



HBM4EU

science and policy  
for a healthy future

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## **Annex 2.1.2 to D7.3**

### **Interviewer Manual to the basic questionnaire for 1<sup>st</sup> priority substances**

**WP 7**

**Task 7.3**

**D 7.3**

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### 1. Interviewer manual of basic questionnaire

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## 2 Aims

The present manual contains instructions intended to facilitate the field work. This manual is designed specifically for interviewers in order to be considered as a reference tool at the time of collecting information. The success of the surveys depends largely on it.

Likewise, the manual provides a justification of the objective of each question included in the basic questionnaire. The basic questionnaire has been designed to collect all the necessary information concerning individual characteristics of the participants and on different sources and routes of exposure to 1st-priority substances selected for study (Phthalates/DINCH, Bisphenols, Per-/Polyfluorinated compounds, Flame Retardants, Cd, Cr, PAHs and Aniline family: MOCA), with the aim to characterise as well as possible the level of exposure to all these substances.

## 3 Considerations about basic questionnaire

This questionnaire aims to collect information in a standardized way from each participant, as this will enable to obtain comparable results across countries involved in the HBM4EU study. It has been designed to collect all the necessary information concerning individual characteristics on the following topics: I) sociodemographic characteristics; II) residential environment and home exposures; III) dietary habits; IV) lifestyle; V) occupational exposures; VI) health data.

## 4 Information for interviewers

To ensure that this questionnaire is administered in a standardized way, please follow the considerations listed below:

- This questionnaire only must be applied to the person selected to participate in HBM4EU study.
- Questions and responses must be literally read by the interviewers, always following the fixed order. To dispel misunderstanding among participants, please do speak clear and loud enough and at a normal rate to be adequately heard by the interviewee.
- The response given by the interviewee must be accepted by the interviewer. In those cases, where a certain response is not feasible or convincing the interviewer should formulate the question again to receive a new answer. If not, the given response will be finally accepted by the interviewer.
- All the questions of this questionnaire must be answered by the interviewee. In case the interviewee does not provide a precise response after a reasonable period of time, or refuse to answer, the question will be considered as "Don't know".

## 5 Basic questionnaire interviewer manual

### I. SOCIO-DEMOGRAPHIC SECTION

| QUESTIONS  | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|--|--|---|
| <p><b>1. What is your birth date?</b></p>  | <p>This question is essential to identify potential differences in human exposures, as well as susceptibility associated with the age. Potential determinant of exposure to phthalates, BPA, PFASs, FR, Cd, Cr, PAHs and anilines (1st priority substances).</p> | <p>Month and year of birth will be asked here.</p>  |
| <p><b>2. Where were you, your parents and grandparents born?</b></p>   | <p>It is necessary to collect information on participants' country of origin, as it could lead to different exposure levels to priority substances (due to genetic characteristics, lifestyle or dietary habits, among others).</p>                              | <p>In this question, information on countries where the participants and their direct family members (parents and grandparents) were born will be asked for.</p>  |
| <p><b>3. Which language(s) do you speak at home</b></p>  | <p>Asking for languages spoken at home we can collect additional information on the origin of the participant and also on cultural factors.</p>  | <p>Please, indicate the national language (or languages, for countries with several official languages) spoken at home. If other language(s) different from national languages is (are) spoken at home, specify which one(s).</p>                                       |
| <p><b>4. How long have you been living in...? Please indicate the number of years (or months if less than 1 year)</b></p>  | <p>This question is intended to gather information on internal and external migrations, since it could be associated with changes in chemical exposure levels.</p>   | <p>According to geographical characteristics of each country, please ask for the length of time living in this country/region/province/municipality/current address. Select "Don't know" if the interviewee does not remember that time.</p>                            |
| <p><b>5. If you have lived in other households in the past 10 years, complete the following information for each address (starting with the current address and going back to complete the temporal frame)</b></p> | <p>This question provides information on residential history, which helps to identify the potential influence of the place of residence on the results of the study.</p>   | <p>Please, provide complete information on this question. If address is not remembered, indicate at least the municipality or postal code. Regarding the period of time living in each place, try to collect information on how many months and years, if possible.</p> |

| QUESTIONS   | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS   |
|---|--|--|
| <b>6. What is the highest level of education you attained?</b>                              | The level of education is a proxy of the socio-economic situation, which could be used to develop an indicator of occupational social class. Determinant of exposure to phthalates, BPA, PFASs, FR, Cd ,Cr, PAHs (1st priority substances).                      | Please, indicate the level completed by the interviewee. When required, check the right category in Annex 2.1.2.1 "International Standard Classification of Education"                                     |
| <b>7. What is your current main labour status?</b>  | The labour status is also a proxy of the socio-economic situation, which could be used to develop an indicator of occupational social class. Determinant of exposure to phthalates, BPA, PFASs, FR, Cd, Cr, PAHs and anilines (1st priority substances).         | Please note that this question is referred to the labour which the interviewee dedicates most of her/his time to.  |
| <b>8. Which of the following best describes your current professional category?</b>         | The professional category is also a proxy of the socio-economic situation, which could be used to develop an indicator of occupational social class. Determinant of exposure to phthalates, PFASs, BPA, FR, Cd, Cr, PAHs and anilines (1st priority substances). | Please note that this question is referred to the current professional category in which the interviewee spends most of her/his time in. Check the ISCO 08 manual (Annex 2.1.2.2) to answer this question. |
| <b>9. Please, give us the following information on all members of your household</b>        | The number of people living in the same household, as well as their education, labour status and professional category, is an indicator of the socio economic situation of the household.  | Please, complete the table with the information given for every household member (including members currently living at home, or outside but economically dependent from the household, e.g. students).    |
| <b>10. Could you provide the approximate range of your household 's total gross income?</b> | The income level is an indicator of the socio economic status of the household. Determinant of exposure to phthalates, PFASs, BPA, FR, Cd, Cr and PAHs (1st priority substances).  | This question is referred to total annual gross incomes from all members of the household.   |

## II. RESIDENTIAL ENVIRONMENT AND HOME EXPOSURES

| QUESTIONS   | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS  |
|---|---|---|
| <p><b>1. In which area is your home located?</b></p>                                | <p>This question aims to characterize the environment where the participant lives, as differences could exist in human exposure associated with the area of residence. Residential area impacts exposure to fine particles, PAHs and other air pollutants, and it could be also a determinant of exposure to phthalates, BPA, FR, Cd and Cr (1st priority substances).</p>  | <p>This question has to be answered according to the area in which the home is located. Please, only one from the given options must be selected (best fit).</p>  |
| <p><b>2. Is there any of the following facilities within 300 m of you home?</b></p> | <p>It is necessary to collect information on facilities considered as potential sources of exposure to pollutants, which might lead to differences in human exposure levels. Likewise, this question provides information on the general characteristics of the living environment (e.g. heavily industrialized area...)<br/>Large scale combustion facilities nearby households increase the PAH exposure and other air pollutants. Determinant of exposure to phthalates, BPA, Cd and Cr (1st priority substances).</p> | <p>Please, ask only for those facilities located near the participant's home (300 m). Multiple answers are possible.<br/>If the concept of distance is not well understood by the interviewee, some explanation can be given as: "facilities within 15 minutes walking distance from your home".<br/>When appropriate (e.g. facilities not included in the given options or not sure of the right category), specify the name of other facilities located near household.</p> |
| <p><b>3. Which of the following options best describes your home...?</b></p>        | <p>Asking for home types allows gathering additional information on the characteristics of the dwelling and the environment where the participant live. Moreover, the home type could contribute to different exposure to contaminants (e.g. floor level, isolation...)</p>   | <p>Indicate the option that best fits from the given options. When necessary, specify other home types. Please note that semi-detached house is a single-family home that is built to share one common wall with the adjacent home, having both of them the same design. On the other hand, townhouses are traditionally row houses with two or more floors, where homes are connected, on both sides and on all levels.</p>  |



| QUESTIONS  | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|--|--|---|
| <b>4. Do you know approximately when was your home built?</b>  | Home's age is a direct indicator of the indoor environment and also of the materials and compounds used for building. Since some compounds have been banned and others have emerged, this question will provide information on the potential contribution of home's age on environmental exposures levels. | Please select the year range where the year of building is more likely included, according to the participant's answer.<br>If the interviewee has not a clear idea or a reference of the age of building, then select Don't Know.   |
| <b>5. What is the living surface (in m<sup>2</sup>) of your house?</b>   | The home surface, together with the number of household members, provides information on the socio-economic status of the participant. Furthermore, this surface might also affect the indoor concentration of certain compounds, which leads to differences in levels of exposure.                        | This question refers to indoor living spaces (terraces, gardens... should not be included). Participants can provide an estimation or rounding answers if they do not know exactly the home surface.  |
| <b>6. Is there a garage directly communicated (attached to the side, in the basement) with this home? If yes, please specify frequency of use and cars parked in it.</b> | Direct air connection between garage and living spaces may clearly result in PAH exposure and other combustion products.   | Please note that this question aims to collect information on communicated garages in houses (e.g. attached to walls, in the basement) and also in flats or apartments (in the basement of the building). Specify also the number of days/week in which the garage is used and the number of cars generally parked. |

| QUESTIONS   | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|---|--|---|
| <p><b>7. What materials are most of the floor covering your home made of?</b></p>   | <p>The floor covering is considered as an important source of indoor exposure to certain compounds, especially phthalates, BPA, PFASs and FR. Furthermore, floor covering favouring dust accumulation could be a way for humans to be exposed to other pollutants at home. Phthalates and flame retardants are used as plasticizers(softeners) in floor covering. They are volatile and can be found in house dust, too. One of the newer phthalates, DPHP, is used in both carpet coating and also inside cars. The more space in the flat has PVC floor covering, the bigger is the surface for possible phthalates exposure. Regarding flame retardants, despite some compounds have been forbidden (e.g. PBDEs), exposure to other organohalogen and organophosphorus compounds could occur at home due to the previous presence of these materials in floor covering.</p> | <p>This question aims to collect information on the main type of materials used to cover more than 50% of the floor. When appropriate (e.g. floor covering not included in the given options or not sure about the right category), specify the name of other floor coverings given by the interviewee. If a clear response is not obtained, then select Don't Know. Synthetic or natural fiber with plastic backing refers to fiber that is fixed on a flat, sometimes bendable surface made out of a rubber or plastic. This surface is often not seen easily as it is the layer applied to the ground (the backside or backing), with the fiber side facing upwards.</p> |
| <p><b>8. Please, complete the following information about redecorations and renovations made in your home. Has your home been...</b></p> <p><b>8.1. Renovated in the last 2 years?</b></p> <p><b>8.2. Redecorated in the last year?</b></p> | <p>Renovations and redecorations at home entail the use of a wide of variety of compounds, such as paints, varnish, metals, and plastics, among others. This could contribute to chemical exposure in people living in houses where recent renovations and redecorations were conducted. Especially renovation can include the exchange of floor or wall covering. The procedure of removing the former covering with a new one with a potentially higher concentration of phthalates, BPA or flame retardant could increase exposure to these compounds.</p>  | <p>Please, consider only renovations conducted in the last 2 years, and redecorations in the last year. Renovations refer to major changes made at home for a better state, such as removing floor or windows, rebuilding walls or roof, remodelling kitchen or bathroom... Redecorations refer to changes in decorative scheme or appearance, such as applying paint, varnish, changing wallpapers, among others.</p>  |

