies** ~~body~~ of water ~~covered by the hazard assessment~~.

5. On the basis of the information collected under paragraphs 1 and 2 and gathered under Directive 2000/60/EC, Member States shall ensure that ~~take~~ the following measures **are taken** in cooperation with water suppliers and other stakeholders, ~~or ensure that those measures are taken by the water suppliers:~~

- (a) prevention measures **needed** to reduce the level of treatment required and to safeguard the water quality, ~~including~~ **taking into account the** measures referred to in Article 11(3)(d) of Directive 2000/60/EC;
- (b) mitigating measures **and other preventive measures**, which are considered necessary on the basis of the monitoring carried out under paragraph 1(d), in order to ~~identify and~~ address the **identified** pollution sources.;
- (c) **mapping of the safeguard zones for groundwater and surface water, where those zones have been established according to Article 7(3) of Directive 2000/60/EC, and any other relevant zones.**

Member States shall regularly review any such measure.



Article 9

Supply risk assessment **and management**

1. Member States shall ensure that water suppliers perform a supply risk assessment ~~that include the whole water supply chain from the catchment area through abstraction, treatment, storage and distribution of water to the compliance point specified in Article 6~~ **in accordance with Part C of Annex II and take risk management measures in accordance with paragraph 5.**
2. Member States shall ensure that the supply risk assessment:
  - (a) takes into account the results of identification of hazards and hazardous events carried out in accordance with Article 8 of this Directive and of the monitoring carried out pursuant to Article 7(1) and Article 8 of Directive 2000/60/EC;
  - (b) **entails a description of the supply system, an identification of the hazards and hazardous events in the supply system and an assessment of the risks they may pose to the quality of water intended for human consumption;**
  - (c) entails a supply-specific operational **and verification** monitoring programme according to Article 11;
  - ~~(d) includes verification of whether materials in contact with water intended for human consumption used in the supply chain are in line with the requirements as specified in Article 10a.~~

3. ~~The~~ **On the basis of the results of the supply risk assessment, Member States shall allow also providing ~~provide~~ for the possibility to ~~remove~~ for removing of a parameter from the list of parameters to be monitored or adjust the monitoring frequency in the following cases:**

- (a) **on the basis of the occurrence of a parameter in the raw water, in accordance with the ~~hazard assessment~~ identification of hazards and hazardous events as set out in Article 8(3)(b);**
- (b) **when a parameter can only result from the use of certain treatment technique or disinfection method, and that technique or method is not used by the water supplier; or**
- (c) **on the basis of the specifications set out in Annex II, part C.**

**The supply risk assessment shall concern ~~for any~~ parameters listed in Annex I, parts A, and B and ~~E~~ C that are not core parameters according to part B of Annex II, ~~depending on their occurrence in the raw water.~~**

~~For those parameters Member States shall ensure that water suppliers can deviate from the sampling frequencies set out in Annex II, part B, in accordance with the specifications set out in Annex II, part C.~~

~~To that end, water suppliers shall be required to take into account the results of the hazard assessment carried out in accordance with Article 8 of this Directive and of the monitoring carried out pursuant to Article 7(1) and Article 8 of Directive 2000/60/EC.~~

4. ~~Supply risk assessment shall be approved by the competent authorities.~~ **Member States shall ensure that water suppliers prepare the supply risk assessment in accordance with the paragraphs 1 and 2 of this Article.**

5. On the basis of the supply risk assessment, Member States shall ensure that water suppliers take the necessary measures relevant to their activity within the water supply chain, as foreseen under Article 8(5) (a) and (b), and any other additional relevant measures in order to manage the risks identified in the supply chain that may compromise the quality of water intended for human consumption.
6. Member States may exempt water suppliers supplying between 10 m<sup>3</sup> and 100 m<sup>3</sup> per day as an average or serving between 50 and 500 people from performing supply risk assessment and management. In case of such exemption, those water suppliers shall carry out regular monitoring in accordance with Article 11.

#### *Article 10*

##### *Domestic Distribution Risk Assessment*

1. Member States shall ensure that a domestic distribution risk assessment is performed, comprising the following elements:
  - (a) ~~an general analysis assessment~~ of the potential risks associated with ~~the~~ domestic distribution systems, and with ~~the~~ related products and materials, and whether they affect the quality of water at the point where it emerges from the taps normally used for human consumption, ~~in particular~~ where water is supplied to the public in priority premises;
  - (b) ~~regular~~ **surveillance** monitoring of the parameters listed in Annex I, part **D** €, in **priority** premises where the potential danger to human health is considered highest. Relevant parameters and **priority** premises for monitoring shall be selected on the basis of the ~~assessment~~ **general analysis** performed under point (a).

With regard to the ~~regular~~ **surveillance** monitoring referred to in the first subparagraph, Member States may set up a monitoring strategy focusing on priority premises;

**For the purpose of this paragraph, Member States may include in the domestic distribution risk assessment other premises whose domestic distribution systems could pose a risk to human health.**

~~(c) a verification of whether the performance of construction products in contact with water intended for human consumption is adequate in relation to the essential characteristics linked to the basic requirement for construction works specified in point 3(e) of Annex I to Regulation (EU) No 305/2011.~~

2. Where Member States ~~conclude~~ **consider**, on the basis of the ~~assessment~~ **analysis** carried out under paragraph 1(a), that there is a risk to human health stemming from the domestic distribution systems or from the related products and materials, or where monitoring carried out in accordance with paragraph 1(b) demonstrates that the parametric values set out in Annex I, part **D** €, are not met, they ~~Member States~~ shall **consider the following measures**:

- (a) take appropriate measures to eliminate or reduce the risk of non-compliance with the parametric values set out in Annex I, part **D** €;
- (b) take all necessary measures to ensure that the migration of substances or chemicals from construction products used in the preparation or distribution of water intended for human consumption does not, either directly or indirectly, endanger human health;
- ~~(c) take other measures, such as appropriate conditioning techniques, in cooperation with water suppliers, to change the nature or properties of the water before it is supplied so as to eliminate or reduce the risk of non-compliance with the parametric values after supply;~~
- (d) duly inform and advise consumers about the conditions of consumption and use of the water and about possible action to avoid the risk from reoccurring;

- (e) ~~organise~~ **ensure promote organisation of** training for plumbers and other professionals dealing with domestic distribution systems and the installation of construction products;
- (f) for *Legionella*, ensure that effective control and management measures are in place to prevent and address possible disease outbreaks;-
- (g) **for lead, establish programmes of measures to address the identified risks for consumers, such as raising awareness measures and, if economically and technically feasible, measures for early substitution of components made of lead in existing domestic distribution systems.**

~~Article 10a~~

*Minimum requirements for materials that come into contact with water intended for human consumption ~~and for starting substances to be used in such materials~~*

1. For the purposes of Article 4, Member States shall ensure that materials that are intended to be used in new installations or, in case of ~~major~~ repair works or reconstruction, in existing installations for abstraction, treatment or distribution of water intended for human consumption and that come into contact with such water do not:
  - (a) directly or indirectly compromise human health protection as provided for by this Directive;
  - (b) adversely affect the colour, odour or taste of the water;
  - (c) enhance microbial growth in the water;
  - (d) leach contaminants into the water at levels that are higher than necessary in view of the intended purpose.

2. For the purpose of ensuring application of paragraph 1, the specific minimum hygiene requirements for materials referred to in paragraph 1 and substances to be used in such materials shall comprise of:
- (a) common methodology for assessing the groups of materials (organic, cementitious, metallic, enamels and ceramic) and substances to be used in such materials, that may consist of reference to the European positive lists of substances, assessment test methods of the effects on water quality, including test conditions and the identification of relevant substances/parameters to be controlled in migration water, assessment criteria (pass/fail) of the test results, conditions of application or use, procedure for approval of materials or any other acceptance criteria, where appropriate;
  - (b) establishment of European positive lists of substances in accordance with paragraph 3;
  - (c) a procedure for applications from economic operators to include or remove substances from the European positive lists of substances. These applications, submitted by the Member States to the Commission, shall be accompanied by risk assessments and initial technical opinions;

For the purpose of points (a) and (c) of this paragraph, the Commission shall be empowered to adopt delegated acts in accordance with Article 19.

3. For the purpose of point (b) of paragraph 2, the Commission shall adopt implementing acts in accordance with examination procedure referred to in Article 20 to establish the European positive lists of substances. Substances placed on such lists may be accompanied by specific conditions or restrictions for their use in materials.

**The first European positive lists of substances shall be adopted no later than 4 years following the entry into force of this Directive and shall be based, among others, on existing national positive lists of substances and on the risk assessments that led to the establishment of such national lists. The Commission shall regularly review and update the European positive lists of substances in line with the latest scientific and technological developments.**

- 4. Member States shall consider that substances on the European positive lists of substances, which comply with any conditions or restrictions included in those lists, do not directly or indirectly compromise human health protection as provided by this Directive.**
- 5. Member States shall consider that materials approved in accordance with specific requirements set out in paragraphs 2 and 3 are compliant with the general requirements set out in paragraph 1.**
- 6. Member States shall ensure that materials approved in accordance with requirements set out in paragraphs 2 and 3 are accompanied by appropriate technical documentation declaring their compliance with requirements set out in this article. Such documentation shall be made available on demand.**
- 7. The Commission may request one or several European standardisation organisations to draft a European standard or European standardisation for developing test methods ~~minimum requirements~~ set out in paragraph 2 (a) in accordance with Article 10 of Regulation (EU) No 1025/2012.**
- 8. In the absence of adoption of specific minimum hygiene requirements as referred to in paragraph 2, Member States are entitled to maintain or adopt national measures on specific minimum hygiene requirements for materials referred to in paragraph 1, provided they comply with the rules of the Treaty.**

9. In the absence of any Union harmonisation legislation on products that consist of materials referred to in paragraph 1, Member States may require national measures related to products that consist of materials referred to in paragraph 1 to take into consideration requirements under Article 4 and those established for materials under this Article.
10. The Commission shall, no later than 7 years after the date of transposition of this Directive, based in particular on experience gained with the application of Regulation (EU) No 1935/2004 and Regulation (EU) No 305/2011, review the functioning of the system as set out in this Article and present a report to the European Parliament and the Council assessing whether:
- (a) the protection of human health is adequately ensured throughout the Union;
  - (b) the proper functioning of the internal market for materials in contact with water intended for human consumption is ensured;
  - (c) there is a need for any further legislative proposal on the matter.

