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
Intestinal enterococci	0	number/100 ml	For water put into bottles or containers, the unit is number/250 ml.
Escherichia coli (E. coli)	0	number/100 ml	For water put into bottles or containers, the unit is number/250 ml.

Part B

Chemical parameters

Parameter	Parametric value	Unit	Notes
Acrylamide	0,10	µg/l	The parametric value of 0,10 µg/l 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	10	µg/l	
Arsenic	10	µg/l	
Benzene	1,0	µg/l	
Benzo(a)pyrene	0,010	µg/l	
Bisphenol A	2,5	µg/l	
Boron	1,5	mg/l	A parametric value of 2,4 mg/l shall

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			be applied when desalinated water is the predominant water source of the supply system concerned or in regions where geological conditions could lead to high levels of boron in groundwater.
Bromate	10	µg/l	
Cadmium	5,0	µg/l	
Chlorate	0,25	mg/l	A parametric value of 0,70 mg/l shall be applied where a disinfection method that generates chlorate, in particular chlorine dioxide, 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 measured only if such disinfection methods are used.
Chlorite	0,25	mg/l	A parametric value of 0,70 mg/l shall be applied where a disinfection method that generates chlorite, in particular chlorine dioxide, is used for disinfection of water intended for human consumption. Where possible, without compromising disinfection, Member

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			States shall strive for a lower value. This parameter shall be measured only if such disinfection methods are used.
Chromium	25	µg/l	The parametric value of 25 µg/l shall be met, at the latest, by 12 January 2036. The parametric value for chromium until that date shall be 50 µg/l.
Copper	2,0	mg/l	
Cyanide	50	µg/l	
1,2-dichloroethane	3,0	µg/l	
Epichlorohydrin	0,10	µg/l	The parametric value of 0,10 µg/l 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 (HAAs)	60	µg/l	This parameter shall be measured only when disinfection methods that can generate HAAs are used for the disinfection of water intended for human consumption. It is the sum of the following five representative substances: monochloro-, dichloro-, and trichloro-acetic acid, and mono- and dibromo-acetic acid.

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Lead	5	µg/l	The parametric value of 5 µg/l shall be met, at the latest, by 12 January 2036. The parametric value for lead until that date shall be 10 µg/l.
			After that date, the parametric value of 5 µg/l shall be met at least at the point of supply to the domestic distribution system. For the purposes of point (b) of the first subparagraph of Article 11(2), the parametric value of 5 µg/l at the tap shall apply.
Mercury	1,0	µg/l	
Microcystin-LR	1,0	µg/l	This parameter shall be measured only in the event of potential blooms in source water (increasing cyanobacterial cell density or bloom forming potential).
Nickel	20	µg/l	
Nitrate	50	mg/l	Member States shall ensure that the condition [nitrate]/50 + [nitrite]/3 ≤ 1, where the square brackets signify the concentrations in mg/l for nitrate (NO_3) and nitrite (NO_2), is complied with and that the parametric value of 0,10 mg/l for nitrites is complied with ex water treatment works.

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Nitrite	0,50	mg/l	Member States shall ensure that the condition [nitrate]/50 + [nitrite]/3 ≤ 1, where the square brackets signify the concentrations in mg/l for nitrate (NO_3) and nitrite (NO_2), is complied with and that the parametric value of 0,10 mg/l for nitrites is complied with ex water treatment works.
Pesticides	0,10	µg/l	'Pesticides' means: — organic insecticides, — organic herbicides, — organic fungicides, — organic nematocides, — organic acaricides, — organic algicides, — organic rodenticides — organic slimicides, — related products (inter alia, growth regulators), and their metabolites as defined in point (32) of Article 3 of Regulation (EC) No 1107/2009 of the European Parliament and of the Council[a], that are considered relevant for water intended for human consumption.