| QUESTIONS  | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|--|--|---|
| <b>9. Do you have any of the following problems in your home?</b>  | Mould or mildew on walls and water damage, among others, are frequent domestic problems which can provide information on the quality of the living environment, as well as on participant's socio-economic status.   | Complete the table with the information on domestic problems given by the interviewee.  |
| <b>10. According to the vehicular traffic, how do you classify the road in which your home is located?</b> | Traffic density has a direct impact on exposure to fine particles, PAHs, and other air pollutants, as well as Cd and Cr (1st priority substances).   | Please, indicate the type of road according to vehicular traffic. This classification includes categories which vary from highest frequency of traffic (highway) to lowest one (pedestrian road).   |
| <b>10.1 At what distance (meters) is your home from a street with constant traffic?</b>                    | Distance to heavy traffic has a direct impact on exposure to fine particles and PAHs, and other air pollutants, as well as Cd and Cr (1st priority substances).  | Please note that constant traffic means cars continuously circulating.  |
| <b>11. Does your home have at least one window facing a street with constant traffic?</b>                  | This window may be open at times increasing exposure to air pollutants, which could a source of the exposure to PAHs, Cd an Cr (1st priority substances).  | Please note that constant traffic means cars continuously circulating.  |
| <b>12. How often do heavy vehicles (buses, trucks...) circulate near your home?</b>                        | Heavy traffic intensity has a direct impact on exposure to fine particle, PAHs, and other air pollutants, as well as Cd and Cr (1st priority substances).  | This question only refers to heavy vehicles, such as buses and trucks. Please, select the option that best fits to interviewee situation.   |
| <b>13. How is your home mainly heated?</b>   | Heating system has an important contribution on the indoor levels of certain compounds, specially the number and types of stoves/fireplaces enhance exposure to fine particle, PAH, hazard combustion products, and heavy metals among others.<br>Hence, it is necessary to identify the main heating system at home to explore its association with human exposure levels to these compounds. | This question is intended to identify the main heating system used at homes, that is, the system used to heat more than 50% of the home surface, regardless of other systems used at home.<br>District heating refers to urban heating (which comes from outside the house).<br>When none heating system at all is available at home, then select "No heating".<br>In case of selecting heating system not included in the given options or not sure of the right category, it is necessary to specify the name of these other heating system. If the interviewee has not a clear response, then select Don't Know. |

| QUESTIONS   | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|---|--|---|
| <b>14. Which fuels or energy sources are mainly used in your home for heating, water heating and cooking? Please, specify how many months each source of energy is used every year</b>                    | This question includes information on fuels and other sources of energy used for heating, water heating and cooking. Should the energy sources release smoke indoors, this is relevant for exposure to fine particles, PAHs and other combustion products.   | Please, specify which options are used for heating, water heating and cooking at home, and when proceeding, indicate the number of months in which they are used.   |
| <b>15. Is there any smoke extraction system in your home kitchen? If yes, please specify frequency of use</b>   | Smoke extraction systems in kitchens help to reduce indoor concentration of certain chemicals, such as combustion products. Hence, it is important to collect information on these smoking extraction systems, as well as on their frequency of use to better characterize home exposure to contaminants.  | Smoke extraction system refers to those systems located in the kitchen (especially near of the cooking area, e.g. extractor hood), aimed to evacuate and remove fumes, smoke and combustion products. Please, indicate the frequency of use of this system when appropriate.  |
| <b>16. How is your house usually ventilated? For each option, please, specify frequency of ventilation (months/year in which mechanical systems are used; hours/day for window ventilation by season)</b> | Ventilation at home (mechanical or manual) is related with the exchange of circulating compounds, affecting to indoor concentrations of these compounds at home, and consequently to human exposure levels. This is relevant for fine particle and PAH exposure especially if there is heavy traffic outside the point of fresh air entrance.    | Please, ask for ways of the ventilation of home, and their frequency of use. Please note that mechanical ventilation usually entails the presence of electromechanical systems (e.g. fans) to drive air flow inside and outside home. In case this mechanical system is automatically working, then indicate Always working in the questionnaire. |
| <b>17. How often is general cleaning done in your home?</b>   | House cleaning is associated with the concentration of substances, including chemical pollutants inside home, such as flame retardants and phthalates, among others. This variable might affect human exposure indoors, since house cleaning involves the mobilization and elimination of dust-borne chemicals deposited in floor, windows, etc. | Please note that general cleaning refers to a wide cleaning in the whole dwelling involving floors, dust, regardless of the person involved on this task.   |
| <b>18. Are you in charge of general cleaning of your home?</b>  | As mentioned above, house cleaning might affect human exposure to substances accumulated indoors, especially by those in charge of the general cleaning, due to their direct contact.  | Please, specify the contribution of the interviewee to the general cleaning of the house (if he/she has a partial contribution, ask for an estimation of the percentage of the workload usually done).  |

| QUESTIONS   | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS   |
|---|--|--|
| <p><b>19. Do you use a vacuum cleaner for general cleaning of your home? If yes, please, specify type of vacuum cleaner and use frequency</b></p>   | <p>The use of vacuum cleaner for house cleaning involves the mobilization of substances accumulated in domestic dust. This might affect the concentrations of circulating compounds inside home (e.g. flame retardants and phthalates), and therefore, the exposure of residents to these compounds.</p>   | <p>Please, indicate if a vacuum cleaner is used for house cleaning. When appropriate, specify the frequency of use, as well as the type of filter. Note that water filters refer to those vacuum cleaners having a container for water, while air filters do not need water for working but a bag or a tank where the dust is accumulated.</p>   |
| <p><b>20. In the last month, were any of following cleaning products used in your home, at least once a week? If yes, please specify if the cleaning product generally used is a chemical or eco-friendly product</b></p> | <p>Certain household cleaning products contain chemical substances which residents could be exposed to (e.g. PFASs in furniture polish/ specific cleaning agents/ impregnation/ coating agents/ paints). Hence, a proper characterization of the exposure via questionnaire to these products is needed to identify their potential contribution on human exposure.</p>                        | <p>This question aims to identify those products used at home at least once a week in the last month, irrespective of the person in charge of their application. For those products used, please specify if it is a chemical or eco-friendly product. Eco-friendly products refer to those products without chemical substances in their composition (or reduced concentrations). They can be identified by the labelled and specifications in their packaging. Please, select "don't know" if the interviewee is unable to differentiate chemical from eco-friendly products. If applicable (e.g. a product not included in the given options or not sure of the right category), specify the name of product given by the interviewee. If the interviewee does not have a clear response about the use of a product, then select Don't Know.</p> |
| <p><b>21. Do you have any pets at home? If so, specify type and number</b></p>  | <p>Pets are considered as a source of home exposure to certain compounds (allergens, pesticides, parabens, among others), because of the deposition or accumulation of these substances in the hair. Likewise, this question could be also helpful for studying the relationship between having pets at home and the development of allergic or atopic diseases, such as asthma, eczema...</p> | <p>Note down if certain animals are present at home, and their number. Please, specify other animals not included but reported by the interviewee. If there are no pets at home, jump to the next section "<b>Dietary habits</b>".</p>   |

| QUESTIONS  | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS   |
|--|---|--|
| <b>21.1. In the last month, were any of the following products used for your pets?</b> | Pets products could be a source of exposure to certain substances, such as insecticides, parabens, among others. Information on this matter has to be collected for a proper characterization of human exposure to these compounds. | Please, collect complete information on pet's product used in the last month.<br>Overall, grooming products refer to cosmetic products for pets (e.g. shampoos, lotions...) while external antiparasitic treatments are used to control parasitic pest (fleas, ticks...).<br>IF applicable (e.g. a product not included in the given options or not sure of the right category), specify the name of the product given by the interviewee. If the interviewed has not a clear response about the use of a product, then select Don't Know. |

### III. DIETARY HABITS

| QUESTIONS   | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|---|--|---|
| <p><b>1. How often did you consume the following food items in the last 4 weeks?</b></p>  | <p>This question is necessary to assess the overall dietary habits of participants. Certain foodstuffs can be the source of exposure to prioritized substances. Smoked food, grilled over an open flame/burning embers, fried food. All of these ways of food processing can generate PAHs. Phthalate exposure has been shown to be positively correlated with consumption of: cereal products, fats, fatty dairy products (e.g. butter, cheese), offal, and various sweets (e.g. ice cream, hazelnut spread, and jelly candies) as well as ready meals, fruits and vegetables, fish, meat (poultry) and eggs. Can food/drinks could be a determinant of the exposure to BPA. Fish, seafood and microwave popcorn are sources of exposure to PFASs. Seafood consumption is also a determinant of the exposure to Cd and Cr. Regarding flame retardants, the following food items have been found to be associated with the exposure to this group of substances: eggs and egg products, milk and dairy products, meat and meat products, animal and vegetable fats and oils, fish and other seafood.</p> | <p>Please note that the period of interest is 4 weeks in order to assess the typical diet. Think about all the food you eat, both meals and snacks, either at home or outside, please specify all amount of foods you consumed including also ingredients of any meal (e.g. salad for sandwiches, cheese for pasta or sandwiches...) Please, show Annex 2.1.2.3 "Food serving sizes gallery" to the interviewee to check the serving sizes of each food consumed in the last 4 weeks. Indicate the frequency of consumption of each food, as well as the number of servings, according to the pictures included in the gallery.</p> |
| <p><b>2. Do you consume dietary supplements (e.g. vitamins and minerals)? If so, please indicate frequency, starting date and finishing date (if the use has finished).</b></p> | <p>Human metabolism of some xenobiotics could be affected/modulated by the concentration of vitamins.</p>  | <p>Information on vitamins and supplements (not for medicines), has to be collected here. When appropriate (e.g. a product not included in the listed options or not sure of the right category), specify the name of the product given by the interviewee. If the interviewee has not a clear response about the use of a product, then select Don't know.</p>   |