#### *Article 11*

#### *Monitoring*

1. Member States shall take all measures necessary to ensure that regular monitoring of the quality of water intended for human consumption is carried out **in accordance with this Article and Annex II part A and B**, in order to check that the water available to consumers meets the requirements of this Directive and in particular the parametric values set in accordance with Article 5. Samples shall be taken so that they are representative of the quality of the water consumed throughout the year.



In addition, Member States shall take all measures necessary to ensure that, where disinfection forms part of the preparation or distribution of water intended for human consumption, the efficiency of the disinfection treatment applied is verified, and that any contamination from disinfection by products is kept as low as possible without compromising the disinfection and that, where treatment chemicals are used in the preparation of water intended for human consumption they comply with the relevant provisions of Regulation 528/2012 concerning the making available on the market and use of biocidal products, as well as the relevant EU chemicals legislation, and that, any contamination from treatment chemicals is kept as low as possible and any substances remaining in the water do not jeopardise the achievement of the general obligations set out in Article 4.

2. To meet the obligations imposed in paragraph 1, appropriate monitoring programmes shall be established in accordance with Annex II, Part A for all water intended for human consumption. Those monitoring programmes shall **be supply-specific, taking into account the outcomes of the risk assessment for the determined bodies or part of bodies of water and for the supply chain, and shall** consist of the following elements:
  - (a) monitoring of the parameters listed in Annex I, parts A, ~~and B, C and D~~, and of the parameters set in accordance with Article 5(2-3), in accordance with Annex II, and, where a supply risk assessment is performed, in accordance with Article 9 **and Annex II part C, unless a Member State decides that one of these parameters can be removed from the list of parameters to be monitored, in accordance with Article 8(3)(b);**
  - (b) **surveillance** monitoring of the parameters listed in Annex I, part ~~C~~ **D**, for the purposes of the domestic distribution risk assessment, as provided for under Article 10(1)(b);
  - (c) **monitoring of the parameters listed in Annex I Part E with regard to their potential presence in raw water, as provided for under Article 8(1) (c) water intended for human consumption based on the technical guidelines as referred to in paragraph 6 of this Article;**

(d) **monitoring** for the purposes of the ~~hazard assessment~~ **identification of hazards and hazardous events**, as provided for under Article 8(1)(~~c d~~);

(e) **operational monitoring** ~~complementary to verification monitoring with the aim to provide rapid insight in operational performance and water quality problems and to allow rapid remedial action. Operational monitoring~~ shall be conducted in accordance with Annex II, part A, point 3.

3. The sampling points shall be determined by the competent authorities and shall meet the relevant requirements set out in Annex II, part D.

4. Member States shall comply with the specifications for the analyses of parameters set out in Annex III, in accordance with the following principles:

(a) methods of analysis other than those specified in Annex III, Part A, may be used, provided that it can be demonstrated that the results obtained are at least as reliable as those produced by the methods specified by providing the Commission with all relevant information concerning such methods and their equivalence;

(b) for those parameters listed in Annex III, Part B, any method of analysis may be used provided that it meets the requirements set out therein.

5. Member States shall ensure that additional monitoring is carried out on a case-by-case basis of substances and micro-organisms for which no parametric value has been set in accordance with Article 5, if there is reason to suspect that they may be present in amounts or numbers which constitute a potential danger to human health.

6. **Commission, in collaboration with Member States, may develop technical guidelines regarding the analytical methods, including detection limits and parameter values and frequency of sampling for monitoring of the substances included in Annex I Part E, in particular for PFASs of concern.**

7. Commission may adopt implementing acts for the updating of the list of parameters included in Annex I Part E to include substances or compounds of emerging concern to health. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 20.

*Article 12*

*Remedial action and restrictions in use*

1. Member States shall ensure that any failure to meet the parametric values set in accordance with Article 5 is immediately investigated in order to identify the cause.
2. If, despite the measures taken to meet the obligations imposed in Article 4(1), water intended for human consumption does not meet the parametric values set in accordance with Article 5, **and subject to Article 6(2)** the Member State concerned shall ensure that the necessary remedial action is taken as soon as possible to restore its quality and shall give priority to their enforcement action, having regard *inter alia* to the extent to which the relevant parametric value has been exceeded and ~~to the associated~~ potential danger to human health.

In case of non-compliance with the parametric values set out in Annex I, part **D** ~~€~~, remedial action shall include **relevant** ~~the~~ measures **as** set out in points (a) to (~~g~~**g**) of Article 10(2).

3. Regardless of whether any failure to meet the parametric values has occurred, Member States shall ensure that any supply of water intended for human consumption which constitutes a potential danger to human health is prohibited or its use restricted and that any other remedial action is taken that is necessary to protect human health.

~~Member States shall automatically consider any failure to meet the minimum requirements for parametric values set out in Annex I, parts A and B, as a potential danger to human health.~~

4. **Where ~~in~~ the cases described in paragraphs 2 and 3, are considered as relevant for human health**, Member States shall as soon as possible take all of the following measures:
- (a) notify all affected consumers of the potential danger to human health and its cause, of the exceedance of a parametric value and of the remedial actions taken, including prohibition, restriction or other action;
  - (b) give, and regularly update, the necessary advice to consumers on conditions of consumption and use of the water, taking particular account of potential vulnerable population groups with increased water related health risks;
  - (c) inform consumers once it has been established that there is no longer a potential danger to human health and inform them that the service has resumed back to normal.
5. The competent authorities or other relevant bodies shall decide what action under paragraph 3 shall be taken, bearing in mind the risks to human health which would be caused by an interruption of the supply or a restriction in the use of water intended for human consumption.
6. **In the event of non-compliance with the parametric values or with the specifications set out in Annex I, Parts ~~C and E~~, Member States shall consider whether that non-compliance poses any risk to human health. They shall take remedial action to restore the quality of the water where that is necessary to protect human health.**
7. **Where Member States consider the non-compliance with a parametric value to be trivial, they do not need to take the measures set out in paragraph 4.**

*Article 12bis*

*Derogations*

1. In duly justified circumstances, Member States may provide for derogations from the parametric values set out in Annex I, Part B, or set in accordance with Article 5(3), up to a maximum value to be determined by them, provided no derogation constitutes a potential danger to human health; and provided that the supply of water intended for human consumption in the area concerned cannot otherwise be maintained by any other reasonable means. ~~The derogation shall be limited to the following cases:~~

~~(a) a newly defined water supply zone;~~

~~(b) the parameters listed in the first paragraph of Article 22bis.~~

~~(c) a new source of pollution detected in a water supply zone that was previously in compliance with this Directive,~~

~~Member States shall communicate to the Commission the grounds of the decision to grant a derogation as well as the information foreseen in paragraph 2.~~

The derogation shall be limited to as short a time as possible and shall not exceed three years, towards the end of which a review shall be conducted to determine whether sufficient progress has been made.

In exceptional circumstances, Member States may ask the Commission for grant a second derogation for a period not exceeding three years. ~~The Commission shall take a decision on any such request within three months.~~

2. Any derogation granted in accordance with paragraphs 1 shall specify the following:

(a) the grounds for the derogation;

- (b) the parameter concerned, previous relevant monitoring results, and the maximum permissible value under the derogation;
- (c) the geographical area, the quantity of water supplied each day, the population concerned and whether or not any relevant food-~~production-undertaking~~ business would be affected;
- (d) an appropriate monitoring scheme, with an increased monitoring frequency where necessary;
- (e) a summary of the plan for the necessary remedial action, including a timetable for the work and an estimate of the cost and provisions for reviewing;
- (f) the required duration of the derogation.

3. If the competent authorities consider the non-compliance with the parametric value to be trivial, and if action taken in accordance with Article 12 is sufficient to remedy the problem within 30 days, the requirements of paragraph 2 need not be applied.

In that event, only the maximum permissible value for the parameter concerned and the time allowed to remedy the problem shall be set by the competent authorities or other relevant bodies.

4. Recourse may no longer be had to paragraph 3 if failure to comply with any one parametric value for a given water supply has occurred on more than 30 days on aggregate during the previous 12 months.
5. Any Member State which has recourse to the derogations provided for in this Article shall ensure that the population affected by any such derogation is promptly informed in an appropriate manner of the derogation and of the conditions governing it. In addition the Member State shall, where necessary, ensure that advice is given to particular population groups for which the derogation could present a special risk.

These obligations shall not apply in the circumstances described in paragraph 3 unless the competent authorities decide otherwise.