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			A pesticide metabolite shall be deemed relevant for water intended for human consumption if there is reason to consider that it has intrinsic properties comparable to those of the parent substance in terms of its pesticide target activity or that either itself or its transformation products generate a health risk for consumers.
			The parametric value of 0,10 µg/l shall apply to each individual pesticide. In the case of aldrin, dieldrin, heptachlor and heptachlor epoxide, the parametric value shall be 0,030 µg/l. Member States shall define a guidance value to manage the presence of non-relevant metabolites of pesticides in water intended for human consumption. Only pesticides which are likely to be present in a given supply need to be monitored. Based on the data reported by Member States, the Commission may establish a database of pesticides and their relevant metabolites taking

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			into account their possible presence in water intended for human consumption.
Pesticides Total	0,50	µg/l	'Pesticides Total' means the sum of all individual pesticides, as defined in the previous row, detected and quantified in the monitoring procedure.
PFAS Total	0,50	µg/l	'PFAS Total' means the totality of per- and polyfluoroalkyl substances. This parametric value shall only apply once technical guidelines for monitoring this parameter are developed in accordance with Article 13(7). Member States may then decide to use either one or both of the parameters 'PFAS Total' or 'Sum of PFAS'.
Sum of PFAS	0,10	µg/l	'Sum of PFAS' means the sum of per- and polyfluoroalkyl substances considered a concern as regards water intended for human consumption listed in point 3 of Part B of Annex III. This is a subset of 'PFAS Total' substances that contain a perfluoroalkyl moiety with three or more carbons (i.e. –

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			CnF2n–, n ≥ 3) or a perfluoroalkylether moiety with two or more carbons (i.e. –CnF2nOCmF2m–, n and m ≥ 1).
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	20	µg/l	A parametric value of 30 µg/l shall be applied for regions where geological conditions could lead to high levels of selenium in groundwater.
Tetrachloroethene and Trichloroethene	10	µg/l	The sum of concentrations of these two parameters.
Trihalomethanes Total	100	µg/l	Where possible, without compromising disinfection, Member States shall strive for a lower parametric value. It is the sum of concentrations of the following specified compounds: chloroform, bromoform, dibromochloromethane and bromodichloromethane.
Uranium	30	µg/l	
Vinyl chloride	0,50	µg/l	The parametric value of 0,50 µg/l refers to the residual monomer concentration

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			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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Part C

Indicator parameters

Parameter	Parametric value	Unit	Notes
Aluminium	200	µg/l	
Ammonium	0,50	mg/l	
Chloride	250	mg/l	The water should not be corrosive.
Clostridium perfringens including spores	0	number/100 ml	This parameter shall be measured if the risk assessment indicates that it is appropriate to do so.
Colour	Acceptable to consumers and no abnormal change		
Conductivity	2 500	µS cm^{-1} at 20 °C	The water should not be aggressive.
Hydrogen ion concentration	≥ 6,5 and ≤ 9,5	pH units	The water should not be aggressive. 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.
Iron	200	µg/l	

Manganese	50	µg/l	
Odour	Acceptable to consumers and no abnormal change		
Oxidisability	5,0	mg/l O_2	This parameter need not be measured if the parameter TOC is analysed.
Sulphate	250	mg/l	The water should not be corrosive.
Sodium	200	mg/l	
Taste	Acceptable to consumers and no abnormal change		
Colony count 22° C	No abnormal change		
Coliform bacteria	0	number/100 ml	For water put into bottles or containers, the unit is number/250 ml.
Total organic carbon (TOC)	No abnormal change		This parameter need not be measured for supplies of less than 10 000 m^3 a day.
Turbidity	Acceptable to consumers and no abnormal change		

Water should not be aggressive or corrosive. This applies particularly to water undergoing treatment (demineralization, softening, membrane treatment, reverse osmosis, etc.).

Where water intended for human consumption is derived from treatment that significantly demineralizes or softens water, calcium and magnesium salts could be added to condition the water in order to reduce any possible negative health impact, as well as to reduce the corrosiveness or aggressivity 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 those processes.

Part D

Parameters relevant for the risk assessment of domestic distribution systems

Parameter	Parametric value	Unit	Notes
Legionella	< 1 000	CFU/l	This parametric value is set for the purposes of Articles 10 and 14. Actions

			provided for in those Articles could be considered even when the value is below the parametric value, e.g. in cases of infections and outbreaks. In such cases, the source of infection should be confirmed and the species of *Legionella* should be identified.
Lead	10	µg/l	This parametric value is set for the purposes of Articles 10 and 14. Member States should use their best endeavours to achieve the lower value of 5 µg/l by 12 January 2036.