| QUESTIONS  | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS  |
|--|---|---|
| <b>3. In the last 4 weeks, did you consume fast food /take away food (including beverages)? If so, how was it packed and how often did you consume it?</b> | This question evaluates exposure to food contact materials possibly containing phthalates, BPA, PFASs and other priority substances.  | Please note that participants can select multiple type of food contact materials, most of them considered as possible sources of prioritized substances. However, other food contact materials such as aluminum or glass are possible.                      |
| <b>4. What materials do you use as cookware for cooking and frying (e.g. pots, pans, fryer, robots, making bread machine etc.)</b>                         | This question evaluates the possible exposure to prioritized substances (e.g. BPA, PFASs) from cross contamination from other food products.  | Please note that participants can select multiple type of materials, most of them considered as possible sources of prioritized substances, other ones such as aluminum or glass are possible.  |
| <b>5. How often have you eaten at restaurant or communal catering (canteen, dining hall or cafeteria) in the last 4 weeks?</b>                             | This question evaluates the exposure to material possibly containing phthalates, BPA, PFASs and other priority substances.  | Please note that multiple answers are possible and the type of selected material referred only to other possible sources of prioritized substances, such as aluminum or glass are possible.   |
| <b>6. How much water do you drink on average each day? (Consider also hot beverages and soups!)</b>  | This question evaluates the amount of water consumed daily by the interviewees.   | Please note that the period of interest is 4 weeks in order to assess the current amount of water consumption. Also consider any other beverages you drink at home and outside home, including hot beverages, tea, coffee and soup.                         |
| <b>7. What is the main source of your drinking water?And cooking water?</b>  | This question is essential to understand what kind of water is consumed most frequently by study participants because the different sources of water have their own bromatological and chemical composition. Together with the home address it provides valuable exposure information. Often, liquids are within bottles with a cap or a layer made out of plastic that is in contact with the liquid. This is why bottled water can potentially be a source of phthalate and BPA exposure. Origin could be also associated with the exposure to PFASs. | This question refers to water consumed at home or elsewhere (e.g., tap water, bottled water). Consider also water use to prepare hot beverages (tea, coffee), and for preparing meals. Please, only indicate the main source of drinking and cooking water. |
| <b>8. Do you use water purification devices or water filtering systems for your drinking water?<br/>And cooking water?</b>                                 | This question evaluates the kind of filters used by the participants at home because filters modify and purify water and consequently they can influence the levels of chemicals of interest.   | This refers to any water treatments done at home, do not include treatments performed by the municipality.  |



| QUESTIONS  | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS   |
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| <p><b>9. Do you drink beverages different from water (fruit juices, ice tea, soft drinks...)? If yes, specify which of the following bottling types do you usually consume</b></p> | <p>This question assesses the possible exposure to prioritized substances from food contact materials through food (cross contamination). Often, liquid containers have a cap or an internal layer made out of plastic that is in contact with the liquid they contain. This is why bottled water can potentially be a source of phthalate and BPA exposure.</p> | <p>Please note that and type of selected material referred only to possible sources of prioritized substances. Other sources such as aluminum or glass are also possible.</p>                          |
| <p><b>10. Do you use containers for fridge storage of food or for long-time storage elsewhere? If so, how often do you use it?</b></p>   | <p>This question evaluates the possible exposure to prioritized substances (e.g. PFASs, BPA) from food contact materials.</p>  | <p>Please note that information on the use of each type of containers has to be collected. Containers used for general food storage (cold and non-cold storage) are included here.</p>                 |
| <p><b>11. Do you use containers for preparing or heating food in the microwave oven? If so, how often?</b></p>   | <p>This question evaluates the possible exposure to prioritized substances (e.g. PFASs, BPA) from food contact materials (cross contamination).</p>  | <p>Please note that multiple answers are possible and type of selected material referred only to possible sources of prioritized substances. Other sources such as aluminum or glass are possible.</p> |
| <p><b>12. Do you use bread toaster?</b></p>  | <p>Heavily toasted bread certainly contains PAHs although any type of toast contains to some extent those substances.</p>  | <p>Please note that the period of interest is 4 weeks in order to assess the frequency of using toaster (at home and elsewhere).</p>   |

#### IV. LIFESTYLE

| QUESTIONS   | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS   |
|---|---|--|
| <p><b>1. In relation to smoking habits, which of the following options best describes your situation? Please, specify all the information for the situation chosen.</b></p> |   | <p>Please, indicate the situation of the participant in relation to smoking habits. Specify the type of product and the frequency of smoking (occasionally, daily and ex-smokers). If the participant has never smoked, 'no' can be ticked under point 1.1 and skip the remaining parts of the question.</p> |
| <p><b>2. How many people living in this house smoke regularly (indoors)? For each of them, please indicate the average number of cigarettes smoked indoors per day</b></p>  | <p>Information on smoking habits and passive exposure to tobacco smoke has to be collected since these are well known sources of exposure to a wide variety of substances such as PAHs, Cd, Cr, BPA and anilines. The concentration of nicotine metabolites has been shown to be significantly associated with the concentration of phthalates.</p> | <p>Please, complete this table for all of the household members that smoke inside the home.</p>  |
| <p><b>3. Do people who visit this house smoke indoor?</b></p>   |   | <p>Here, ask for the frequency in which people visiting the house smoke (indoors)</p>  |
| <p><b>4. How long, on a daily average, do you usually spend in the following indoor places where people smoke?</b></p>  |   | <p>Here it is important to ask only for these indoor places where people smoke, not for general indoor places.</p>   |
| <p><b>5. From the following list of alcoholic beverages please, indicate your frequency of consumption during the previous 12 months?</b></p>                               |   | <p>Alcohol has been identified as an important confounder in many epidemiological studies. Hence, information on alcohol consumption in the last year has to be collected.</p>   |
| <p><b>6. Which of the following options best describes your current physical exercise? Please do not take into account your physical activity at work</b></p>               | <p>This question aims to collect information on general physical exercise. Physical exercise might affect some factors related to metabolism of xenobiotics in humans, as has been observed in epidemiological studies, which could lead to differences in exposure levels to these compounds.</p>  | <p>This question includes information on overall physical exercise, excluding working activity. Please, note that intensive exercise refers to any sweating activity that also makes breathing harder.</p>   |

| QUESTIONS  | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS   |
|--|---|--|
| <p><b>7. How much time do you spend on average in the following places (referred to workdays and weekends)?</b></p>  | <p>The time spent on a daily basis in different environments will provide essential information on potential sources of exposure to contaminants in humans, as well as on their contribution on total exposure burden.</p> <p>Newer cars' interiors can be a source for phthalate exposure (e.g. DPHP), BPA or FR. The newer the car, the more likely a higher exposure. The more time spent in a new car, the more likely is higher exposure.</p>  | <p>Please, compile information on time spent in each of the given environments, during workdays and weekends. Time should refer to an average of time based on the daily habits of the interviewee. 'In your car' refers to the total time spent seated in the car with the doors closed, no matter if the engine is turned on or not.</p>   |
| <p><b>8. How old is the car you spend most time in?</b></p>  | <p>Car's age is directly related to the materials used for its construction. Newer cars' interiors can be a source for phthalate (e.g. DPHP) and flame retardant exposure. The newer the car, the more likely a higher exposure.</p>  | <p>Please, indicate the approximated age of the car most often used by the interviewed (e.g. more than 50 % of the total car commuting). The total age of the car is referred to as the timespan between when the car was first bought and now.</p>  |
| <p><b>9. How often did you use the following cosmetic and hygiene products in the last month? For each product, please indicate the commercial brand you mostly use.</b></p> | <p>Personal care products and cosmetics are widely used.</p> <p>Complete information on the use of these products is needed to a proper characterization of the exposure in humans. Phthalate exposure has been shown to be positively correlated with the use of deodorant, body lotion, anti-ageing cream and perfume as well as make-up and cosmetic products in general. BPA exposure could be also associated with the use of these products.</p> <p>Specific types, such as water resistant make up, nail polish... could be associated with the exposure to PFASs.</p> | <p>Complete information on personal care products and cosmetic used by the interviewee in the last month has to be collected. For each listed product, please indicate yes/no, and the commercial brand for those used by the interviewees. If the interviewee cannot give an answer for a product, please invite him/her to check whether the mentioned product is available at home at the time of the interview. The best would be to show a list of the cosmetic products in question and let the participant to read it along with the interviewer. This would make it easier and quicker to point out the cosmetic items used.</p> |
| <p><b>9.1. How often (times per day) do you wash your hands?</b></p>   | <p>Frequency of hand washing is a determinant of the exposure to different compounds (e.g. phthalates)</p>  | <p>Please indicate here the times per day.</p>   |

| QUESTIONS   | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS  |
|---|---|---|
| <p><b>10. Did you carry out any of the following activities as DIY activities or hobbies and/or were you exposed to any of these substances in such activities in the last month?? (Please, do not consider your professional activity)</b></p> | <p>Some hobbies and DIY activities involve the use of certain products which could affect exposure to first priority substances. This question will help to explore the relationship between the products used in the last month and the exposure levels to the studied analytes.</p> | <p>Please note that this question refers to exposures occurred in the last month.<br/>For each group of products, indicate if they have been used by the interviewee. When applicable (e.g. a product not included in the given options or not sure about the right category), then select other products and specify the name of the product given by the interviewee. If the interviewee has not a clear response about the use of a product, then select Don't Know. For those questions covering the use of inks (e.g. tattoos), please note that they refer to people using these substances (e.g. tattoos artists) but not to people receiving a tattoo (this aspect is covered in Health Section, question no. 17)</p> |
| <p><b>11. Please, indicate how much time on a daily average, you use electronic devices such as mobile phones, computers, tablets, GPS... in the last month?</b></p>  | <p>This question aims to collect information on use of electronic devices, since BPA and FR are frequently used in their manufacture.</p>   | <p>Please, indicate the overall time average dedicated to handle electronic devices, including portable and desk devices, in the last month.</p>  |
| <p><b>12. Do you wear regularly plastic or rubber shoes such as e.g. flip-flops, beach shoes, swimming shoes, Crocs® or clogs without socks?</b></p>  | <p>Rubber shoes often contain phthalates. Direct contact with (sweating) skin can therefore be a source of phthalate exposure.</p>  | <p>Please, ask for the regular use of the type of plastic or rubber shoes mentioned. The use is limited to cases wearing shoes without socks.<br/>Regular use means more than 3 times per week.</p>   |
| <p><b>13. Do you have a habit of putting objects made of plastic (e.g. pens, glasses or toys) in your mouth and chewing on them? If yes, please specify the frequency</b></p>   | <p>Determinant of exposure to phthalates, among other substances.</p>   | <p>Ask here if the interviewee has habit of chewing on plastic objects.</p>   |