6. Except where ~~With the exception of derogations granted in accordance with~~ paragraph 3 applies, a Member State shall inform the Commission within two months of any derogation concerning an individual supply of water exceeding 1000 m<sup>3</sup> a day as an average or serving more than 5000 persons, including the information specified in paragraph 2.
7. This Article shall not apply to water intended for human consumption offered ~~for sale~~ in bottles or containers.

### *Article 13*

#### *Access to water intended for human consumption*

Member States shall take necessary measures to improve or maintain access to water intended for human consumption for all, in particular for vulnerable and marginalised groups, as defined by the Member States, and to promote the use of tap water intended for human consumption by choosing the most appropriate measures, taking into account local, geographical and cultural circumstances.

~~1. Without prejudice to Article 9 of Directive 2000/60/EC, Member States shall take all necessary measures to improve access for all to water intended for human consumption and promote its use on their territory. This shall include all of the following measures:~~

- (a) **To this end, Member States shall ensure that** ~~identifying~~ people without access to water intended for human consumption and reasons for lack of access (such as belonging to a vulnerable and marginalised group) **are identified**, assessing possibilities to improve access for those people and informing them about possibilities of connecting to the distribution network or about alternative means to have access to such water;

~~(b) — setting up and maintaining outdoors and indoors equipment for free access to water intended for human consumption in public spaces;~~

~~(c) — promoting water intended for human consumption by:~~

**Measures to promote tap water intended for human consumption may include:**

- (i) launching campaigns to inform citizens about the quality of such water;
- (ii) encouraging the provision of such water in administrations and public buildings;
- (iii) encouraging the free provision of such water in restaurants, canteens, and catering services.

~~2. — On the basis of the information gathered under paragraph 1(a), Member States shall take all necessary measures to ensure access to water intended for human consumption for vulnerable and marginalised groups.~~

~~In case those groups do not have access to water intended for human consumption, Member States shall immediately inform them of the quality of the water they are using and of any action that can be taken to avoid adverse effects on human health resulting from any contamination of that water.~~

*Article 14*

*Information to the public*

1. Member States shall ensure that adequate and up-to-date information on **the quality of** water intended for human consumption is available online **or by other means** to all persons supplied, in accordance with Annex IV.



2. Member States shall ensure that all persons supplied receive regularly and at least once a year, and in the most appropriate form (for instance on their invoice or by **digital means such as** smart applications) without having to request it, **information on the price or cost of water intended for human consumption supplied per litre and or cubic metre and relevant information on the quality of water supplied including** ~~the following information:~~

~~(a) — information on the cost structure of the tariff charged per cubic metre of water intended for human consumption, including fixed and variable costs, presenting at least costs related to the following elements:~~

~~(i) — measures taken by water suppliers for the purposes of the hazard assessment pursuant to Article 8(5);~~

~~(ii) — treatment and distribution of water intended for human consumption;~~

~~(iii) — waste water collection and treatment;~~

~~(iv) — measures taken pursuant to Article 13, in case such measures have been taken by water suppliers;~~

~~(b) — the price of water intended for human consumption supplied per litre and cubic metre;~~

~~(c) — the volume consumed by the household, at least per year or per billing period, together with yearly trends of consumption;~~

~~(d) — comparisons of the yearly water consumption of the household with an average consumption for a household in the same category;~~

~~(e) — a link to the website containing the information set out in Annex IV.~~

~~The Commission may adopt implementing acts specifying the format of, and modalities to present, the information to be provided under the first subparagraph. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 20(2).~~

3. Paragraphs 1 and 2 are without prejudice to Directives 2003/4/EC and 2007/2/EC.

*Article 15*

*Information on monitoring of implementation*

1. Without prejudice to Directive 2003/4/EC and Directive 2007/2/EC, Member States, assisted by the European Environment Agency, shall:
- (a) set up by ... [6 years after the end-date for transposition of this Directive], and update every 6 years thereafter, a data set containing information on ~~any efforts made~~ **measures taken to improve access to and to promote the use of water intended for human consumption,** ~~measures taken under Article 13,~~ and on the share of their population that has access to water intended for human consumption. **This does not include bottled water;**
  - (b) set up by ... [~~3~~ **4** years after the end-date for transposition of this Directive], and update every 3 years thereafter, a data set containing the **identification of hazards and hazardous events** and domestic distribution risk assessments performed in accordance with Articles 8 and 10, respectively, including the following elements:
    - (i) ~~the abstraction points identified~~ **information on catchment areas** under Article 8(1)(a);
    - (ii) the monitoring results collected in accordance with Article 8(1)(~~c~~ **d**) and Article 10(1)(b); and
    - (iii) concise information on measures taken pursuant to Article 8(5) and Article 10(2);
  - (c) set up, and update annually thereafter, a data set containing monitoring results, in cases of exceedances of the parametric values set in Annex I, parts A and B, collected in accordance with Articles 9 and 11 and information about the remedial actions taken in accordance with Article 12;

- (d) set up, and update annually thereafter, a data set containing information on drinking water incidents that have caused potential danger to human health, regardless of whether any failure to meet the parametric values occurred, that lasted for more than 10 consecutive days and that affected at least 1 000 people, including the causes of those incidents and remedial actions taken in accordance with Article 12.
- (e) **set up, and update annually thereafter, a data set containing information on all derogations granted in accordance with Article 12bis(1), including the information foreseen in Article 12bis(2).**

Where possible, spatial data services as defined in Article 3(4) of Directive 2007/2/EC shall be used to present those data sets.

**Member States may derogate from this paragraph on any of the grounds referred to in Article 13(1) of Directive 2007/2/EC.**

2. Member States shall ensure that the Commission, the European Environment Agency and the European Centre for Disease Prevention and Control have access to the data sets referred to in paragraph 1.
3. The European Environment Agency shall publish and update a Union-wide overview on the basis of the data collected by the Member States on a regular basis or following receipt of a request from the Commission.

The Union-wide overview shall include, as appropriate, indicators for outputs, results and impacts of this Directive, Union-wide overview maps and Member State overview reports.

4. The Commission may adopt implementing acts specifying the format of, and modalities to present, the information to be provided in accordance with paragraphs 1 and 3, including detailed requirements regarding the indicators, the Union-wide overview maps and the Member State overview reports referred to in paragraph 3.

The implementing acts referred to in the first subparagraph shall be adopted in accordance with the examination procedure referred to in Article 20(2).

#### *Article 16*

##### *Access to justice*

~~1. Member States shall ensure that, natural or legal persons or their associations, organisations or groups, in accordance with national legislation or practice, have access to a review procedure before a court of law or another independent and impartial body established by law to challenge the substantive or procedural legality of decisions, actions or omissions related to the implementation of Articles 4, 5, 12, 13, and 14, when one of the following conditions is fulfilled:~~

~~(a) they have a sufficient interest;~~

~~(b) they maintain the impairment of a right, where the administrative procedural law of the relevant Member State requires this as a precondition.~~

~~2. Member States shall determine at what stage decisions, acts or omissions may be challenged.~~

~~3. What constitutes a sufficient interest and impairment of a right shall be determined by Member States, consistently with the objective of giving the public concerned wide access to justice.~~

~~To that end, the interest of any non-governmental organisation promoting environmental protection and meeting the requirements under national law shall be deemed sufficient for the purposes of paragraph 1(a).~~

~~Such organisations shall also be deemed to have rights capable of being impaired for the purposes of paragraph 1(b).~~

- ~~4. Paragraphs 1, 2 and 3 shall not exclude the possibility of a preliminary review procedure before an administrative authority and shall not affect the requirement of exhaustion of administrative review procedures prior to recourse to judicial review procedures, where such a requirement exists under national law.~~
- ~~5. Any such review procedure referred to in paragraph 1 and 4 shall be fair, equitable, timely and not prohibitively expensive.~~

~~Member States shall ensure that information is made available to the public on access to administrative and judicial review procedures.~~

#### *Article 17*

#### *Evaluation*

1. The Commission shall, by [12 years after the end-date for transposition of this Directive], carry out an evaluation of this Directive. The evaluation shall be based, *inter alia*, on the following elements:
  - (a) the experience gathered with the implementation of this Directive;
  - (b) the data sets from Member States set up in accordance with Article 15(1) and the Union-wide overviews compiled by the European Environment Agency in accordance with Article 15(3);
  - (c) relevant scientific, analytical and epidemiological data;
  - (d) World Health Organisation recommendations, where available.
2. In the context of the evaluation, the Commission shall pay particular regard to the performance of this Directive concerning the following aspects:
  - (a) the risk-based approach set out in Article 7;

~~(b) provisions related to access to water set out in Article 13;~~

(b) ~~(e)~~ provisions concerning the information to be provided to the public under Article 14 and Annex IV.

