

# What is environmental information?

[The Freedom of Access to Information on the Environment Regulations of 2005 \(LN 116 of 2005\)](#) (as amended by [LN 298 of 2012](#)) which came into force on 17<sup>th</sup> May, 2005, have directly incorporated the definition of environmental information from the European Directive [2003/4/EC](#) on public access to environmental information (which in turn closely follows, but expands upon, the definition in the Convention).

It is important to understand the distinction between environmental information that would fall within the scope of the Regulations, and personal data, which falls under the [Data Protection Act 2001](#), in order to deal with requests/complaints lawfully.

The following aims to provide an understanding as to what constitutes environmental information, however, it should be noted that this guidance is not intended to be exhaustive.

As per Article 2 of the above regulations, 'Environmental information' means any information in written, visual, aural, electronic or any other material form on:

- (a) the state of the elements of the environment, such as\* air and atmosphere, water, soil, land, landscape and natural sites including wetlands, coastal and marine areas, biological diversity and its components, including genetically modified organisms, and the interaction among these elements;
- (b) factors, such as substances, energy, noise, radiation or waste, including radioactive waste, emissions, discharges and other releases into the environment, affecting or likely to affect the elements of the environment referred to in paragraph (a);
- (c) measures (including administrative measures), such as policies, legislation, plans, programmes, environmental agreements, and activities affecting or likely to affect the elements and factors referred to in paragraphs (a) and (b) as well as measures or activities designed to protect those elements;
- (d) reports on the implementation of environmental legislation;
- (e) cost-benefit and other economic analyses and assumptions used within the framework of the measures and activities referred to in paragraph (c); and
- (f) the state of human health and safety, including the contamination of the food chain, where relevant, conditions of human life, cultural sites and built structures inasmuch as they are or may be affected by the state of the elements of the environment referred to in paragraph (a) or, through those elements, by any of the matters referred to in paragraphs (b) and (c).

More information on the above can be found further down on this page.

Information can include - or be found in:

- Documents, leaflets, reports, books, notes, data sets, memos, meeting notes in

fact anything written down and pictures, maps, plans, designs, models, video, posters, diagrams, sketches, graphs, illustrations

- Tape recordings, recorded presentations, compact discs
- Any type of computer file, word-processor file, database, spreadsheet, computer models (incl. 3-D models), emails, archived web pages/sites, temporary or cached files, still images, video images, computer generated images
- Any other material form - that is, other forms not widely available but does not include - information that does not yet exist but that could be created by the manipulation of existing information. In other words authorities are only obliged to release information held and are not required to research or manipulate data to create new information.

Example: If the Environment and Resources Authority is asked for a graph of air quality for the last 12 months, but it only holds the raw data and no graph has been created, it would only be required to release the data, it would not be required to create the graph.

Information is not restricted by geographical location.

**(a) the state of the elements of the environment, such as\* air and atmosphere, water, soil, land, landscape and natural sites including wetlands, coastal and marine areas, biological diversity and its components, including genetically modified organisms, and the interaction among these elements;**

\*use of 'such as' - this indicates that the elements listed here are purely representative, it is not suggesting that these are the only things which should be considered as elements - 'such as' also appears in paragraphs 2(1)(b) and (c).

- **The state of the elements** - this includes the physical, biological and chemical characteristics - this is not limited to current conditions but includes past and predicted future conditions.
- **Air and atmosphere** - the atmosphere is the collection of gases that surround the earth and that are retained by the earth's gravitation. The atmosphere extends up to approximately 660km in altitude, the distinction between air and atmosphere suggests that air refers to air within buildings and structures, underground, indoors, in the workplace and elsewhere where it is confined in some way. Air and atmosphere should not always be taken to mean 'air' as a whole and in its entirety, the gases, which make up the atmosphere and air are also included separately, for example, carbon dioxide, oxygen etc.
- **Water** - will mean water in all its forms (vapour, liquid) and is not limited by scale (from oceans to the smallest droplet), it includes water underground or on the surface, water in natural settings (harbours) and man-made (ponds).