## V. OCCUPATION

| QUESTIONS   | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS   |
|---|---|--|
| <p><b>1. Please, indicate the sector of industry/workplace in which you are currently working (refer to annex 2.1.2.4):</b><br/> <b>If other, please specify:</b></p> | <p>The sector of industry is needed to classify the field of work.</p>  | <p>Annex 2.1.2.4: The <b>Statistical classification of economic activities in the European Community</b>, abbreviated as <b>NACE</b> (NACE Rev. 2). Annex 2.1.2.4 can be found attached to D7.3 at the end of this document (main classes).</p>  |
| <p><b>2. Please, describe your current job:</b></p>   | <p>Job description gives information about the type of work where possible exposures could occur.</p>   | <p>Detailed description of work tasks is important to correctly interpret the participants' exposure conditions.</p>   |
| <p><b>3. How long have you been doing this job?</b><br/> <b>Specify years (or months if less than one year)</b></p>   | <p>Length of time working is important when assessing effects of occupational exposures</p>   | <p>Total working time in this job in years and months is asked.</p>  |
| <p><b>4. Which of the following substances are you exposed to in your job?</b></p>  | <p>This question is essential to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.</p> | <p>It is important to let participants enough time to think about the possible exposure to these substances. Category of chemicals is listed in questions 4.1 - 4.27 considering various exposure conditions. Some of the 1<sup>st</sup> priority substances under HBM4EU are mentioned separately in a specified exposure category.</p>   |
| <p><b>4.1. Oil, gasoline, or diesel</b></p>   | <p>The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.</p>      | <p>Oil products represent a general source of exposure to polycyclic aromatic hydrocarbons (PAHs), which are 1<sup>st</sup> priority substances under HBM4EU. Please, select from the list or otherwise specify the work where you come into contact with these substances (e.g., oil refining/ petrochemical plants/ petroleum refinery, garage work, contaminated soil renovation)</p> |
| <p><b>4.2. Creosote, creosote oil, coal tar</b></p>   | <p>The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.</p>      | <p>There is a risk of PAH exposure in contact with creosote and tar. Please, select from the list or otherwise specify the work where you come into contact with these substances (e.g. creosote work, wood impregnation, pillar work, rail work, contaminated soil renovation)</p>  |

| QUESTIONS  | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS   |
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| <b>4.3. Bitumen, bitumen products</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.     | Bitumen products are a source of exposure to PAHs. Please, select from the list or otherwise specify the work where you come into contact with these substances (e.g. road paving, bitumen work, bitumen roofing, waterproofing, contaminated soil renovation)   |
| <b>4.4. Combustion products, including gasoline/diesel exhausts, ash or soot</b>                         | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as and to avoid possible bias. | Combustion products including fine particles have an impact on PAH exposure. Please, select from the list or otherwise specify the work where you come into contact with combustion products (e.g. aluminum production, chimney sweeping, coking plants, firefighting/ fire practice/ fire prevention training, foundry industry, garage work, heating/thermal power plants, metallurgic industry, mining, vehicle inspection, vehicle depots, waste incineration) |
| <b>4.5. Polycyclic aromatic hydrocarbons (PAHs), if not included in other substance group/categories</b> | PAHs are 1 <sup>st</sup> priority substances under HBM4EU.  | Other possible sources of PAH exposure. In case some specific PAHs are used, identification of PAH compounds (name, CAS-number, etc.) is informative in order to correctly interpret the results of the questionnaire.   |
| <b>4.6. Metallic dust</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.     | Please, specify the work task where you come into contact with metallic dust. Identification of metals/substances in dust (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Metallic dust could be a source of exposure to hazardous (heavy) metals including 1 <sup>st</sup> priority substances under HBM4EU cadmium and chromium (VI).  |
| <b>4.7. Mercury</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and of biological monitoring as well as to avoid possible bias.  | Please, specify the work task where you come into contact with mercury or mercury compounds. In the case of mercury compounds, specify compounds (name, CAS-number, etc.).   |

| QUESTIONS                     | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|-------------------------------|--|---|
| <b>4.8. Cadmium</b>           | Cadmium is one of the 1 <sup>st</sup> priority substances under HBM4EU.  | Please, specify the work where you come into contact with cadmium or cadmium compounds. In case of cadmium compounds, specify individual compounds (name, CAS-number, etc.).  |
| <b>4.9. Chromium (VI)</b>     | Chromium (VI) is one of the 1 <sup>st</sup> priority substances under HBM4EU.  | Please, specify the work where you come into contact with chromium or chromium compounds. In the case of chromium compounds, specify compounds (name, CAS-number, etc.).  |
| <b>4.10. Other metals</b>     | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.    | Identification of metals and metal compounds (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.  |
| <b>4.11. Pharmaceuticals</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.    | Specification of the effective drug and its ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire e.g. the analgesic acetaminophen (paracetamol) is a major metabolite of aniline, which is one of the 1 <sup>st</sup> priority substances under HBM4EU.   |
| <b>4.12. Paints/ coatings</b> | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and of biological monitoring as well as to avoid possible bias. | Specification of the paint and its ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.  |
| <b>4.13. Printing inks</b>    | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and of biological monitoring as well as to avoid possible bias. | Specification of the ink and its ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Printing inks could contain e.g. anilines and PAHs, which are 1 <sup>st</sup> priority substances under HBM4EU. Please, specify the work where you come into contact with printing inks (e.g. ink production, printing industry, other job, which?). |

| QUESTIONS   | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS  |
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| <b>4.14. Dyes, azo dyes and pigments (tattoo inks, sulphur dyes, indigo compounds)</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of the dye or pigment and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Dyes could contain e.g. anilines, which are 1 <sup>st</sup> priority substances under HBM4EU.   |
| <b>4.15. Diisocyanates,4,4'-Methylenediphenyl diisocyanate (MDI)-based lacquers, foams and adhesives, toluene diisocyanate (TDI) and MDI or TDI-based polyurethane polymers</b> | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of each of the diisocyanates (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Some anilines (e.g.methylenedianiline (MDA) and toluenediamine (TDA)) are metabolites of diisocyanates. Please, specify the work where you come into contact with diisocyanates. |
| <b>4.16. Varnishes</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of varnishes and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.  |
| <b>4.17. Solvents</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of solvents and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.   |
| <b>4.18. Plasticisers</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of the plasticisers (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Plasticisers could contain e.g. phthalates, which are 1 <sup>st</sup> priority substances under HBM4EU.   |
| <b>4.19. Pesticides, biocides or disinfection products (herbicides, fungicides, insecticides or bactericides)</b>   | The question aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.    | Specification of each of the pesticides and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Pesticides could contain e.g. various anilines, which are 1 <sup>st</sup> prioritysubstances under HBM4EU.  |



| QUESTIONS  | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS   |
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| <b>4.20. Cosmetics or hair treatment products (hair dyes, etc.)</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of cosmetics or hair treatment products/hair dyes and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Cosmetics and hair treatment products could contain e.g. various anilines, which are 1 <sup>st</sup> priority substances under HBM4EU.                       |
| <b>4.21. Anilines (e.g. aniline, 4,4'-methylenedianiline (=4,4'-MDA), 4,4'-methylenebis[2-chloroaniline] (= MOCA), o- and p-toluidine, p-phenylenediamine (= p-PDA), 1,3-diphenylguanidine), if not included in other substance/ group</b> | Anilines are 1 <sup>st</sup> priority substances under HBM4EU.  | Other possible sources of exposure to anilines (especially aniline, 4,4'-MDA, MOCA, o- and p-toluidine, p-PDA, 1,3-diphenylguanidine). In case some specific anilines are used, identification of each of the aniline (name, CAS-number, etc.) is informative in order to correctly interpret the results of the questionnaire.                            |
| <b>4.22. Rubber chemicals</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Identification of specific rubber chemicals (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Rubber chemicals could contain e.g. various anilines and PAHs, which are 1 <sup>st</sup> priority substances under HBM4EU. Please, specify the work where you come into contact with rubber chemicals. |
| <b>4.23. Flame retardants</b>  | Flame retardants are 1 <sup>st</sup> priority substances under HBM4EU.  | Identification of each of the flame retardants and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.   |
| <b>4.24. Nanomaterials</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of nanomaterials and nanoparticles (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.   |

| QUESTIONS  | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS  |
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| <b>4.25. Photoresist/antireflective coatings</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of each of the photoresist/antireflective coatings and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.  |
| <b>4.26. Other hazardous materials, hazardous waste or other chemicals (e.g. contaminated soil renovation)</b> | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of other hazardous materials, hazardous waste or other chemicals (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. These could include e.g. various mixtures, which are 1 <sup>st</sup> priority substances under HBM4EU. |
| <b>4.27. Other compounds</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of each other compound used (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.   |

| QUESTIONS  | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
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| <p><b>5. Please, indicate the main work tasks/activities that you perform regularly: Task/activity 1, 2 and 3:</b></p> <p><b>* Duration of the tasks (hours in a work shift):</b></p> <p><b>* Frequency of the tasks (days/week or days/month):</b></p> <p><b>* Chemicals/substances produced, used or handled (please, refer to category list of question 4):</b></p> <p><b>* Use of Personal Protective Equipment (PPE) (please, specify the type):</b></p> <p><b>* Availability of collective protective measures (please, specify the type):</b></p> | <p>The main work tasks/activities give insight into participants' regular exposure conditions.</p> <p>Duration provides information about the total length of possible exposure in that task per workday.</p> <p>Frequency provides information about frequency of possible exposure in that task on a workweek or month basis.</p> <p>This question provides information about possible sources of exposure in main work tasks/activities. This question provides information on the PPE used in that task, which is an important exposure modifier.</p> <p>This question provides information on collective protective measures in that task, which are also important exposure modifiers.</p> | <p>There are three main work tasks in the questionnaire and the following five questions are asked in each of them.</p> <p>This is the average time devoted to that task every workday (less than one hour could be expressed as minutes).</p> <p>Frequency is expressed as days per week or days per month. Please, fulfill how many days and circle or write down the selection, week or month. Referred to the category list of question 4. If there is answered "yes" or "specify" -selection is fulfilled.</p> <p>Please, specify the type of PPE (e.g. respirator and type, hand protection/gloves, protective clothing, eye protection).</p> <p>Please, specify the type of collective protective measures used (e.g. general ventilation, local ventilation, compartmentalization).</p> <p>Please, collect the above information from each of the tasks developed by the interviewee (1, 2, 3 or more, according to the individual case).</p> |
| <p><b>6. Do you use Personal Protective Equipment (PPE)?</b></p>   | <p>This question provides information on PPE used in general.</p>  | <p>Please, specify the type of PPE (e.g. respirator and type, hand protection/gloves, protective clothing, eye protection).</p>   |

| QUESTIONS  | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS   |
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| <p><b>7. In the working environment in which you perform working tasks/activities are there technical risk management measures (e.g. local exhaust ventilation, compartmentalisation of the exposure source...) available?</b></p>   | <p>This question provides information on collective protective measures in the workplace in general.</p>   | <p>Please, specify the type of measures used (e.g. general ventilation, local ventilation, compartmentalization)</p>   |
| <p><b>8. Are you subjected to a health surveillance program at work?</b><br/> <b>If yes: Does the health surveillance program to which you are subjected include biological monitoring (measurement of chemicals or their metabolites in e.g. blood or urine samples)?</b></p> | <p>This question provides information whether biological monitoring is carried out.</p>  | <p>If answer is yes:<br/>           -What chemicals/substances have been monitored (if known, please specify the CAS number)? Specification of the biological matrix used for the analysis (e.g. chromium in urine) is also essential.<br/>           -How often is the biological monitoring carried out?</p>   |
| <p><b>Other information on occupational exposure:</b><br/> <b>9.. Are your family/household members working with chemicals in their job?</b></p>   | <p>This question provides additional information on possible exposures.</p>  | <p>If yes, specify:<br/>           -How many members are working with chemicals?<br/>           -Which chemicals are involved?</p>   |
| <b>Occupational history</b>  |  |  |
| <p><b>1. Please, fill the following questions for each of your previous jobs in the past 25 years.</b></p>   | <p>The industry sector is needed to classify the field of work. Job description gives information about the type of work where possible exposures can occur. The working period is important when assessing effects of exposure.</p> | <p>Annex 2.1.2.4: The <b>Statistical classification of economic activities in the European Community</b>, abbreviated as <b>NACE</b> (NACE Rev. 2). Annex 2.1.2.4 at the end of this document (main classes and sub- classification). Detailed description of work tasks is important to correctly interpret the participants' exposure conditions. The total working time in this job (in years and months) is asked.</p> |