### *Article 18*

#### *Review and amendment of Annexes*

1. At least every five years, the Commission shall review Annexes I **and II** in the light of scientific and technical progress **as well as the Member States' hazard and domestic distribution risk assessments contained in the data sets established pursuant to Article 15 and, where appropriate, shall make legislative proposals for amendments in accordance with the Treaty.**

~~The Commission shall, on the basis of Member States' hazard and domestic distribution risk assessments contained in the data sets set up pursuant to Article 15, review Annex II and assess whether there is a need to adapt it or to introduce new monitoring specifications for the purposes of those risk assessments.~~

2. The Commission is empowered to adopt delegated acts in accordance with Article 19 amending Annexes ~~III-I to IV~~ where necessary, to adapt ~~it them~~ to scientific and technical progress ~~or to specify monitoring requirements for the purposes of the hazard and domestic distribution risk assessments pursuant to Article 8(1)(d) and Article 10(1)(b).~~

### *Article 19*

#### *Exercise of the delegation*

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

2. The power to adopt delegated acts referred to in Article 18(2) shall be conferred on the Commission for ~~an indeterminate period of time from [date of entry into force of this Directive]~~ **a period of 5 years from [date of entry into force of this Directive]. The Commission shall draw up a report in respect of the delegation of power no later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension no later than three months before the end of each period.**
3. The delegation of power referred to in Article 18(2) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.
4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement on Better Law-Making of 13 April 2016.
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
6. A delegated act adopted pursuant to Article 18(2) shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

*Article 20*  
*Committee procedure*

1. The Commission shall be assisted by a committee. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.
2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

**Where the Committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation 182/2011 shall apply.**

*Article 21*  
*Penalties*

Member States shall lay down the rules on penalties applicable to infringements of national provisions adopted pursuant to this Directive and shall take all measures necessary to ensure that they are implemented. The penalties provided for shall be effective, proportionate and dissuasive. Member States shall, by ... [2 years after entry into force of this Directive], notify the Commission of those rules and those measures and shall notify it of any subsequent amendment affecting them.



*Article 22*  
*Transposition*

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with Articles 2 and 5 to 21 and Annexes I to IV by ... [2 years after entry into force of this Directive] . They shall immediately communicate the text of those measures to the Commission .When Member States adopt those measures, they shall contain a reference to this Directive or shall be accompanied by such a reference on the occasion of their official publication. They shall also include a statement that references in existing laws, regulations and administrative provisions to the Directives repealed by this Directive shall be construed as references to this Directive. Member States shall determine how such reference is to be made and how that statement is to be formulated.
2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

*Article 22bis*  
*Transitional period*

1. **Member States shall take the measures necessary to ensure that water intended for human consumption complies with the parametric values set in Annex I, part B, for the following parameters: Chlorate, Chlorite, Haloacetic Acids, Microcystin-LR, PFOA, PFOS, PFAS, ~~PFAS-total~~, Uranium, by [3 years after end-date for transposition].**
2. **During this transitional period, water suppliers shall not be obliged to monitor the water intended for human consumption in accordance with the provisions of Article 11 for the parameters listed in the first paragraph.**

## *Article 23*

### *Repeal*

1. Directive 98/83/EC, as amended by the instruments listed in Annex V, Part A, is repealed with effect from [day after the date in the first subparagraph of Article 22(1)] , without prejudice to the obligations of the Member States relating to the time-limits for the transposition into national law of the Directives set out in Annex V, Part B.

References to the repealed Directive shall be construed as references to this Directive and shall be read in accordance with the correlation table in Annex VI.

2. Derogations granted by Member States in accordance with Article 9(1) of Directive 98/83/EC that are still applicable by [end-date for transposition of this Directive] shall remain applicable until the end of their duration. They may **be renewed in accordance with Article 12bis only where a second derogation has not yet been granted.** ~~not be renewed further.~~ **The right to ask the Commission for a third derogation in accordance with Article 9(2) of Directive 98/83/EC shall remain applicable for those derogations already granted by Member States at the time of the entry into force of this Directive.**

## *Article 24*

### *Entry into force*

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

*Article 25*  
*Addressees*

This Directive is addressed to the Member States.

Done at Brussels,

*For the European Parliament*  
*The President*

*For the Council*  
*The President*

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## ANNEX I

## MINIMUM REQUIREMENTS FOR PARAMETRIC VALUES USED TO ASSESS THE QUALITY OF WATER INTENDED FOR HUMAN CONSUMPTION

## PART A

## Microbiological parameters

Parameter	Parametric value	Unit	Notes
<u><i>Clostridium perfringens</i> including spores</u>	0	<u>Number/100 ml</u>	<u><del>This parameter needs not to be measured unless the water originates from or is influenced by surface water.</del></u>
Coliform bacteria	0	Number/100 ml	
<u>Intestinal</u> Enterococci	0	Number/100 ml	
<i>Escherichia coli</i> ( <i>E. coli</i> )	0	Number/100 ml	
<del>Heterotrophic plate counts (HPC) 22°</del>	<del>No abnormal change</del>		
<u>Somatic coliphages</u>	0	<u>Number/100 ml</u>	<u><del>This parameter needs not to be measured unless the water originates from or is influenced by surface water.</del></u>
Turbidity	≤1	NTU	

## PART B

### Chemical parameters

Parameter	Parametric value	Unit	Notes
Acrylamide	0,10	µg/l	The parametric value refers to the residual monomer concentration in the water as calculated according to specifications of the maximum release from the corresponding polymer in contact with the water.
Antimony	<del>5,0</del> 20	µg/l	
Arsenic	10	µg/l	
Benzene	1,0	µg/l	
Benzo(a)pyrene	0,010	µg/l	
<del>Beta-estradiol (50-28-2)</del>	<del>0,001</del>	<del>µg/l</del>	
<del>Bisphenol A</del>	<del>0,01</del>	<del>µg/l</del>	
Boron	<del>1,0</del> 2,4	mg/l	
Bromate	10	µg/l	
Cadmium	5,0	µg/l	
Chlorate	0,25	mg/l	<b>Parametric value of 0,7 mg/l shall be applied when a disinfection method that generates chlorate/<del>chlorite</del>, in particular chlorine dioxide, <del>chlorination</del> is used for disinfection of water intended for human consumption. Where possible, without compromising disinfection, Member States shall strive for a lower value. This parameter shall be</b>

			measured only if such disinfection methods are used.
Chlorite	0,25	mg/l	<p>Parametric value of 0,7 mg/l shall be applied when a disinfection method that generates <del>ehlorate</del>/chlorite, in particular chlorine dioxide, <del>ehlorination</del> is used for disinfection of water intended for human consumption.</p> <p>Where possible, without compromising disinfection, Member States shall strive for a lower value.</p> <p>This parameter shall be measured only if such disinfection methods are used.</p>
Chromium	25	µg/l	<p>The value shall be met, at the latest, by [15 0 years after the entry into force of this Directive].</p> <p>The parametric value for chromium until that date is 50 µg/l.</p>
Copper	2,0	mg/l	<p><del>The value applies to a sample of water intended for human consumption obtained by an adequate sampling method at the tap and taken so as to be representative of a weekly average value ingested by consumers. Member States must take account of the occurrence of peak levels that</del></p>

			<del>may cause adverse effects on human health.</del>
Cyanide	50	µg/l	
1,2-dichloroethane	3,0	µg/l	
Epichlorohydrin	0,10	µg/l	The parametric value refers to the residual monomer concentration in the water as calculated according to specifications of the maximum release from the corresponding polymer in contact with the water.
Fluoride	1,5	mg/l	
Haloacetic acids (HAA <del>5</del> s)	<del>8</del> <u>60</u>	µg/l	<b>This parameter shall be measured only when chlorination is used for disinfection methods that can generate HAAs are used for the disinfection of water intended for human consumption is applied.</b> Sum of the following <del>five</del> <u>nine</u> representative substances: monochloro-, dichloro-, and trichloro-acetic acid, mono- and dibromo-acetic acid, <u>bromochloroacetic acid</u> , <del>bromodichloroacetic acid</del> , <del>dibromochloroacetic acid</del> and <del>tribromoacetic acid</del> .
Lead	5	µg/l	<del>The value applies to a sample of water intended for human consumption obtained by an adequate sampling method at the tap and taken so as to be</del>

			<p><del>representative of a weekly average value ingested by consumers. Member States must take account of the occurrence of peak levels that may cause adverse effects on human health.</del></p> <p>The value shall be met, at the latest, by [15 0 years after the entry into force of this Directive].</p> <p>The parametric value for lead until that date is 10 µg/l.</p>
Mercury	1,0	µg/l	
Microcystin-LR	1,0	µg/l	<p><del>This parameter needs not to be measured only in case of potential blooms in source water (increasing cyanobacterial cell density or bloom forming potential) unless the water originates from or is influenced by surface water.</del></p>
Nickel	20	µg/l	<p><del>The value applies to a sample of water intended for human consumption obtained by an adequate sampling method at the tap and taken so as to be representative of a weekly average value ingested by consumers. Member States must take account of the occurrence of peak levels that may cause adverse effects on human health.</del></p>



Nitrate	50	mg/l	Member States shall ensure that the condition $\frac{[\text{nitrate}]}{50} + \frac{[\text{nitrite}]}{3} \leq 1$ , where the square brackets signify the concentrations in mg/l for nitrate (NO <sub>3</sub> ) and nitrite (NO <sub>2</sub> ), is complied with and that the value of 0,10 mg/l for nitrites is complied with ex water treatment works.
Nitrite	0,50	mg/l	Member States shall ensure that the condition $\frac{[\text{nitrate}]}{50} + \frac{[\text{nitrite}]}{3} \leq 1$ , where the square brackets signify the concentrations in mg/l for nitrate (NO <sub>3</sub> ) and nitrite (NO <sub>2</sub> ), is complied with and that the value of 0,10 mg/l for nitrites is complied with ex water treatment works.
<del>Nonylphenol</del>	<del>0,3</del>	<del>µg/l</del>	
Pesticides	0,10	µg/l	<p>‘Pesticides’ means:</p> <ul style="list-style-type: none"> <li>– organic insecticides,</li> <li>– organic herbicides,</li> <li>– organic fungicides,</li> <li>– organic nematocides,</li> <li>– organic acaricides,</li> <li>– organic algicides,</li> <li>– organic rodenticides</li> <li>– organic slimicides,</li> <li>– related products (<i>inter alia</i>, growth regulators)</li> </ul> <p>and their relevant metabolites as</p>