- **Soil** - soil can be taken to mean the unconsolidated mineral or organic material top layer of the earth's surface in which plants grow.
- **Land** - land can be described as all land surfaces, buildings, land covered by water, and underground strata. By including underground strata the implication is that land covers natural minerals and deposits such as limestone.
- **Landscape** - Landscape is defined by the European Landscape Convention 2000 as, 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'. A more technical definition may be of more use when attempting to ascertain what landscape will mean in terms of environmental information. A specialist environmental definition of landscape is, 'the traits, patterns, and structure of a specific geographic area, including its biological composition, its physical environment, and its anthropogenic or social patterns. An area where interacting ecosystems are grouped and repeated in similar form'.
- **Natural sites, including wetlands, coastal and marine areas** - 'natural sites' recognises the importance of protected areas such as Sites of Special Scientific Importance and Areas of High Landscape Value. However, a site will not need to have been designated to qualify as a 'natural site'. All natural sites that are ascribed a specific value, local value, special natural or historic value can be taken to be a natural site. 'Natural' does not necessarily mean devoid of human interference, the management of a site will not preclude it from being classified as natural.
- **Biological diversity and its components** - Article 2 of the Convention on Biological Diversity 1992 defines the term as, 'the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems'. The components of biodiversity then must be taken to mean, genetic diversity - the genetic composition of a species (genes, DNA, etc.), species diversity - every living thing, every single species (plant, animal, bacteria, virus's etc), ecosystem diversity - all habitats whether natural or man-made (from arctic wilderness to urban sprawl). In addition, biological diversity and its components should not be limited in time, for instance, it will include dead and extinct individual organisms and species.

- **Genetically modified organism' (GMO)** - UNECE describe GMOs as 'any organism with the exception of human beings that possesses a novel combination of genetic material obtained through the use of modern biotechnology'. In addition, the European Community has used the following definition, 'genetically modified organism (GMO) means an organism, with the exception of human beings, in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination.
- **The interaction among these elements** - this recognises that no one aspect of the environment can be fully understood in isolation and that the interaction between the elements is just as important as the elements themselves.

**(b) factors, such as substances, energy, noise, radiation or waste, including radioactive waste, emissions, discharges and other releases into the environment, affecting or likely to affect the elements of the environment referred to in paragraph (a);**

- **Factors** - factor in this sense should simply be taken to mean, something that has an affect on an element of the environment. It is important to note at this stage that it is possible for an 'element' to be a 'factor', for instance, water will become a 'factor' in an incidence of flooding. Equally, a 'factor' may also be an 'element'.
- **Substances** - includes all material/matter, natural or synthetic, for example, chemicals, pharmaceuticals, hormones, antibiotics, oil, particulates, gases, liquids - a European definition of substances states, 'Substances means any chemical element and its compounds, as they occur in the natural state or as produced by industry, whether in solid or liquid or gaseous form'.
- **Energy** - can be expressed in traditional scientific language, thermal, chemical, electrical, kinetic, potential, light, and sound. Common usage for the term centres on power generation, oil-fired, coal-fired, gas-fired, and nuclear energy and renewable energy (wind power, solar energy etc). However, energy is not restricted to large-scale power plants and electricity generation. It also includes, heat (heat, in the form of hot water emitted into the sea for example, can have a drastic affect on the plants, animals and fish living in the vicinity). Energy will include sunlight, geothermal, radio waves, microwaves etc.
- **Noise** - although noise is itself energy, it is included here separately. Noise is subjective, localised and transient. A simple dictionary definition of noise is, 'a

sound, especially one that is loud, unpleasant, or disturbing'. Noise also includes vibrations (Environmental Protection Act, 2001).