| QUESTIONS  | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|--|--|---|
| <b>2. Did you come into contact with the following substances on your job?</b> | This question is essential to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | It is important to let participants enough time to think about the possible exposure to these substances. A category list follows in questions 4.1 - 4.27 considering various exposure conditions. Some of the 1 <sup>st</sup> priority substances under HBM4EU are mentioned separately in specified exposure category.  |
| <b>2.1. Oil, gasoline, or diesel</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.      | Oil products are a general source of exposure to polycyclic aromatic hydrocarbons (PAHs), which are 1 <sup>st</sup> priority substances under HBM4EU. Please, select from the list or otherwise specify the work where you come into contact with these substances (e.g. oil refining/ petrochemical plants/ petroleum refinery, garage work, contaminated soil renovation) |
| <b>2.2. Creosote, creosote oil, coal tar</b>                                   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.      | There is a risk of PAH exposure in contact with creosote and tar. Please, select from the list or otherwise specify the work where you come into contact with these substances (e.g. creosote work, wood impregnation, pillar work, rail work, contaminated soil renovation)  |
| <b>2.3. Bitumen, bitumen products</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.      | Bitumen products are a source of exposure to PAHs. Please, select from the list or otherwise specify the work where you come into contact with these substances (e.g. road paving, bitumen work, bitumen roofing, waterproofing, contaminated soil renovation)  |

| QUESTIONS   | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|---|--|---|
| <b>2.4. Combustion products, including gasoline/diesel exhausts, ash or soot</b>                        | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.  | Combustion products including fine particles have an impact on PAH exposure. Please, select from the list or otherwise specify the work where you come into contact with combustion products (e.g. aluminum production, chimney sweeping, coking plants, firefighting/ fire practice/ fire prevention training, foundry industry, garage work, heating/ thermal power plants, metallurgic industry, mining, vehicle inspection, vehicle depots, waste incineration) |
| <b>2.5. Polycyclic aromatic hydrocarbons (PAHs),if not included in other substance group/categories</b> | PAHs are 1 <sup>st</sup> priority substances under HBM4EU.   | Other possible sources of PAH exposure. In the case of some specific PAHs are used,specification of PAH compounds (name, CAS-number, etc.) is informative in order to correctly interpret the results of the questionnaire.   |
| <b>2.6. Metallic dust</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. Metallic dust could be a source of hazardous (heavy) metals including 1 <sup>st</sup> priority substances under HBM4EUcadmium and chromium (VI). | Please, specify the work task where you come into contact with metallic dust. Specification of metals/substances in dust (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.  |
| <b>2.7. Mercury</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.  | Please, specify the work task where you come into contact with mercury or mercury compounds. In the case of mercury compounds, specify compounds (name, CAS-number, etc.).  |
| <b>2.8. Cadmium</b>   | Cadmium is one of the1 <sup>st</sup> priority substances underHBM4EU.  | Please, specify the work where you come into contact with cadmium or cadmium compounds. In the case of cadmium compounds, specify compounds (name, CAS-number, etc.).   |

| QUESTIONS  | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS  |
|--|---|---|
| <b>2.9. Chromium (VI)</b>  | Chromium (VI) is one of the 1 <sup>st</sup> priority substances under HBM4EU.   | Please, specify the work where you come into contact with chromium or chromium compounds. In the case of chromium compounds, specify compounds (name, CAS-number, etc.).  |
| <b>2.10. Other metals</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of metals and metal compounds (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.   |
| <b>2.11. Pharmaceuticals</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of the effective drug and its ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire, e.g. analgesic paracetamol is a major metabolite of aniline, which is one of the 1 <sup>st</sup> priority substances under HBM4EU.  |
| <b>2.12. Paints/ coatings</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of the paint and its ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.  |
| <b>2.13. Printing inks</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of the ink and its ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Printing inks could contain e.g. anilines and PAHs, which are 1 <sup>st</sup> priority substances under HBM4EU. Please, specify the work where you come into contact with printing inks (e.g. Ink production, printing industry, other job, which?). |
| <b>2.14. Dyes, azo dyes and pigments (tattoo inks, sulphur dyes, indigo compounds)</b> | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of the dye or pigment and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Dyes could contain e.g. anilines, which are 1 <sup>st</sup> priority substances under HBM4EU.   |

| QUESTIONS   | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS   |
|---|---|--|
| <b>2.15. Diisocyanates,4,4'-Methylenediphenyl diisocyanate (MDI)-based lacquers, foams and adhesives, toluene diisocyanate (TDI) and MDI or TDI-based polyurethane polymers</b> | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of the diisocyanate (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Some anilines (e.g.methylenedianiline (MDA) and toluenediamine (TDA)) are metabolites of diisocyanates. Please, specify the work where you come into contact with diisocyanates.           |
| <b>2.16. Varnishes</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of varnishes and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.   |
| <b>2.17. Solvents</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of solvents and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.  |
| <b>2.18. Plasticisers</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of compounds (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Plasticisers could contain e.g., phthalates, which are 1 <sup>st</sup> priority substances under HBM4EU.  |
| <b>2.19. Pesticides, biocides or disinfection products (herbicides, fungicides, insecticides or bactericides)</b>   | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of pesticides and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Pesticides could contain e.g. various anilines, which are 1 <sup>st</sup> priority substances under HBM4EU.  |
| <b>2.20. Cosmetics or hair treatment products (hair dyes etc.)</b>  | The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias. | Specification of cosmetics or hair treatment products/hair dyes and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Cosmetics and hair treatment products could contain e.g. various anilines, which are 1 <sup>st</sup> priority substances under HBM4EU. |



| QUESTIONS  | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|--|--|---|
| <p><b>2.21. Anilines</b> (e.g. aniline, 4,4'-methylenedianiline (=4,4'-MDA), 4,4'-methylenebis[2-chloroaniline] (= MOCA), o- and p-toluidine, p-phenylenediamine (= p-PDA), 1,3-diphenylguanidine), if not included in other substance/group</p> | <p>Anilines are 1<sup>st</sup>priority substances under HBM4EU.</p>  | <p>Other possible sources of exposure to anilines (especially aniline, 4,4'-MDA, MOCA, o- and p-toluidine, p-PDA, 1,3-diphenylguanidine). In case of some specific anilines are used, the identification of each aniline compound (name, CAS-number, etc.) is informative in order to correctly interpret the results of the questionnaire.</p> |
| <p><b>2.22. Rubber chemicals</b></p>   | <p>The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.</p> | <p>Specification of chemicals (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire. Rubber chemicals could contain e.g. various anilines and PAHs, which are 1<sup>st</sup>priority substances under HBM4EU. Please, specify the work where you come into contact with rubber chemicals.</p>  |
| <p><b>2.23. Flame retardants</b></p>   | <p>Flame retardants are 1<sup>st</sup>priority substances under HBM4EU.</p>  | <p>Specification of flame retardants and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.</p>  |
| <p><b>2.24. Nanomaterials</b></p>  | <p>The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.</p> | <p>Specification of nanomaterials and nanoparticles (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.</p>   |
| <p><b>2.25. Photoresist/antireflective coatings</b></p>  | <p>The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.</p> | <p>Specification of photoresist/antireflective coatings and their ingredients (name, CAS-number, etc.) is essential in order to correctly interpret the results of the questionnaire.</p>   |

| QUESTIONS   | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|---|--|---|
| <p><b>2.26. Other hazardous materials, hazardous waste or other chemicals (e.g. contaminated soil renovation)</b></p>   | <p>The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.</p> | <p>Specification of exposure to any other hazardous materials, hazardous waste or other chemicals (name, CAS-number, etc.) is also helpful to correctly interpret the results of the questionnaire. These could include e.g. various chemical mixtures, which are 1<sup>st</sup>priority substances under HBM4EU.</p> |
| <p><b>2.27. Other compounds</b></p>   | <p>The question is aimed to obtain an overall and complete overview of the participants' exposure conditions in order to correctly interpret the results of the questionnaire and biological monitoring as well as to avoid possible bias.</p> | <p>Specification of exposure to any other compounds (name, CAS-number, etc.) is also helpful to correctly interpret the results of the questionnaire.</p>   |
| <p><b>3. Were you subjected to a health surveillance program at work in the past?</b></p> <p><b>If yes: Did this health surveillance program to which you were subjected include biological monitoring (measurement of chemicals or their metabolites in e.g blood or urine samples)?</b></p> | <p>This question provides information on whether biological monitoring had been carried out in previous jobs.</p>  | <p>If answer is yes:<br/>         -What chemicals/substances were monitored (if known, please specify the CAS number)?<br/>         Specification of analyte and biological material (e.g. chromium in urine) is also essential.<br/>         -How often was biological monitoring carried out?</p>                   |

## VI. HEALTH

| QUESTIONS   | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS  |
|---|--|---|
| <b>1. Anthropometric measurements</b>   | Anthropometric measurements are indicators of body composition. The BMI has been shown to be significantly correlated with exposure to some phthalates.  | Record the self-reported height in cm without shoes.<br>Record the self-reported weight in kg without clothes and shoes.  |
| <b>2. Weight change</b>   | Weight change is an indicator of intended and unintended changes in body weight.   | If the interviewee reports that his/her weight has not changed during the past year, skip questions 2.2 and 2.3. For 2.2 and 2.3 weight change is recorded in kg.   |
| <b>3. Do you have or have you ever had any of the following diseases or conditions, diagnosed by a medical doctor? If yes, please specify how old you were when this was first diagnosed.</b>                                       | The information about diagnosed diseases is an indicator about disease prevalence and disease history.   | The interviewee is asked to provide answer to all diseases on the list and if he/she says “Yes”, then ask and record the age when the disease was diagnosed for the first time. If the interviewee says that he/she has been diagnosed for any other disease(s) not listed, this should be recorded at the end under ‘Other diseases or conditions’ |
| <b>4. If you answered “Yes” for cancer, please specify what kind of cancer</b>  | The information about cancer types is an indicator of specific cancer prevalence.  | This question is asked only for those who self-reported to have or have had any cancer. In case of having had more than one cancer at different sites, record all different cancers reported.   |
| <b>5. During the past two weeks, have you used any medicines that were prescribed for you by a doctor?</b>  | This question provides information about medication use for three defined diseases: hypertension, high cholesterol and diabetes. This information is needed, in addition that from health examinations, to define whether a person has hypertension, elevated cholesterol or diabetes. | This question asks use of medication for hypertension, high blood cholesterol levels and diabetes.  |
| <b>5.1 Which medicines prescribed for you by a doctor you have used in the past two weeks? Please, indicate the commercial name of the medicine, the indication, as well as the strength of the drug, dose and frequency of use</b> | This question provides information about medication use in general. This information is needed to define does person have a specific disease together with information about diagnosed diseases.   | This question asks about the use of medicines. All medicines prescribed by a doctor and used in the past two weeks should be recorded as accurately as the interviewee recall this information.   |