			<p>defined in Article 3(32) of Regulation (EC) No 1107/2009<sup>1</sup>. The parametric value applies to each individual pesticide.</p> <p>In the case of aldrin, dieldrin, heptachlor and heptachlor epoxide, the parametric value is 0,030 µg/l.</p> <p><b>Only those pesticides which are likely to be present in a given supply need be monitored.</b></p>
Pesticides — Total	0,50	µg/l	<p>‘Pesticides — Total’ means the sum of all individual pesticides, as defined in the previous row, detected and quantified in the monitoring procedure.</p>
Perfluorooctanoic acid - PFOA	<del>0,065</del> <u>0,030</u>	µg/l	<p><b>If PFOS is present at the same time, the following formula shall apply:</b></p> <p><b>PFOS concentration/<del>0,030</del> <u>0,065</u> µg/L + PFOA concentration/<del>0,065</del> <u>0,030</u> µg/L ≤ 1,0</b></p>
Perfluorooctane sulfonate - PFOS	<del>0,030</del> <u>0,065</u>	µg/l	<p><b>If PFOA is present at the same time, the following formula shall apply:</b></p> <p><b>PFOS concentration/<del>0,030</del> <u>0,065</u> µg/L + PFOA concentration/<del>0,065</del> <u>0,030</u> µg/L ≤ 1,0</b></p>

<sup>1</sup> Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC (OJ L 309 24.11.2009, p. 1).

PFAS	0,10	µg/l	<del>'PFAS' means each individual per- and polyfluoroalkyl substance (chemical formula: <math>C_nF_{2n+1}=R</math>). Only relevant PFAS which are likely to be present in a given supply need be monitored.</del>
<del>PFASs — Total</del>	0,50	µg/l	<del>'PFASs Total' means the sum of per- and polyfluoroalkyl substances (chemical formula: <math>C_nF_{2n+1}=R</math>). Only relevant PFAS — Total which are likely to be present in a given supply need be monitored.</del>
Polycyclic aromatic hydrocarbons	0,10	µg/l	Sum of concentrations of the following specified compounds: benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)perylene, and indeno(1,2,3-cd)pyrene.
Selenium	<del>10</del> 30	µg/l	
Tetrachloroethene and Trichloroethene	10	µg/l	Sum of concentrations of specified parameters
Trihalomethanes — Total	100	µg/l	Where possible, without compromising disinfection, Member States shall strive for a lower value.  Sum of concentrations of the following specified compounds: chloroform, bromoform, dibromochloromethane, bromodichloromethane.
Uranium	30	µg/l	

Vinyl chloride	0,50	µg/l	The parametric value refers to the residual monomer concentration in the water as calculated according to specifications of the maximum release from the corresponding polymer in contact with the water.
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**The parametric values for chlorate, chlorite, HAA5, THMs shall be zero for bottled spring waters, in accordance with the Directive 2009/54/EC which forbides the disinfection of spring waters.**

## PART C

### ~~Parameters relevant for the domestic distribution risk assessment~~

#### Indicator parameters

Parameter	Parametric value	Unit	Notes
Aluminium	200	µg/l	
Ammonium	0,50	mg/l	
Chloride	250	mg/l	Note 1
<i>Clostridium perfringens</i> including spores	0	Number/100 ml	Note 2
Colour	Acceptable to consumers and no abnormal change		
Conductivity	2500	µS cm <sup>-1</sup> at 20 °C	Note 7 4
Hydrogen ion concentration	≥ 6,5 and ≤ 9,5	pH units	Notes 7 4 and 3 2
Iron	200	µg/l	
Manganese	50	µg/l	

<b>Odour</b>	<b>Acceptable to consumers and no abnormal change</b>		
<b>Oxidisability</b>	<b>5,0</b>	<b>mg/l O<sub>2</sub></b>	<b>Note 4 3</b>
<b>Sulphate</b>	<b>250</b>	<b>mg/l</b>	<b>Note 1</b>
<b>Sodium</b>	<b>200</b>	<b>mg/l</b>	
<b>Somatic coliphages</b>	<b>0</b>	<b>Number/100 ml</b>	<b>Note 2</b>
<b>Taste</b>	<b>Acceptable to consumers and no abnormal change</b>		
<b>Colony count 22°</b>	<b>No abnormal change</b>		
<b>Coliform bacteria</b>	<b>0</b>	<b>number/100 ml</b>	<b>Note 4 5</b>
<b>Total organic carbon (TOC)</b>	<b>No abnormal change</b>		<b>Note 5 6</b>
<b>Turbidity</b>	<b>Acceptable to consumers and no abnormal change</b>		

**Note 1:** The water should not be corrosive aggressive.

**Note 2:** This parameter needs not to be measured unless the water originates from or is influenced by surface water. This parameter is used to control the water treatment process.

**Note 3:** For still water put into bottles or containers, the minimum value may be reduced to 4,5 pH units. For water put into bottles or containers which is naturally rich in or artificially enriched with carbon dioxide, the minimum value may be lower.

**Note 4 3:** This parameter need not be measured if the parameter TOC is analysed.

**Note 5 4:** For water put into bottles or containers the unit is number/250 ml.

**Note 6 5:** This parameter need not be measured for supplies of less than 10 000 m<sup>3</sup> a day.

**Note 7:** The water should not be aggressive.

**Waters should not be aggressive or corrosive. This applies ~~to all types of waters distributed~~ and particularly to waters undergoing treatment (demineralization, membrane treatment, reverse osmosis, etc.)**

**Where water intended for human consumption is derived from such treatment that significantly demineralizes water, calcium and magnesium salts could be added to condition the water in order to reduce possible negative health impact, as well as corrosion or aggression of water and to improve taste. Minimum concentrations of calcium and magnesium or total dissolved solids in softened or demineralized water could be established taking into account the characteristics of water that enters these processes.**

## PART D

### Parameters relevant for the domestic distribution risk assessment

Parameter	Parametric value	Unit	Notes
<i>Legionella</i>	<1000	Number/l	<p><del>In case the parametric value &lt;1000/l is not met for <i>Legionella</i>, resampling for <i>Legionella pneumophila</i> shall be done. If <i>Legionella pneumophila</i> is not present, the parametric value for <i>Legionella</i> is &lt;10 000/l</del></p> <p><b>This parametric value is not set as a health target, but as a trigger value that can determine risk assessment and remedial action. Such actions could be considered even below the parametric value, e.g. <u>When the value of 100 /l is exceeded, and in case of infections and outbreaks.</u> In these cases the source of infection should be confirmed and the species to which it belongs should be identified.</b></p>
Lead	5	µg/l	<p>The value shall be met, at the latest, by [1<del>5</del>0 years after the entry into force of this Directive].</p> <p>The parametric value for lead until that date is 10 µg/l.</p> <p><b>Member States shall strive to met a value of 5 µg/l earlier than 15 years after the entry</b></p>

			into force of this Directive <del>by adoption of programmes of measures for the substitution of components made of lead in existing domestic distribution systems.</del>
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## PART E

### Parameters watch list ~~with marker values~~

Parameter			<u>Notes</u>
Beta-estradiol (50-28-2)	<del>0,001</del>	µg/l	This parameter needs not to be measured unless the water originates from or is influenced by surface water that is impacted by treated sewage effluent and other discharges.
Bisphenol A	<del>0,1</del>	µg/l	<del>This parameter needs not to be measured unless the water originates from or is influenced by surface water.</del>
Nonylphenol	<del>0,3</del>	µg/l	<u>This parameter needs not to be measured unless the water originates from or is influenced by surface water that is impacted by treated sewage effluent and other discharges.</u>
<u>cPFASs</u>			'cPFASs Total' means the sum of toxicologically most potent per- and polyfluoroalkyl substances of concern; cPFASs are assumed to be at least all carboxylic acids C7-C13 and sulfonic acids C6-C13, <u>i.e. The following substances could shall be monitored:</u> <u>Perfluorbutansulfonat (PFBS)</u>



			<p>Perfluorhexansulfonat (PFHxS)</p> <p><u>Perfluoroheptane sulfonic acid (PFHpS)</u></p> <p>Perfluoroktansulfonat (PFOS)</p> <p><u>Fluortelomersulfonat (6:2 FTS)</u></p> <p><u>Perfluorbutanoat (PFBA)</u></p> <p><u>Perfluorpentanoat (PFPeA)</u></p> <p><u>Perfluorononane sulfonic acid (PFNS)</u></p> <p><u>Perfluorodecane sulfonic acid (PFDS)</u></p> <p><u>Perfluoroundecane sulfonic acid</u></p> <p><u>Perfluorododecane sulfonic acid</u></p> <p><u>Perfluorotridecane sulfonic acid</u></p> <p><u>Perfluorhexanoat (PFHxA)</u></p> <p>Perfluorheptanoat (PFHpA)</p> <p>Perfluoroktanoat (PFOA)</p> <p>Perfluornonanoat (PFNA)</p> <p>Perfluordekanoat (PFDA)</p> <p><u>Perfluoroundecanoic acid (PFUnDA)</u></p> <p><u>Perfluorododecanoic acid (PFDoDA)</u></p> <p><u>Perfluorotridecanoic acid (PFTrDA)</u></p> <p><del>'PFASs Total' means the sum of per- and polyfluoroalkyl substances (chemical formula: <math>C_nF_{2n+1}-R</math>).</del></p> <p><del>Only relevant PFAS for which a health risk has been established and which are likely to be present in a given supply need to be monitored.</del></p>
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PFASs - Total		<p><b>'PFASs Total' means the sum of all other per- and polyfluoroalkyl substances that are assumed not to be cPFASs of concern; including all PFAS substances that contain a perfluoroalkyl moiety with three or more carbons (i.e. <math>-C_nF_{2n}-</math>, <math>n \geq 3</math>) or a perfluoroalkylether moiety with two or more carbons (i.e. <math>-C_nF_{2n}OC_mF_{2m}-</math>, <math>n</math> and <math>m \geq 1</math>).</b></p> <p><del><b>'PFASs Total' means the sum of per- and polyfluoroalkyl substances (chemical formula: <math>C_nF_{2n+1}-R</math>).</b></del></p> <p><del><b>Only relevant PFAS for which a health risk has been established and which are likely to be present in a given supply need to be monitored.</b></del></p>
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## ANNEX II

