ANNEX I

I.DEFINITION

1. 'Natural mineral water' means microbiologically wholesome water, within the meaning of Article 5, originating in an underground water table or deposit and emerging from a spring tapped at one or more natural or bore exits.

Natural mineral water can be clearly distinguished from ordinary drinking water:

- (a) by its nature, which is characterised by its mineral content, trace elements or other constituents and, where appropriate, by certain effects;
- (b) by its original purity,

both characteristics having been preserved intact because of the underground origin of such water, which has been protected from all risk of pollution.

- 2. The characteristics referred to in point 1, which may give natural mineral water properties favourable to health, shall have been assessed:
- (a) from the following points of view:
 - (i) geological and hydrological;
 - (ii) physical, chemical and physico-chemical;
 - (iii) microbiological;
 - (iv) if necessary, pharmacological, physiological and clinical;
- (b) according to the criteria listed in Section II;
- (c) according to scientific methods approved by the responsible authority.

The analyses referred to in point (a)(iv) of the first subparagraph may be optional where the water presents the compositional characteristics on the strength of which it was considered a natural mineral water in the Member State of origin prior to 17 July 1980. This is the case in particular when the water in question contains, per kg, both at source and after bottling, a minimum of 1 000 mg of total solids in solution or a minimum of 250 mg of free carbon dioxide.

3. The composition, temperature and other essential characteristics of natural mineral water shall remain stable within the limits of natural fluctuation; in particular, they shall not be affected by possible variations in the rate of flow.

Within the meaning of Article 5(1), the normal viable colony count of natural mineral water means the reasonably constant total colony count at source before any treatment, the qualitative and quantitative composition of which, as taken into account in the recognition of that water, is checked by periodic analysis.

II. REQUIREMENTS AND CRITERIA FOR APPLYING THE DEFINITION

1.1. **Requirements for geological and hydrological surveys**

There shall be a requirement to supply the following particulars:

- 1.1.1. the exact site of the catchment with indication of its altitude, on a map with a scale of not more than 1:1 000;
- 1.1.2. a detailed geological report on the origin and nature of the terrain;

- 1.1.3. the stratigraphy of the hydrogeological layer;
- 1.1.4. a description of the catchment operations;
- 1.1.5. the demarcation of the area or details of other measures protecting the spring against pollution.

1.2. Requirements for physical, chemical and physico-chemical surveys

These surveys shall establish:

- 1.2.1. the rate of flow of the spring;
- 1.2.2. the temperature of the water at source and the ambient temperature;
- 1.2.3. the relationship between the nature of the terrain and the nature and type of minerals in the water;
- 1.2.4. the dry residues at 180 °C and 260 °C;
- 1.2.5. the electrical conductivity or resistivity, with the measurement temperature having to be specified;
- 1.2.6. the hydrogen ion concentration (pH);
- 1.2.7. the anions and cations;
- 1.2.8. the non-ionised elements;
- 1.2.9. the trace elements;
- 1.2.10. the radio-actinological properties at source;
- 1.2.11. where appropriate, the relative isotope levels of the constituent elements of water, oxygen ($^{16}O ^{18}O$) and hydrogen (protium, deuterium, tritium);
- 1.2.12. the toxicity of certain constituent elements of the water, taking account of the limits laid down for each of them.

1.3. Criteria for microbiological analyses at source

These analyses shall include:

- 1.3.1. a demonstration of the absence of parasites and pathogenic micro-organisms;
- 1.3.2. a quantitative determination of the revivable colony count indicative of faecal contamination:
 - (a) absence of *Escherichia coli* and other coliforms in 250 ml at 37 $^{\circ}$ C and 44,5 $^{\circ}$ C;
 - (b) absence of faecal streptococci in 250 ml;
 - (c) absence of sporulated sulphite-reducing anaerobes in 50 ml;
 - (d) absence of *Pseudomonas aeruginosa* in 250 ml;
- 1.3.3. determination of the revivable total colony count per ml of water:
 - (a) at 20 to 22 °C in 72 hours on agar-agar or an agar-gelatine mixture;
 - (b) at 37 °C in 24 hours on agar-agar.

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

1.4. **Requirements for clinical and pharmacological analyses**

- 1.4.1. The analyses, which shall be carried out in accordance with scientifically recognised methods, shall be suited to the particular characteristics of the natural mineral water and its effects on the human organism, such as diuresis, gastric and intestinal functions, compensation for mineral deficiencies.
- 1.4.2. The establishment of the consistency and concordance of a substantial number of clinical observations may, if appropriate, take the place of the analyses referred to in point 1.4.1. Clinical analyses may, in appropriate cases, take the place of the analyses referred to in point 1.4.1 provided that the consistency and concordance of a substantial number of observations enable the same results to be obtained.

III. SUPPLEMENTARY QUALIFICATIONS RELATING TO EFFERVESCENT NATURAL MINERAL WATERS

At source or after bottling, effervescent natural mineral waters give off carbon dioxide spontaneously and in a clearly visible manner under normal conditions of temperature and pressure. They fall into three categories to which the following reserved designations respectively shall apply:

- (a) 'naturally carbonated natural mineral water' means water the carbon dioxide content of which from the spring after decanting, if any, and bottling is the same as at source, taking into account where appropriate the reintroduction of a quantity of carbon dioxide from the same water table or deposit equivalent to that released in the course of those operations and subject to the usual technical tolerances;
- (b) 'natural mineral water fortified with gas from the spring' means water the carbon dioxide content of which from the same water table or the same deposit after decanting, if any, and bottling is greater than that established at source;
- (c) 'carbonated natural mineral water' means water to which has been added carbon dioxide of an origin other than the water table or deposit from which the water comes.