| QUESTIONS   | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS  |
|---|---|---|
| <b>6. Have you been vaccinated for?</b>   | This question provides information about vaccination status.  | Replies to all defined vaccinations are required.   |
| <b>7. Are you pregnant at present?</b>  | This question provides information about pregnancy status of female participants. It is needed to identify pregnant women as they may need to be treated separately in some analysis. | This question is asked for women only.<br><br>Question is asked from women younger than 45 years.   |
| <b>8. Have you ever been pregnant?</b>  | This question provides information on the number of pregnancies.  | This question is asked for women only.<br><br>If the interviewee replies that she has ever been pregnant, ask the number of pregnancies including possible current pregnancy, live births, miscarriages, stillbirths, tubal pregnancies and abortions.                      |
| <b>9. Please, complete the following information for each of your pregnancies</b>   | This question provides detailed information on each pregnancy.  | This question is asked for women only.<br><br>For each pregnancy, information is needed about the outcome: abortion, live birth, polyembryotic or birth defects have to be recorded.  |
| <b>10. Are you breast feeding or had breastfed? If so, please indicate the length of breastfeeding.</b>                                     | This question provides information about breast feeding history, since it could affect the concentrations of certain compounds in humans (e.g. PFASs, FR).                            | This question is asked from women only.<br>Women with several children have to specify total months of breastfeeding.   |
| <b>11. Have there been time period when you have attempted to have a child but have not succeeded or it took over 12 months to succeed?</b> | This question provides information on fertility problems.   | This question is asked for women only.<br><br>This question refers to attempts to get pregnant without success or when it took over 12 months to succeed. If person replies 'Yes', the further question to ask is when was the last time this happened (in years) is asked. |
| <b>12. Have you ever been examined or been treated for infertility?</b>   | This question provides information on fertility problems.   | This question is asked for women only.  |
| <b>12.1 What was the reason for your infertility?</b>   | This question provides information on type of the fertility problems.   | This question is asked for women only.<br><br>This question refers to the fertility problems listed in the questionnaire.   |

| QUESTIONS   | JUSTIFICATION  | INFORMATION FOR INTERVIEWERS   |
|---|--|--|
| <b>13. Which of the following options best describe your menstrual cycle?</b>   | Information on menstrual cycle and menopause will be collected here, since it could affect the bioaccumulation of priority substances in women (e.g. PFASs).   | This question is asked from women only. Please, collect information on the current situation. Menopause refers to the absence of menstrual periods for 12 consecutive months   |
| <b>14. Have there been time period when you have attempted to have a child but have not succeeded or it took over 12 months to succeed?</b> | This question provides information about fertility problems.   | This question is asked from men only.<br><br>This question refers to attempts to get pregnant without success or when it took over 12 months to succeed. If person replies 'Yes', further question on when was the last time this happened (in years) is asked.  |
| <b>15. Have you ever been examined or been treated for infertility?</b>   | This question provides information regarding fertility problems.   | This question is asked from men only.<br><br>This question refers to attempts to have a child without getting it or when it took over 12 months to succeed. If person replies 'Yes', the further question to ask is when was the last time this happened (in years).   |
| <b>15.1 What was the reason for your infertility?</b>   | This question provides information on fertility problems.  | This question is asked for men only.   |
| <b>16. Do you have amalgam fillings/dental sealant in your teeth?</b>   | This question is used to identify persons with amalgam fillings and dental sealant. They may need to be treated separately in some analysis. Dental sealant is a determinant of exposure to BPA, while amalgam fillings could be a source of exposure to metals. | Please note that a filling is expected to last for as many as ten years, whereas the average life expectancy of a dental sealant is no longer than a year. Sealants are usually provided to children. If person reports that he/she has any amalgam fillings, the number of teeth which have the filling should be recorded as the time when the filling was last time placed/removed. |

| QUESTIONS  | JUSTIFICATION   | INFORMATION FOR INTERVIEWERS  |
|--|---|---|
| <p><b>17. Have you done any body modifications? (excluding medical interventions). If yes, specify how long since you got first</b></p>  | <p>This question is used to identify persons with body modifications. They may need to be treated separately in some analysis. Body modifications, such as piercings or tattoos (including different colours), could be a source of exposure to certain metals (e.g. cadmium, chromium) and PAHs.</p> | <p>This question excludes any medical intervention done for the body. Please, specify the colour(s) of the tattoo, when applicable. The timing for each body modification should be reported as accurately as possible. If the number of days cannot be precisely recalled, ask at least for the number of months and years. In case the number of months is difficult to provide, at least the number of years should be recorded.</p> |
| <p><b>18. Do you have any artificial joints, pins, plates, metal suture materials, or other types of metal objects in your body? (Do not include piercings, crowns, dental braces or retainers, shrapnel, or bullets.)</b></p> | <p>This question is used to identify persons with artificial joints etc. in their body. These may need to be treated separately in some analysis.</p>   | <p>The interviewee should answer “Yes” if he/she has any of the listed objects in their body.</p>   |
| <p><b>19. How often do you usually wear metallic jewellery (e.g. rings, earrings, necklaces)</b></p>   | <p>Wearing metallic jewellery on the skin could be a source of exposure to certain metals, specially chromium.</p>  | <p>Please, specify here if the interviewee wear metallic jewellery and frequency.</p>   |
| <p><b>20. Do you use glasses and/or contact eye lenses?</b></p>  | <p>Potential determinant of the exposure to BPA.</p>  | <p>Use of glasses or contact lenses has to be collected here.</p>   |



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## **Annex 2.1.2.1**

### **Summary table of ISCED 2011 codes and criteria**

**WP 7**

**Task 7.3**

**D 7.3**



## Annex A

# Summary table of ISCED 2011 codes and criteria

The units of the ISCED classification are education programmes and their related recognised qualifications.

<http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx>

The ISCED classification uses **3 digits**: the **first is the educational level**, the **second** and **third are complementary dimensions**.

The ISCED level of an education programme reflects the degree of complexity and specialisation of the content of the programme measured with respect to gradations of learning experiences and the knowledge, skills and competencies the programme is intended to impart. Educational attainment is measured with respect to the highest education programme successfully completed, which is normally certified by a recognised qualification. If the highest education programme is not successfully completed, the level of attainment of the person is their attainment level before entering the programme.





## LEVELS AND COMPLEMENTARY DIMENSIONS OF THE INTERNATIONAL STANDARD CLASSIFICATION OF EDUCATION (ISCED) 2011

### Codification of education programmes and educational attainment

| Level                 |                           | Criteria for classifying national programmes by levels   |   |
|-----------------------|---------------------------|--|---|
| 1 <sup>st</sup> digit |                           | Main criteria  | Subsidiary criteria   |
| No education          |                           | –  | –   |
| 0                     | Early childhood education | <i>Learning stimulated</i> by environment (§105)* or in interaction with educators (§106).   | <i>Qualifications of staff:</i> Pedagogical qualifications for educators (§111).              |
|                       |                           | <i>Institution:</i> school-based or centre-based (§107)  | Existence of a regulatory framework (§112).   |
|                       |                           | <i>Admission/age:</i> 3 years and above for pre-primary education (§102/108).  | Typically not compulsory (§113).  |
|                       |                           | <i>Intensity:</i> 2 hours of education per day and 100 days a year (§110).   |   |
| 1                     | Primary education         | <i>Education</i> with systematic teaching and learning in reading, writing and mathematics (§125).   | Often coincides with the beginning of compulsory education (§127).                            |
|                       |                           | <i>Admission/age and duration:</i> official age of entry between ages 5 and 7 years; typical duration of 6 years (range is 4 to 7 years) (§122). |   |
|                       |                           | <i>Teacher:</i> typically one main teacher is in charge of a group (§126).   |   |
| 2                     | Lower secondary education | <i>Transition to subject-oriented</i> instruction (§144).  | <i>Typical entry age</i> is between 10 and 13 years, the most common being 12 (§141).         |
|                       |                           | <i>Entry requirements:</i> completion of primary education (or the capacity to study at ISCED level 2) (§145).                                   | <i>Subject teachers,</i> with qualifications in specific subjects as well as pedagogy (§147). |
|                       |                           | <i>Cumulative duration:</i> ends after 8 to 11 years of education (often 9) from the start of primary education (§146).                          | The end of the level often coincides with the <i>end of compulsory education</i> (§148).      |

#### Notes

\* Paragraph numbers are references to the main ISCED 2011 classification document. See more details in the Reader's Guide.

\*\* European Union Labour Force Survey variable HATLEVEL / HATVOC (European Commission Regulation 317/2013).



| Complementary dimensions      |  |                       |   | Coding  |  |   |
|-------------------------------|--|-----------------------|---|---|--|---|
| 2 <sup>nd</sup> digit         |  | 3 <sup>rd</sup> digit |   | Education programmes ISCED-P (Annex II of ISCED 2011) | Educational attainment ISCED-A (Annex III of ISCED 2011) | EU Labour Force Survey variable HATLEVEL/HATVOC** |
| -                             |  | -                     |   | -   | 010  | 000   |
| <b>Type of education:</b>     |  |                       |   |   |  |   |
| 1                             | Early childhood educational development (0 to 2 years)                 | -                     | -   | 010   | 020  | -   |
| 2                             | Pre-primary education (from 3 years to the start of primary education) | -                     | -   | 020   |  | 000   |
| -                             | -  | -                     | -   | 100   | 100  | 100   |
| <b>Programme orientation:</b> |  |                       | <b>Level completion and access to higher ISCED level:</b>   |   |  |   |
| 4                             | <b>General</b>   | 1                     | Insufficient for level completion or partial level completion (duration < 2 years or cumulative duration < 8 years since the start of ISCED level 1). | 241, 251  | 100  | 100   |
|                               |  | 2                     | Partial level completion (intermediate programme with duration ≥ 2 years and cumulative duration ≥ 8 years).  | 242, 252  | 242, 252   | 200   |
| 5                             | <b>Vocational</b>  | 3                     | Level completion without direct access to ISCED 3 (duration ≥ 2 years, cumulative duration ≥ 8 years).  | 243, 253  | 243, 253   | 200   |
|                               |  | 4                     | Level completion with direct access to ISCED 3 (duration ≥ 2 years, cumulative duration ≥ 8 years).   | 244, 254  | 244, 254   | 200   |

## Notes

\* Paragraph numbers are references to the main ISCED 2011 classification document. See more details in the Reader's Guide.