### MONITORING

#### PART A

#### General objectives and monitoring programmes for water intended for human consumption

1. Monitoring programmes established pursuant to Article 11(2) for water intended for human consumption shall :
  - (a) verify that the measures in place to control risks to human health throughout the water supply chain from the abstraction area through treatment and storage to distribution are working effectively and that water at the point of compliance is wholesome and clean;
  - (b) provide information on the quality of the water supplied for human consumption to demonstrate that the obligations set out in Article 4 and the parametric values set in accordance with Article 5 are being met;
  - (c) identify the most appropriate means of mitigating the risk to human health.
2. Monitoring programmes established pursuant to Article 11(2) shall include one **or a combination** of the following :
  - (a) collection and analysis of discrete water samples;
  - (b) measurements recorded by a continuous monitoring process.

Monitoring programmes shall also include an operational monitoring programme complementary to verification monitoring, providing rapid insight in operational performance and water quality problems, and allowing rapid pre-planned remedial action. Such operational monitoring programmes shall be supply-specific, taking into account the outcomes of the hazard and supply risk assessments, and intended to confirm the effectiveness of all control measures in abstraction, treatment, distribution and storage. The operational monitoring programme shall include the monitoring of the parameter turbidity to regularly control the efficacy of physical removal by filtration processes, in accordance with the parametric values and frequencies indicated in the following table:

Parameter	Parametric value
Turbidity	0.3 NTU (95%) and not >0.5 NTU for 15 consecutive minutes

Volume (m <sup>3</sup> ) of water distributed or produced each day within a supply zone	Minimum frequency
≤10 000	Daily
>10 000	Online

In addition, monitoring programmes may consist of:

- (a) inspections of records of the functionality and maintenance status of equipment;
- (b) inspections of the abstraction area, and of the treatment, storage and distribution infrastructure without prejudice to monitoring requirements provided under Article 8(1)(c) and Article 10(1)(b) .

3. Monitoring programmes shall also include an operational monitoring programme ~~complementary to verification monitoring~~, providing rapid insight in operational performance and water quality problems, and allowing rapid pre-planned remedial action. Such operational monitoring programmes shall be supply-specific, taking into account the outcomes of the identification of hazards and hazardous events and supply risk assessments, and intended to confirm the effectiveness of all control measures in abstraction, treatment, distribution and storage. The operational monitoring programme shall include the monitoring of the parameter turbidity at the water supply plant to regularly control the efficacy of physical removal by filtration processes, in accordance with the parametric reference values and frequencies indicated in the following table (not applicable for groundwater sources where turbidity is caused by iron and manganese):

Parameter	<u>Reference Parametric</u> value
Turbidity	0.3 NTU (95%) and not >0.5 NTU for 15 consecutive minutes

Volume (m <sup>3</sup> ) of water distributed or produced each day within a supply zone	Minimum frequency
≤ 1000	Weekly
> 1000 to ≤ 10 000	Daily
>10 000	Online

4. Member States shall ensure that monitoring programmes are reviewed on a continuous basis and updated or reconfirmed at least every 6 years.

## PART B

### Core-Parameters and sampling frequencies

#### 1. ~~Core~~ List of parameters

##### Group A

The following parameters (Group A) shall be monitored in accordance with the monitoring frequencies set out in Table 1 of point 2:

- (a) *Escherichia coli* (*E. coli*), intestinal enterococci, coliform bacteria, colony count 22 °C, colour, turbidity, taste, odour, pH, conductivity;
- (b) other parameters identified as relevant in the monitoring programme, in accordance with Article 5(3) and, where relevant, through a supply risk assessment as set out in Part C.

Under specific circumstances, the following parameters shall be added to the Group A Parameters:

- (a) ammonium and nitrite, if chloramination is used;
- (b) aluminium and iron, if used as water treatment chemicals.

*Escherichia coli* (*E. coli*) and intestinal enterococci ~~*Clostridium perfringens* spores, and somatic coliphages~~ are considered 'core parameters' and may not be subject to a **reduction due to a** supply risk assessment in accordance with **Article 9 and** part C of this Annex. They shall always be monitored at the frequencies set out in Table 1 of point 2.

## Group B parameters

In order to determine compliance with all parametric values set out in this Directive, all other parameters not analysed under Group A and set in accordance with Article 5, except for parameters in Annex I, Parts D and E, shall be monitored at least at the frequencies set out in Table 1 of point 2, unless a different sampling frequency is determined on the basis of a supply risk assessment carried out in accordance with Article 9 and part C of this Annex.

### 2. Sampling frequencies

~~All parameters set in accordance with Article 5 shall be monitored at least at the frequencies set out in the following Table, unless a different sampling frequency is determined on the basis of a supply risk assessment carried out in accordance with Article 9 and part C of this Annex:~~

<i>Table 1</i>			
<i>Minimum frequency of sampling and analysis for compliance monitoring</i>			
Volume of water distributed or produced each day within a supply zone (See Notes 1 and 2) m <sup>3</sup>		Group A parameter number of samples per year (See Note 3)	Group B parameter number of samples per year (See Note 3)
	≤ 10	> 0 (See Note 4)	> 0 (See Note 4)
>10	≤ 100	<del>1</del> 2 ≥ 4 (See Note 4)	> 1 (See Note 5 4)
> 100	≤ 1000	4	<del>2</del> 1
> 1000	≤ 10000	4 + 3 for each additional 1000 m <sup>3</sup> /d and part thereof of the total volume (See Note 3)	2 + 1 for each additional 4500 m <sup>3</sup> /d and part thereof of the total volume (See Note 3)
> 10000	≤ 100000		3

			+ 1 for each additional 10000 m <sup>3</sup> /d and part thereof of the total volume <u>(See Note 3)</u>
> 100000			12 + 1 for each additional 25000 m <sup>3</sup> /d and part thereof of the total volume <u>(See Note 3)</u>

<i>Table 1</i>	
<i>Minimum frequency of sampling and analysis for compliance monitoring</i>	
<b>Volume (m<sup>3</sup>) of water distributed or produced each day within a supply zone</b>	<b>Minimum number of samples per year</b>
$\leq 100$	10 <sup>a</sup>
$> 100$ $\leq 1\,000$	10 <sup>a</sup>
$> 1\,000$ $\leq 10\,000$	50 <sup>b</sup>
$> 10\,000$ $\leq 100\,000$	365
$> 100\,000$	365

a: all samples are to be taken during times when the risk of treatment breakthrough of enteric pathogens is high.

b: at least 10 samples are to be taken during times when the risk of treatment breakthrough of enteric pathogens is high.



*Note 1:* A supply zone is a geographically defined area within which water intended for human consumption comes from one or more sources and water quality may be considered as being approximately uniform.

*Note 2:* The volumes are calculated as averages taken over a calendar year. The number of inhabitants in a supply zone may be used instead of the volume of water to determine the minimum frequency, assuming water consumption of 200 l/(day\*capita).

*Note 3:* **The frequency indicated is calculated as follows: e.g. 4300 m<sup>3</sup>/d = 16 samples for group A parameters (four for the first 1000 m<sup>3</sup>/d + 12 for additional 3300 m<sup>3</sup>/d).**

*Note 4:* ~~Without prejudice to exemptions applied by Member States under Article 3(2)(b),~~  
**For water suppliers, where an exemption has not been granted under Article 3(2)(b), Member States shall lay down the minimum sampling frequency for parameters of group A and B, provided that core parameters are monitored at least once per year. Member States that have decided to exempt individual supplies under Article 3(2)(b) shall apply these frequencies only for supply zones that distribute between 10 and 100 m<sup>3</sup> per day.**

*Note 5:* **Member States may reduce the sampling frequency, provided that all parameters set in accordance with Article 5 are monitored at least once every ten years as well as in cases where a new water source is integrated or changes to the water supply system, where a potentially adverse effect on the quality of water is to be expected, are made and an adverse effect on the quality of water is to be expected.**

## PART C

### Supply risk assessment

1. ~~The supply risk assessment referred to in Article 9 shall be based on the general principles of risk assessment set out in international standards such as standard EN 15975-2 concerning ‘security of drinking water supply, guidelines for risk and crisis management’.~~
2. **Based on the outcome of the supply risk assessment as referred to in Article 9, Following** ~~a supply risk assessment~~, the list of parameters considered in the monitoring shall be extended and the sampling frequencies set out in Part B increased, where any of the following conditions is fulfilled:
  - (a) the list of parameters or frequencies set out in this Annex is not sufficient to fulfil the obligations imposed under Article 11(1);
  - (b) additional monitoring is required for the purposes of Article 11(5);
  - (c) it is necessary to provide the assurances set out in point (1)(a) of Part A;
  - (d) increasing the sampling frequencies is necessary pursuant to Article 8(3)(a).
3. Following a supply risk assessment, the list of parameters considered in the monitoring and the sampling frequencies set out in Part B may be reduced provided all of the following conditions are met:
  - (a) the location and frequency of sampling is determined in relation to the parameter's origin, as well as the variability and long-term trend of its concentration, taking into account Article 6;