- **Radiation or waste, including radioactive waste** - radiation can be natural (sun, cosmic rays, radioactive minerals), or man-made. There are two main types of radiation, ionising and non-ionising. Ionising radiation is either particulate (alpha, beta, neutrons) or electromagnetic (x-rays, gamma rays). Non-ionising radiation consists of electromagnetic radiation from extremely low frequency (ELF) to ultraviolet (UV).
- **Waste** - waste can be broadly interpreted to mean anything discarded. This would include household waste, industrial waste and commercial waste (which are collectively described as Municipal Solid Waste (MSW)) and, construction and demolition wastes, agricultural wastes, sewage sludge and dredged spoils, and Special Waste, hazardous, toxic waste. The waste sector is highly regulated and the definition of waste can be controversial, for instance, if 'waste' is to be used to generate power through incineration, it has been argued that this therefore allows it to be categorised as fuel as opposed to waste (at the time of writing, it is classified as waste until full recovery is complete, i.e. combustion is complete). There are many categories of waste, and special rules/prohibitions apply to transboundary movement of wastes.
- **Radioactive waste** - radioactive materials are used in many situations, settings and industries and are more widespread than you might think. Radioactive materials are used in common products such as the luminous dials on watches, ceramic glazes and smoke detectors. Radioactive waste is generated by hospitals, pharmaceutical industry, research establishments, and of course the nuclear power generation industry. Radioactive waste is categorised as either High-level waste (HLW), Intermediate-Level Waste (ILM), Low-Level Waste (LLW) or Very-Low-Level Waste (VLLW).
- **Emissions, discharges and other releases** - a common, widely quoted definition of emission comes from the European IPPC Directive<sup>8</sup>, 'emission shall mean the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources (...) into the air, water or land'. 'Discharges' is defined in the Environment Protection Act, 2001 as including emissions, deposit, dumping, disposal, addition or introduction into the environment of a substance or energy, directly or indirectly from any point source or diffuse source, whether stationary or mobile, and whether caused or permitted intentionally or otherwise and whether continuous or intermittent or once only'. Releases - normally includes releases a) in relation to air, any emission of the substance into the air; (b) in relation to water, any entry (including any

discharge) of the substance into water; (c) in relation to land, any deposit, keeping or disposal of the substance in or on land...'

- **Affecting or likely to affect the elements of the environment referred to in (a)** - this is a qualification to the understanding of factors. Information about the factor would not be environmental information unless the factor is affecting or likely to affect the elements of the environment, although it is hard to imagine when a factor would not have such an effect. There is no indication that the effect must be detrimental or large scale, therefore, the effect may be minimal or negligible. Note use of the words 'likely to', this is a stronger threshold than is found in (f) below (may be affected by) and suggests that there must be a degree of evidence to suggest that the factor would have the supposed effect. 'Likely to', can be interpreted by way of reference to the balance of probabilities. This section of the definition deals with two aspects - measures and activities.

**(c) measures (including administrative measures), such as policies, legislation, plans, programmes, environmental agreements, and activities affecting or likely to affect the elements and factors referred to in paragraphs (a) and (b) as well as measures or activities designed to protect those elements;**

- **Measures** - measures will comprise of steps taken to ensure an effect (past, present or future), the methods, processes or instruments used. Administrative measures are specifically mentioned but the interpretation of measures is not restricted to those of an administrative nature. Further explanation is offered by reference to particular examples. Measures will also encompass regulatory, economic and voluntary tools, such as Acts of Parliament, local by-laws, taxes, fines, charges, and voluntary agreements. It should be noted that, for example, policies will not be restricted to 'environmental' policies, but will also take into account development policies, economic policies, transport policies, health and safety policies etc, if they satisfy the qualifying condition (see below). This is also true of environmental agreements, even though 'environmental agreements' (which will include not only international agreements between states, but also regional or local agreements and agreements between the public and private sectors) are specifically mentioned, other types of agreements may be relevant.
- **Activities** - activities are not described in the definition, however, the Aarhus Implementation Guide refers to '...decisions on specific activities, such as permits, licenses, permissions...' Therefore, if the permit can be taken to be the decision to allow the activity to proceed, the activity must be the process, operation, actions, procedure undertaken for which a permit is required. However, it should not be assumed that a permit or authorisation is required in order for an action to be considered an activity. The interpretation of activities

is likely to be broad and may include, for example, the construction of a bypass, a new runway, or agricultural practices.