\*\* European Union Labour Force Survey variable HATLEVEL / HATVOC (European Commission Regulation 317/2013).



| Level                 |  | Criteria for classifying national programmes by levels   |  |
|-----------------------|--|--|--|
| 1 <sup>st</sup> digit |  | Main criteria  | Subsidiary criteria  |
| 3                     | <b>Upper secondary education</b>             | <i>Second/final stage of secondary education, in form of general or vocational programmes (§167).</i>  | <i>More differentiated programmes: increased range of options and streams (§169).</i>                                    |
|                       |  | <i>Entry requirements: completion of lower secondary education (or the capacity to study at ISCED level 3) (§168).</i>   | <i>Teachers often more qualified with respect to the subject matter they teach than lower secondary teachers (§170).</i> |
|                       |  | <i>Cumulative duration: programmes end 12 or 13 years since the beginning of ISCED 1 (§164).</i>   |  |
| 4                     | <b>Post-secondary non-tertiary education</b> | <i>Post-secondary education, generally vocational and terminal programmes preparing for the labour market; typically, not considered as tertiary education at the national level (§190).</i>                               |  |
|                       |  | <i>Programmes which serve to broaden rather than deepen the knowledge, skills and competencies of participants. Often not significantly more advanced than programmes at ISCED level 3 (§191).</i>                         |  |
|                       |  | <i>Entry requirements: completion of upper secondary education (§186).</i>   |  |
| 5                     | <b>Short-cycle tertiary education</b>        | <i>Programmes often designed to provide participants with professional knowledge, skills and competencies; may provide pathway to academic programmes (§207). More complex than levels 3 and 4 but less than 6 (§212).</i> | <i>Institutional transition points: often provided by different institutions from ISCED levels 6, 7 and 8 (§214).</i>    |
|                       |  | <i>Entry requirements: successful completion of upper secondary or post-secondary non-tertiary education giving access to ISCED levels 5, 6 or 7 (§208)</i>  |  |
|                       |  | <i>Minimum duration: 2 years (§213).</i>   | <i>Typical duration: 2 to 3 years (§213).</i>  |

## Notes

\* Paragraph numbers are references to the main ISCED 2011 classification document. See more details in the Reader's Guide.

\*\* European Union Labour Force Survey variable HATLEVEL / HATVOC (European Commission Regulation 317/2013).



| Complementary dimensions      |                              |   | Coding   |  |  |              |
|-------------------------------|------------------------------|---|--|--|--|--------------|
| 2 <sup>nd</sup> digit         | 3 <sup>rd</sup> digit        |   | Education programmes ISCED-P (Annex II of ISCED 2011)  | Educational attainment ISCED-A (Annex III of ISCED 2011) | EU Labour Force Survey variable HATLEVEL/ HATVOC** |              |
| <b>Programme orientation:</b> |                              | <b>Level completion and access to higher ISCED level:</b> |  |  |  |              |
| 4                             | General                      | 1   | Insufficient for level completion or partial level completion (duration < 2 years or cumulative duration < 11 years since the start of ISCED level 1). | 341, 351   | 244, 254   | 200          |
|                               |                              | 2   | Partial level completion (intermediate programme with duration ≥ 2 years and cumulative duration ≥ 11 years).  | 342, 352   | 342, 352   | 302/1, 302/2 |
| 5                             | Vocational                   | 3   | Level completion without direct access to ISCED 3 (duration ≥ 2 years, cumulative duration ≥ 11 years).  | 343, 353   | 343, 353   | 303/1, 303/2 |
|                               |                              | 4   | Level completion with direct access to ISCED 5, 6 or 7 (duration ≥ 2 years, cumulative duration ≥ 11 years).   | 344, 354   | 344, 354   | 304/1, 304/2 |
| <b>Programme orientation:</b> |                              | <b>Level completion and access to higher ISCED level:</b> |  |  |  |              |
| 4                             | General                      | 1   | Insufficient for level completion (duration < 6 months)  | 441, 451   | 344 354  | 300/1, 300/2 |
| 5                             | Vocational                   | 3   | Level completion without direct access to ISCED 5, 6 or 7  | 443, 453   | 443, 453   | 400/1, 400/2 |
|                               |                              | 4   | Level completion with direct access to ISCED 5, 6 or 7   | 444, 454   | 444, 454   |              |
| <b>Programme orientation:</b> |                              | <b>Level completion and access to higher ISCED level:</b> |  |  |  |              |
| 4                             | General (or academic)        | 1   | Insufficient for level completion (duration < 2 years)   | 541, 551   | 444, 454   | 400          |
| 5                             | Vocational (or professional) | 4   | Level completion   | 544, 554   | 540, 550   | 500          |

## Notes

\* Paragraph numbers are references to the main ISCED 2011 classification document. See more details in the Reader's Guide.

\*\* European Union Labour Force Survey variable HATLEVEL / HATVOC (European Commission Regulation 317/2013).



| Level                 |                                 | Criteria for classifying national programmes by levels   |   |
|-----------------------|---------------------------------|--|---|
| 1 <sup>st</sup> digit |                                 | Main criteria  | Subsidiary criteria   |
| 6                     | <b>Bachelor's or equivalent</b> | Programmes often designed to provide participants with intermediate academic or professional knowledge, skills and competencies, leading to a first degree, such as a <i>Bachelor's</i> , or to an equivalent qualification (§224).  | The requirement of a doctorate (ISCED level 8) qualification for some of the teaching staff may help distinguish ISCED levels 5 and 6 (§231). |
|                       |                                 | <i>Entry requirements:</i> successful completion of upper secondary or post-secondary non-tertiary education giving access to ISCED levels 5, 6 or 7; may require the passing of an entrance examination (§226).   | <i>Further studies:</i> does not give direct access (usually) to doctoral programmes (ISCED level 8) (§226).                                  |
|                       |                                 | <i>Minimum cumulative duration of first degrees:</i> 3 to 4 years full-time (§229).  |   |
|                       |                                 | <i>Position in the national degree structure:</i> typically a first degree in tertiary education; sometimes a second degree of 1 to 2 years (§230).  |   |
| 7                     | <b>Master's or equivalent</b>   | Programmes often designed to provide participants with advanced academic or professional knowledge, skills and competencies, leading to a second degree, such as a <i>Master's</i> , or to an equivalent qualification (§241).   | <i>Minimum duration of long 1<sup>st</sup> degree:</i> 5 years; complexity of content comparable to a <i>Master's</i> (§247).                 |
|                       |                                 | <i>Position in the national degree structure:</i> typically a second or further degree in tertiary education following a first degree at ISCED level 6 or 7 (§246) or a long first degree of at least 5 years if equivalent to a <i>Master's</i> in terms of the complexity of content (e.g. medicine) (§247).   | <i>Further studies:</i> often gives direct access to doctoral programmes (ISCED level 8) (§249).  |
|                       |                                 | <i>Entry requirements:</i> in the case of a 2 <sup>nd</sup> degree, the successful completion of a <i>Bachelor's</i> or equivalent (ISCED level 6) or a <i>Master's</i> or equivalent (ISCED level 7) is required; in the case of a 1 <sup>st</sup> degree, the successful completion of upper secondary or of ISCED 4 granting access to tertiary education is required and, eventually, an entry examination (§243). |   |
| 8                     | <b>Doctoral or equivalent</b>   | Its successful completion requires the <i>submission of a thesis</i> or an equivalent written work, of publishable quality, which is the output of original research representing a considerable contribution to knowledge in the field (§264).  | Degree gives access to faculty positions and research posts (§266).   |
|                       |                                 | <i>Entry requirements:</i> the successful completion of an ISCED 7 programme (§261).   |   |
|                       |                                 | <i>Minimum duration:</i> at least 3 years of full-time studies and a total cumulative duration of at least 7 years of tertiary education (§265)  |   |

### Notes

\* Paragraph numbers are references to the main ISCED 2011 classification document. See more details in the Reader's Guide.

\*\* European Union Labour Force Survey variable HATLEVEL / HATVOC (European Commission Regulation 317/2013).



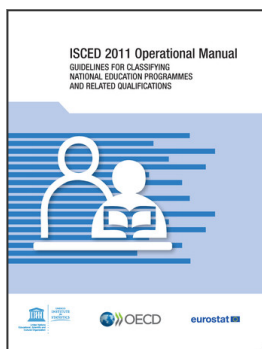
| Complementary dimensions      |                     |   |   | Coding  |  |   |
|-------------------------------|---------------------|---|---|---|--|---|
| 2 <sup>nd</sup> digit         |                     | 3 <sup>rd</sup> digit   |   | Education programmes ISCED-P (Annex II of ISCED 2011) | Educational attainment ISCED-A (Annex III of ISCED 2011) | EU Labour Force Survey variable HATLEVEL/HATVOC** |
| <b>Programme orientation:</b> |                     | <b>Position in the national degree and qualification structure:</b> |   |   |  |   |
| 4                             | <b>Academic</b>     | 1   | Insufficient for level completion (duration of first degree < 3 years)            | 641, 651, 661   | 540, 550   | 500   |
| 5                             | <b>Professional</b> | 5   | First degree (at Bachelor's level) (duration 3 to 4 years)                        | 645, 655, 665   | 640, 650, 660  | 600   |
| 6                             | <b>Unspecified</b>  | 6   | Long first degree (at Bachelor's level) (duration > 4 years)                      | 646, 656, 666   |  |   |
|                               |                     | 7   | Second or further degree (following a 1 <sup>st</sup> degree at Bachelor's level) | 647, 657, 667   |  |   |
| <b>Programme orientation:</b> |                     | <b>Position in the national degree and qualification structure:</b> |   |   |  |   |
| 4                             | <b>Academic</b>     | 1   | Insufficient for level completion (duration of first degree < 5 years)            | 741, 751, 761   | 640, 650, 660  | 600   |
| 5                             | <b>Professional</b> | 6   | Long first degree (at Master's level) (duration ≥ 5 years)                        | 746, 756, 766   | 740, 750, 760  | 700   |
| 6                             | <b>Unspecified</b>  | 7   | Second or further degree (following a 1 <sup>st</sup> degree at Bachelor's level) | 747, 757, 767   |  |   |
|                               |                     | 8   | Second or further degree (following a 1 <sup>st</sup> degree at Master's level)   | 748, 758, 768   |  |   |
| <b>Programme orientation:</b> |                     | <b>Position in the national degree and qualification structure:</b> |   |   |  |   |
| 4                             | <b>Academic</b>     | 1   | Insufficient for level completion (duration of first degree < 3 years)            | 841, 851, 861   | 740, 750, 760  | 700   |
| 5                             | <b>Professional</b> | 4   | Level completion  | 844, 854, 864   | 840, 850, 860  | 800   |
| 6                             | <b>Unspecified</b>  |   |   |   |  |   |

### Notes

\* Paragraph numbers are references to the main ISCED 2011 classification document. See more details in the Reader's Guide.

\*\* European Union Labour Force Survey variable HATLEVEL / HATVOC (European Commission Regulation 317/2013).