- (b) for reducing the minimum sampling frequency of a parameter the results obtained from samples collected at regular intervals over a period of at least 3 years from sampling points representative of the whole supply zone are all less than 60 % of the parametric value;
  - (c) for removing a parameter from the list of parameters to be monitored the results obtained from samples collected at regular intervals over a period of at least 3 years from points representative of the whole supply zone are all less than 30 % of the parametric value;
  - (d) for removing a parameter from the list of parameters to be monitored, the decision is based on the result of the risk assessment, informed by the results of monitoring of sources of water intended for human consumption and confirming that human health is protected from the adverse effects of any contamination of water intended for human consumption, as laid down in Article 1;
  - (e) for reducing the sampling frequency of a parameter or for removing a parameter from the list of parameters to be monitored, the risk assessment confirms that no factor that can be reasonably anticipated is likely to cause deterioration of the quality of the water intended for human consumption.
4. Where monitoring results, demonstrating that the conditions set out in paragraph 3, points (b) to (e) are met, are already available by [the date of entry into force of this Directive], those monitoring results may be used to adapt the monitoring following the supply risk assessment from that date.

**Where adjustments of monitoring have already been implemented following the supply risk-assessment in accordance, inter alia, to Part C of the Commission Directive 2015/1787, Member States may provide for the possibility for confirming their validity without requiring monitoring according to paragraphs 3(b) and 3(c) over another period of at least 3 years from points representative of the whole supply zone.**

## PART D

### Sampling methods and sampling points

1. Sampling points shall be determined so as to ensure compliance with the points of compliance as defined in Article 6. In the case of a distribution network, a Member State may take samples within the supply zone or at the treatment works for particular parameters if it can be demonstrated that there would be no adverse change to the measured value of the parameters concerned. As far as possible, the number of samples shall be distributed equally in time and location.
2. Sampling at the point of compliance shall meet the following requirements:
  - (a) compliance samples for certain chemical parameters (in particular copper, lead, *Legionella* and nickel) shall be taken at the consumer's tap without prior flushing. A random daytime sample of one litre volume is to be taken. As an alternative, Member States may use fixed stagnation time methods that better reflect their national situation, **such as the average weekly intake by consumers**, provided that, at the supply zone level, this does not result in fewer cases of non-compliance than using the random daytime method;
  - (b) compliance samples for microbiological parameters at the point of compliance shall be taken and handled according to EN ISO 19458, sampling purpose B.

**Samples for *Legionella* in domestic distribution systems shall be taken at risk points for proliferation of and/or points representative for systemic exposure to *Legionella pneumophila*. Member States shall establish guidelines for sampling methods for *Legionella*.**

3. Sampling in the distribution network, with the exception of sampling at the consumers' tap, shall be in accordance with ISO 5667-5. For microbiological parameters, sampling in the distribution network shall be taken and handled according to EN ISO 19458, sampling purpose A.

## ANNEX III

### SPECIFICATIONS FOR THE ANALYSIS OF PARAMETERS

Member States shall ensure that the methods of analysis used for the purposes of monitoring and demonstrating compliance with this Directive are validated and documented in accordance with EN ISO/IEC 17025 or other equivalent standards accepted at international level. Member States shall ensure that laboratories or parties contracted by laboratories apply quality management system practices in accordance with EN ISO/IEC 17025 or other equivalent standards accepted at international level.

**For the purposes of assessing the equivalence of alternative methods with the methods laid down in this Annex, Member States may use standard EN ISO 17994, established as the standard on the equivalence of microbiological methods or standard EN ISO 16140 or any other similar internationally accepted protocols, to establish the equivalence of methods based on principles other than culturing, which are beyond the scope of EN ISO 17994.**

In the absence of an analytical method meeting the minimum performance criteria set out in Part B, Member States shall ensure that monitoring is carried out using best available techniques not entailing excessive costs.

#### PART A

#### Microbiological parameters for which methods of analysis are specified

The methods for microbiological parameters are:

- (a) *Escherichia coli* (*E. coli*) and coliform bacteria (EN ISO 9308-1 or EN ISO 9308-2)
- (b) **Intestinal** ~~E~~enterococci (EN ISO 7899-2)
- ~~(c) *Pseudomonas aeruginosa* (EN ISO 16266)~~

- (d) colony count or heterotrophic plate counts at 22 °C (EN ISO 6222)
- (e) *Clostridium perfringens* including spores (EN ISO 14189)
- ~~(f) Turbidity (EN ISO 7027)~~
- (g) *Legionella* (EN ISO 11731)
- (h) Somatic coliphages (EN ISO 10705-2)

## PART B

### Chemical and indicator parameters for which performance characteristics are specified

#### 1. Chemical *and indicator* parameters

For the parameters set out in Table 1, the method of analysis used shall , as a minimum, be capable of measuring concentrations equal to the parametric value with a limit of quantification, as defined in Article 2(2) of Commission Directive 2009/90/EC<sup>1</sup>, of 30 % or less of the relevant parametric value and an uncertainty of measurement as specified in Table 1. The result shall be expressed using at least the same number of significant figures as for the parametric value considered in **Parts B and C** of Annex I.

The uncertainty of measurement laid down in Table 1 shall not be used as an additional tolerance to the parametric values set out in Annex I.

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<sup>1</sup> Commission Directive 2009/90/EC of 31 July 2009 laying down, pursuant to Directive 2000/60/EC of the European Parliament and of the Council, technical specifications for chemical analysis and monitoring of water status (OJ L 201, 1.8.2009, p. 36).

<i>Table 1</i>		
<i>Minimum performance characteristic 'Uncertainty of measurement'</i>		
Parameters	Uncertainty of measurement (See Note 1) % of the parametric value ( <b>except for pH</b> )	Notes
<b>Aluminium</b>	<b>25</b>	
<b>Ammonium</b>	<b>40</b>	
Acrylamide	30	
Antimony	40	
Arsenic	30	
Benzo(a)pyrene	50	See Note 2
Benzene	40	
<del>Beta-estradiol (50-28-2)</del>	<del>50</del>	
<del>Bisphenol A</del>	<del>50</del>	
Boron	25	
Bromate	40	
Cadmium	25	
<b>Chloride</b>	<b>15</b>	
Chlorate	30	
Chlorite	30	
Chromium	30	
Copper	25	
Cyanide	30	See Note 3
1,2-dichloroethane	40	
Epichlorohydrin	30	
Fluoride	20	
HAAs	50	
<b>Hydrogen ion concentration pH (expressed in pH units)</b>	<b>0,2</b>	<b>See Note 4</b>
<b>Iron</b>	<b>30</b>	
Lead	25	
<b>Manganese</b>	<b>30</b>	
Mercury	30	

Microcystin-LR	30	
Nickel	25	
Nitrate	15	
Nitrite	20	
<del>Nonylphenol</del>	<del>50</del>	
<b>Oxidisability</b>	<b>50</b>	<b>See Note 5</b>
Pesticides	30	See Note 6 4
<del>PFASs</del> <b>PFOA/PFOS</b>	50	
Polycyclic aromatic hydrocarbons	30	See Note 7 5
Selenium	40	
<b>Sodium</b>	<b>15</b>	
<b>Sulphate</b>	<b>15</b>	
Tetrachloroethene	30	See Note 8 6
Trichloroethene	40	See Note 8 6
Trihalomethanes — total	40	See Note 7 5
<b>Total organic carbon (TOC)</b>	<b>30</b>	<b>See Note 9</b>
<b>Turbidity</b>	<b>30</b>	<b>See Note 10</b>
Uranium	30	
Vinyl chloride	50	

## 2. Notes to Table 1

<i>Note 1</i>	Uncertainty of measurement is a non-negative parameter characterising the dispersion of the quantity values being attributed to a measurand, based on the information used. The performance criterion for measurement uncertainty ( $k = 2$ ) is the percentage of the parametric value stated in the table or any stricter value . Measurement uncertainty shall be estimated at the level of the parametric value, unless otherwise specified.
<i>Note 2</i>	If the value of uncertainty of measurement cannot be met, the best available technique should be selected (up to 60 %).
<i>Note 3</i>	The method determines total cyanide in all forms.
<i>Note 4</i>	<b>The value Values for trueness, precision and the uncertainty of measurement are is expressed in pH units.</b>
<i>Note 5</i>	<b>Reference method: EN ISO 8467.</b>



<i>Note 6</i>	The performance characteristics for individual pesticides are given as an indication. Values for the uncertainty of measurement as low as 30 % can be achieved for several pesticides, higher values up to 80 % may be allowed for a number of pesticides.
<i>Note 7</i>	The performance characteristics apply to individual substances, specified at 25 % of the parametric value in Part B of Annex I.
<i>Note 8</i>	The performance characteristics apply to individual substances, specified at 50 % of the parametric value in Part B of Annex I.
<i>Note 9</i>	<b>The uncertainty of measurement should be estimated at the level of 3 mg/l of the total organic carbon (TOC). CEN 1484 Guidelines for the determination of TOC and dissolved organic carbon (DOC) shall be used.</b>
<i>Note 10</i>	<b>The uncertainty of measurement should be estimated at the level of 1,0 NTU, <u>(nephelometric turbidity units) in accordance with EN ISO 7027.</u></b>