- **Affecting or likely to affect the elements and factors referred to in (a) and (b) as well as measures or activities designed to protect those elements** - as with the previous section there is a qualifying statement associated with measures and activities. The measure or activity must affect, or be likely to affect either, the elements of the environment, or the factors. Or additionally, in this case, be specifically designed to protect them. In other words, there must be a link between the measure/activity and an element/factor.

**(d) reports on the implementation of environmental legislation;**

This constitutes for instance, any reports reviewing or monitoring, the operation, performance, success or failure of environmental legislation.

**(e) cost-benefit and other economic analyses and assumptions used within the framework of the measures and activities referred to in paragraph (c);**

This part of the definition includes within the definition of environmental information economic and financial information bringing the Directive in line with the Aarhus Convention. The Convention mentions, 'cost-benefit and other economic analyses and assumptions used in environmental decision-making' (Article 2(3)(b)). The desire to include economic and financial information in the definition stems from the recognition that it is important to integrate environment and economic considerations in decision-making (also social, see below). It is notoriously difficult to cost environmental aspects of a project, for example, what value can we place on a rare species? In the past when developments were planned, these environmental aspects were often ignored. However, now it is recognized that these considerations are vitally important. As it is so difficult to adequately account for environmental aspects which have no market value, it is essential that people have access to information as to how those decisions were taken. This section is qualified by referring back to paragraph (c) measures and activities, therefore, the economic and financial aspects taken into account during the framing of measures or activities.

**(f) the state of human health and safety, including the contamination of the food chain, where relevant, conditions of human life, cultural sites and built structures inasmuch as they are or may be affected by the state of the elements of the environment referred to in paragraph (a) or, through those elements, by any of the matters referred to in paragraphs (b) and (c).**

- **The state of human health and safety, including contamination of the food chain** - the state (physical, biological, chemical - as in paragraph (a)) of human health and safety, there is no suggestion that this applies to individuals, therefore, information falling under this category refers to collective health and safety. This may include information on diseases and conditions caused or affected by an element, factor, measure, or activity. This could therefore include information on the recent outbreak of SARS, , asthma, asbestosis, etc.

Special mention has been made of the contamination of the food chain, this follows concerns over BSE and other health scares.

- **Conditions of human life** - this aspect acknowledges the connection between social and environmental factors. As with economic factors, social and environmental concerns cannot be viewed in isolation, social and environmental factors will affect each other. This section therefore, allows relevant social information to be included. As with human health and safety this is not intended to apply to information on an individual scale, but rather large-scale factors, for example, conditions of human life can be interpreted to include information on housing, poverty, employment, social welfare, heating, access to clean water, sanitation, healthcare, education, justice, etc. if there is a link via (a), (b) or (c).
- **Cultural sites** - cultural sites will constitute places which are ascribed a particular literary, educational, artistic, anthropological, historical value, religious, or social significance. For example, World Heritage Sites, scheduled monuments, listed buildings, archaeological sites, gardens, buildings. These sites will include modern as well as historical, and urban as well as rural locations.
- **Built structures** - As mentioned above, buildings in a general sense are included as part of the definition of land as an element, therefore, built structures allows a focus on particular buildings specifically, as well as other infrastructure. This could include pylons, fences, bridges, roads, phone masts, tunnels. Other built structures may include cars, trains, planes, boats, ships, etc. The definition does not specifically refer to human built structures and therefore it is not unreasonable to suppose that bird's nests, for example, will also qualify as built structures.
- **Inasmuch as they are or may be affected by the state of the elements of the environment referred to in paragraph (a) or, through those elements, by any of the matters referred to in paragraphs (b) and (c)** - This paragraph is also subject to qualifying remarks, this is necessary in order to place boundaries on what is considered environmental information as opposed to social or economic information for example. However, it should be noted that this qualification is not the same as the ones used previously. The earlier qualification referred to 'affecting or likely to affect', whereas this refers to 'as they are or may be affected by'. The strength of this test is therefore, weaker. It will not require as much certainty. There need only be a suspicion of an effect occurring, not as much evidence will be required as would be the case for an

effect 'likely to' occur.