**From:**

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## **Annex 2.1.2.2**

**Definitions of major groups, sub-major groups,  
ISCO 2008  
WP 7  
Task 7.3  
D 7.3**

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**STRUCTURE OF THE INTERNATIONAL  
STANDARD CLASSIFICATION OF  
OCCUPATIONS (ISCO-08)**

# Major Groups

- 1 Managers
- 2 Professionals
- 3 Technicians and Associate Professionals
- 4 Clerical Support Workers
- 5 Services and Sales Workers
- 6 Skilled Agricultural, Forestry and Fishery Workers
- 7 Craft and Related Trades Workers
- 8 Plant and Machine Operators and Assemblers
- 9 Elementary Occupations
- 0 Armed Forces Occupations

## **MAJOR AND SUB-MAJOR GROUPS**

### **1 Managers**

- 11 Chief Executives, Senior Officials and Legislators
- 12 Administrative and Commercial Managers
- 13 Production and Specialized Services Managers
- 14 Hospitality, Retail and Other Services Managers

### **2 Professionals**

- 21 Science and Engineering Professionals
- 22 Health Professionals
- 23 Teaching Professionals
- 24 Business and Administration Professionals
- 25 Information and Communications Technology Professionals
- 26 Legal, Social and Cultural Professionals

### **3 Technicians and Associate Professionals**

- 31 Science and Engineering Associate Professionals
- 32 Health Associate Professionals
- 33 Business and Administration Associate Professionals
- 34 Legal, Social, Cultural and Related Associate Professionals
- 35 Information and Communications Technicians

### **4 Clerical Support Workers**

- 41 General and Keyboard Clerks
- 42 Customer Services Clerks
- 43 Numerical and Material Recording Clerks
- 44 Other Clerical Support Workers

### **5 Services and Sales Workers**

- 51 Personal Services Workers
- 52 Sales Workers
- 53 Personal Care Workers
- 54 Protective Services Workers

### **6 Skilled Agricultural, Forestry and Fishery Workers**

- 61 Market-oriented Skilled Agricultural Workers
- 62 Market-oriented Skilled Forestry, Fishery and Hunting Workers
- 63 Subsistence Farmers, Fishers, Hunters and Gatherers

**7 Craft and Related Trades Workers**

71 Building and Related Trades Workers (excluding Electricians)

72 Metal, Machinery and Related Trades Workers

73 Handicraft and Printing Workers

74 Electrical and Electronic Trades Workers

75 Food Processing, Woodworking, Garment and Other Craft and Related Trades Workers

**8 Plant and Machine Operators and Assemblers**

81 Stationary Plant and Machine Operators

82 Assemblers

83 Drivers and Mobile Plant Operators

**9 Elementary Occupations**

91 Cleaners and Helpers

92 Agricultural, Forestry and Fishery Labourers

93 Labourers in Mining, Construction, Manufacturing and Transport

94 Food Preparation Assistants

95 Street and Related Sales and Services Workers

96 Refuse Workers and Other Elementary Workers

**0 Armed Forces Occupations**

01 Commissioned Armed Forces Officers

02 Non-commissioned Armed Forces Officers

03 Armed Forces Occupations, Other Ranks



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## **Annex 2.1.2.3**

### **Food serving sizes gallery**

**WP 7**

**Task 7.3**

**D 7.3**

### ANNEX 2.1.2.3 FOOD SERVING SIZES GALLERY

Pictures included in this gallery will be used to answer food consumption frequency questionnaire. These pictures will help to collect accurate measurements of serving sizes consumed by the participants. Please, indicate the number of servings of each food item consumed in the last 4 weeks, according to the relationship with the food picture.

#### I. FISH

##### WHITE FISH



Serving: two medium units (125 g)



Serving: one medium unit (130 g)

##### BLUE FISH (BIG SIZE)



Serving: one unit (steak, 125 g)

##### BLUE FISH (SMALL SIZE)



Serving: 10-15 units (225 g)



Serving: 4 units (250 g)

## SALMON



Serving: one piece (130 g)

## CEPHALOPODS (e.g squid, octopus)



Serving: one médium unit (100 g)

## TINNED FISH



Serving: one can (60 g)



## FISH FINGERS



Serving: 4 units (100 g)

## CRUSTACEANS AND SHELLFISH (lobster, crayfish, scampi, crab, prawns, oysters, mussels, ...)



Serving: 15 units (100 g)



Serving: 15 units (200 g)

## II. MEAT

### WHITE MEAT (poultry, turkey etc...)



Serving: one thigh (290 g)



Serving: 4 units (100 g)

### RED MEAT (pork, beef)



Serving: one unit (100 g)



Serving: 4 units (100 g)



Serving: one unit (90-100 g)



Serving: 2 units (100 g)

### III. DAIRY PRODUCTS (NOT SKIMMED) AND EGGS

#### BUTTER



Serving: oneteaspoon (10 g)

#### MILK



Serving: one medium glass (200 ml)

#### CHEESE



Serving: 3 units (40 g)



Serving: 2 units (40 g)

#### YOGURT AND SIMILARS



Serving: one unit (125 g)



Serving: one unit (125 g)

#### EGGS



Serving: 2 units (120 g)

## IV. CEREALS

### Bread (White and Whole grain)



Serving: 2 units (100 g)

### Cereal products (crackers, rusk, etc...)



Serving: 3 units (40 g)



Serving: half commercial packet(50 g)

### OTHER CEREALS



Serving: 2 handfuls (30 g)



Serving: 2 handfuls (30 g)



Serving: one unit (25 g)

## PASTA



Serving: half a coffee cup (75 g)



Serving: 75 g

## RICE



Serving: half a coffee cup (75 g)

## FATS



V. VEGETABLES AND FRUITS

**CARROTS**



Serving: 2 units (200 g)

**FRESH TOMATOES**



Serving: 2 units (200 g)

**LEAFY VEGETABLES**



Serving: 4 handfuls (200 g)



Serving: 10 units (200 g)

**BROCCOLI**



Serving: 1/3 unit (200 g)

**GREEN BEANS**



Serving: 10-15 units (200 g)

**CHIPS/FRENCH FRIES**



Serving: 100 g

**MUSHROOMS**



Serving: 8 units (200 g)

**ONION**



Serving: one unit (200-250 g)

**SOYBEANS**



Serving: one handful (20 g)

**TINNED PRODUCTS (e.g. vegetables, legumes, cereals)**



Serving: one can (150 g)



Serving: 9 units (200 g)



## FRESH FRUITS



Serving: one unit (150-200 g)



Serving: one slice (150-170g)



Serving: one slice (200 g)



Serving: 5-7 units (200 g)

## FRUIT JUICES



Serving: one glass or individual brick (200 ml)

**VI. SNACKS**

**Popcorn (microwave or home-made)**



Serving: one bowl (30 g)

**PEANUTS**



Serving: 2 tablespoons (30 g)

**ICECREAMS**



Serving: one unit (75 g)



Serving: one piece (two fingers thick, 60 g or 100 ml)

**POTATO CHIPS**



Serving: one bowl (50 g)

**JELLY CANDIES**



Serving: 20 units (30 g)

**HAZELNUT SPREAD**



Serving: one tablespoon (20-30 g)

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Pictures and information of this gallery are online available at: <http://www.insidemyfood.com>

The following references were reported by <http://www.insidemyfood.com> for the development of the website content:

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## **Annex 2.1.2.4**

**The Statistical classification of economic activities in  
the European Community, abbreviated as NACE (Type  
of industry/workplace)**

**WP 7**

**Task 7.3**

**D 7.3**

#### **ANNEX 2.1.2.4 Type of industry/workplace**

##### **A – Agriculture, forestry and fishing;**

- 01 Crop and animal production, hunting and related service activities
- 02 Forestry and logging
- 03 Fishing and aquaculture

##### **B – Mining and quarrying;**

- 05 Mining of coal and lignite
- 06 Extraction of crude petroleum and natural gas
- 07 Mining of metal ores
- 08 Other mining and quarrying
- 09 Mining support service activities

##### **C – Manufacturing;**

- 10 Manufacture of food products
- 11 Manufacture of beverages
- 12 Manufacture of tobacco products
- 13 Manufacture of textiles
- 14 Manufacture of wearing apparel
- 15 Manufacture of leather and related products
- 16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of particles of straw and plaiting materials
- 17 Manufacture of paper and paper products
- 18 Printing and reproduction of recorded media
- 19 Manufacture of coke and refined petroleum products
- 20 Manufacture of chemicals and chemical products
- 21 Manufacture of basic pharmaceutical products and pharmaceutical preparations
- 22 Manufacture of rubber and plastic products
- 23 Manufacture of other non-metallic mineral products
- 24 Manufacture of basic metals
- 25 Manufacture of fabricated metal products, except machinery and equipment
- 26 Manufacture of computer, electronic and optical products
- 27 Manufacture of electrical equipment
- 28 Manufacture of machinery and equipment n.e.c.
- 29 Manufacture of motor vehicles, trailers and semi-trailers
- 30 Manufacture of other transport equipment

- 31 Manufacture of furniture
- 32 Other manufacturing
- 33 Repair and installation of machinery and equipment
- D – Electricity, gas, steam and air conditioning supply;**
- 35 Electricity, gas, steam and air conditioning supply
  
- E – Water supply, sewerage, waste management and remediation activities;**
- 36 Water collection, treatment and supply
- 37 Sewerage
- 38 Waste collection, treatment and disposal activities; materials recovery
- 39 Remediation activities and other waste management services
  
- F – Construction;**
- 41 Construction of buildings
- 42 Civil engineering
- 43 Specialised construction activities
  
- G – Wholesale and retail trade, repair of motor vehicle and motorcycles;**
- 45 Wholesale and retail trade and repair of motor vehicles and motorcycles
- 46 Wholesale trade, except of motor vehicles and motorcycles
- 47 Retail trade, except of motor vehicles and motorcycles
  
- H – Transportation and storage;**
- 49 Land transport and transport via pipelines
- 50 Water transport
- 51 Air transport
- 52 Warehousing and support activities for transportation
- 53 Postal and courier activities
  
- I – Accommodation and food service activities;**
- 55 Accommodation
- 56 Food and beverage service activities
  
- J – Information and communication;**
- 58 Publishing activities
- 59 Motion picture, video and television programme production, sound recording and music publishing activities
- 60 Programming and broadcasting activities
- 61 Telecommunications
- 62 Computer programming, consultancy and related activities
- 63 Information service activities

- K – Financial and insurance activities;**
- 64 Financial service activities, except insurance and pension funding
  - 65 Insurance, reinsurance and pension funding, except compulsory social security
  - 66 Activities auxiliary to financial services and insurance activities
- L – Real estate activities;**
- 68 Real estate activities
- M – Professional, scientific and technical activities;**
- 69 Legal and accounting activities
  - 70 Activities of head offices; management consultancy activities
  - 71 Architectural and engineering activities; technical testing and analysis
  - 72 Scientific research and development
  - 73 Advertising and market research
  - 74 Other professional, scientific and technical activities
  - 75 Veterinary activities
- N – Administrative and support service activities;**
- 77 Rental and leasing activities
  - 78 Employment activities
  - 79 Travel agency, tour operator and other reservation service and related activities
  - 80 Security and investigation activities
  - 81 Services to buildings and landscape activities
  - 82 Office administrative, office support and other business support activities
- O – Public administration and defence, compulsory social security;**
- 84 Public administration and defence; compulsory social security
- P – Education;**
- 85 Education
- Q – Human health and social work activities;**
- 86 Human health activities
  - 87 Residential care activities
  - 88 Social work activities without accommodation
- R – Arts, entertainment and recreation;**
- 90 Creative, arts and entertainment activities
  - 91 Libraries, archives, museums and other cultural activities
  - 92 Gambling and betting activities
  - 93 Sports activities and amusement and recreation activities

**S – Other service activities;**

94 Activities of membership organisations

95 Repair of computers and personal and household goods

96 Other personal service activities

**T – Activities of households as employers, undifferentiated goods – and services – producing activities of households for own use;**

97 Activities of households as employers of domestic personnel

98 Undifferentiated goods- and services-producing activities of private households for own use

**U – Activities of extraterritorial organisations and bodies.**

99 Activities of extraterritorial organisations and bodies