## ANNEX IV

### INFORMATION TO THE PUBLIC TO BE PROVIDED ONLINE

The following information shall be accessible to consumers on-line in a user-friendly and customized way or by other means:

- (1) identification of the relevant water supplier;
- (2) the most recent monitoring results for parameters listed in Annex I, parts A, ~~and~~ B and C, including frequency ~~and location~~ **distribution** of sampling points, ~~relevant to the area of interest to the person supplied~~, together with the parametric value set in accordance with Article 5. The monitoring results must not be older than **one year**:
  - (a) ~~one month, for very large water suppliers~~;
  - (b) ~~six months for large water suppliers~~;
  - (c) ~~one year for small water suppliers~~;
- (3) **types of water treatment and disinfection applied**;
- (4) ~~(3)~~ in case of exceedance of the parametric values set in accordance with Article 5 **and which are considered as relevant for human health by the competent authorities or other relevant bodies**, information on the potential danger to human health and the associated health and consumption advice or a hyperlink providing access to such information;
- (5) ~~(4)~~ ~~a summary of the~~ relevant **information on** supply risk assessment;

(5) information on the following indicator parameters and associated parametric values:

~~(a) Colour;~~

~~(b) pH (Hydrogen ion concentration);~~

~~(c) Conductivity;~~

~~(d) Iron;~~

~~(e) Manganese;~~

~~(f) Odour;~~

~~(g) Taste;~~

(h) Hardness;

(i) Minerals, anions/cations dissolved in water:

~~—— Borate  $\text{BO}_3^-$~~

~~—— Carbonate  $\text{CO}_3^{2-}$~~

~~—— Chloride  $\text{Cl}^-$~~

~~—— Fluoride  $\text{F}^-$~~

~~—— Hydrogen Carbonate  $\text{HCO}_3^-$~~

– Nitrate  $\text{NO}_3^-$

~~—— Nitrite  $\text{NO}_2^-$~~

~~—— Phosphate  $\text{PO}_4^{3-}$~~

~~—— Silicate  $\text{SiO}_2$~~

~~—— Sulphate  $\text{SO}_4^{2-}$~~

~~—— Sulphide  $\text{S}_2^-$~~

~~—— Aluminium Al~~

~~—— Ammonium  $\text{NH}_4^+$~~

– Calcium Ca

– Magnesium Mg

– Potassium K

– Sodium Na

~~Those parametric values and other non-ionised compounds and trace elements may be displayed with a reference value and/or an explanation;~~

- (6) advice to consumers including on how to reduce water consumption **and avoid health risks due to stagnant water;**

~~(6)~~ (7) for very large water suppliers, annual information on:

- (a) the overall performance of the water system in terms of efficiency, including **for instance** leakage rates and energy consumption per cubic meter of delivered water;
- ~~(b) information on management and governance of the water supplier, including the composition of the board;~~

~~(b) — water quantity supplied yearly and trends;~~

~~(c) — information on the cost structure of the tariff charged to consumers per cubic meter of water, including fixed and variable costs, presenting at least costs related to energy use per cubic meter of delivered water, measures taken by water suppliers for the purposes of the hazard assessment pursuant to Article 8(4), treatment and distribution of water intended for human consumption, waste water collection and treatment, and costs related to measures for the purposes of Article 13, where such measures have been taken by water suppliers;~~

~~(e) — the amount of investment considered necessary by the supplier to ensure the financial sustainability of the provision of water services (including maintenance of infrastructure) and the amount of investment actually received or recouped;~~

~~(d) — types of water treatment and disinfection applied;~~

~~(c) — summary and statistics of consumer complaints **and their handling**, and of timeliness and adequacy of responses to problems;~~

**(7)(8) Upon request, consumers shall be provided with the information under points (1) to (5) in hard copy or shall be given access to historical data for information under points (2) and (3), dating back up to 10 years, upon request.**

## ANNEX V

### Part A

Repealed Directive  
with list of the successive amendments thereto  
(referred to in Article 23)

Council Directive 98/83/EC (OJ L 330, 5.12.1998, p. 32)	
Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1)	Only point 29 of Annex II
Regulation (EC) No 596/2009 of the European Parliament and of the Council (OJ L 188, 18.7.2009, p. 14)	Only point 2.2 of the Annex
Commission Directive (EU) 2015/1787 (OJ L 260, 7.10.2015, p. 6)	

### Part B

Time-limits for transposition into national law  
(referred to in Article 23)

Directive	Time-limit for transposition	
98/83/EC	25 December 2000	
(EU) 2015/1787	27 October 2017	

## ANNEX VI

### CORRELATION TABLE

Directive 98/83/EC	This Directive
Article 1	Article 1
Article 2, introductory wording	Article 2, introductory wording
Article 2 pts. 1 and 2	Article 2 pts. 1 and 2
-	Article 2 pts. 3 to 8
Article 3(1), introductory wording	Article 3(1), introductory wording
Article 3(1)(a) and (b)	Article 3(1)(a) and (b)
Article 3(2) and (3)	Article 3(2) and (3)
Article 4(1), introductory wording	Article 4(1), introductory wording
Article 4(1)(a) and (b)	Article 4(1)(a) and (b)
Article 4(1), 2 <sup>nd</sup> subparagraph	Article 4(1)(c)
Article 4(2)	Article 4(2)
Article 5(1) and (2)	Article 5(1)
Article 5(3)	Article 5(2)
Article 6(1) pts (a) to (c)	Article 6, pts (a) to (c)
Article 6(1), pt (d)	-
Article 6(2)	-
Article 6(3)	-
-	Article 7
-	Article 8
	Article 9
-	Article 10
Article 7(1)	Article 11(1)
Article 7(2)	Article 11(2) introductory wording

-	Article 11(2), pts (a) to (c)
Article 7(3)	Article 11(3)
Article 7(4)	-
Article 7(5)(a)	Article 11(4) introductory wording
Article 7(5)(b)	Article 11(4)(a)
Article 7(5)(c)	Article 11(4)(b)
Article 7(6)	Article 11(5)
Article 8(1)	Article 12(1)
Article 8(2)	Article 12(2), 1st subparagraph
-	Article 12(2), 2nd subparagraph
Article 8(3)	Article 12(3), 1st subparagraph
-	Article 12(3), 2nd subparagraph
-	Article 12(4), pts (a) to (c)
Article 8(4)	Article 12(5)
Article 8(5) to (7)	-
Article 9	-
Article 10	-
-	Article 13
-	Article 14
-	Article 15
-	Article 16
-	Article 17
Article 11(1)	Article 18(1), 1 <sup>st</sup> subparagraph
-	Article 18(1), 2nd subparagraph
Article 11(2)	-
-	Article 18(2)



-	Article 19
Article 12(1)	Article 20(1)
Article 12(2), 1 <sup>st</sup> subparagraph	Article 20(1)
Article 12(2), 2 <sup>nd</sup> subparagrah	-
Article 12(3)	-
Article 13	-
Article 14	-
Article 15	-
-	Article 21
Article 17(1) and (2)	Article 22(1) and (2)
Article 16(1)	Article 23(1)
Article 16(2)	-
	Article 23(2)
Article 18	Article 24
Article 19	Article 25
Annex I, part A	Annex I, part A
Annex I, part B	Annex I, part B
Annex I, part C	-
-	Annex I, part C
Annex II, Part A (1)(a) to (c)	Annex II, Part A (1)(a) to (c)
Annex II, Part A (2) 1 <sup>st</sup> subparagraph	Annex II, Part A (2) 1 <sup>st</sup> subparagraph
-	Annex II, Part A (2) 2nd subparagraph and table
Annex II, Part A (2) 2nd subparagraph	Annex II Part A (2) 3rd subparagraph
Annex II, Part A (3)	-
Annex II, Part A (4)	Annex II, Part A (3)
Annex II, Part B (1)	-
Annex II, Part B (2)	Annex II, Part B (1)

Annex II, Part B (3)	Annex II, Part B (2)
Annex II, Part C (1)	-
Annex II, Part C (2)	Annex II, Part C (1)
Annex II, Part C (3)	-
Annex II, Part C (4)	Annex II, Part C (2)
Annex II, Part C (5)	Annex II, Part C (3)
-	Annex II, Part C (4)
Annex II, Part C (6)	-
Annex II, Part D, pts (1) to (3)	Annex II, Part D, pts (1) to (3)
Annex III, 1 <sup>st</sup> and 2 <sup>nd</sup> subparagraphs	Annex III, 1 <sup>st</sup> and 2 <sup>nd</sup> subparagraphs
Annex III, part A, 1 <sup>st</sup> and 2 <sup>nd</sup> subparagraphs	-
Annex III, part A, 3 <sup>rd</sup> subparagraph, points (a) to (f)	Annex III, part A, 3 <sup>rd</sup> subparagraph points (a) to (h)
Annex III, part B, (1), 1 <sup>st</sup> subparagraph	Annex III, part B, (1), 1 <sup>st</sup> subparagraph
Annex III, part B, (1), 2 <sup>nd</sup> subparagraph	-
Annex III, part B, (1), 3 <sup>rd</sup> subparagraph and Table 1	Annex III, part B, (1), 2 <sup>nd</sup> subparagraph and Table 1
Annex III, part B, (1), Table 2	-
Annex III, part B, (2)	Annex III, part B, (2)
Annex IV	-
Annex V	-
-	Annex IV
-	Annex V
-	Annex VI

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