

Annex B2: Data request

Part 2: Test data collection — data request form

The requested information should preferably be completed in this file and submitted electronically to the Austrian Federal Environment Agency (prokop@ubavie.gv.at).

In view of setting up a European data-collection and assessment framework for contaminated sites, four major data categories have been selected for the test data collection. Again, it should be mentioned that the test data collection is rather comprehensive in order to learn which data are available and which parameters are relevant. For a future application at the Member State level, data requests will be reduced to a small number of relevant parameters.

Countries (or regions) which have access to inventories on contaminated sites and potentially contaminated sites should be able to provide most of the requested data. Those who do not dispose of any data from inventories should be able to provide most of the information concerning points 1, 3 and 4 of the test data collection.

1. **General information:** this part asks for general background information.
2. **Number of sites:** summarised data from the individual inventories are requested.
3. **Costs:** information on cost ranges for investigations and remediations and frequently applied remediation technologies is requested.
4. Relevant **industrial branches** (relevant polluting activities): this part aims at elaborating a list of relevant branches and asks for the most relevant activities according to relevant national or regional priorities.

1. General information

Basic background information is asked, in order to better understand the history of land use of the defined test region and current priorities.

- Please refer to the various aspects in the predefined format.

Add only a few key words if 'text' is specified as answer format.

Item	Answer format and additional information	Information
1. Name of the test region	(text)	
2. Total surface of the test region	(km ²)	
3. Total population in the test region	(number of inhabitants)	
4. Number of municipalities in the test region	(number of municipalities)	
5. Number of cities with more than 100 000 inhabitants	(city name/number of inhabitants)	
6. Topographic description of the region	(text): indicate major topographic characteristics (i.e. rivers, valleys, mountains, coasts, lakes, etc.)	
7. General drinking water supply	(text): i.e. indicate major drinking water sources (groundwater/surface water/springs) and major water supply (private wells, public supply)	
8. Industrial history	(text): specify hot spots of industry (highly industrialised areas) characteristic industries	

1.1. Population density at the municipality level

- Refer to the municipalities which are covered by the test region and specify their size and the population.

Add lines in case you need more.

Municipality name	Area (km ²)	Population (No)
.....		
.....		
.....		
.....		
.....		
.....		

1.2. Type of sites

- Refer to those types of sites which are generally included in the inventories.

Inclusion of specific type of sites	Yes	No
Abandoned waste sites		
Operating waste sites		
Abandoned industrial sites		
Operating industrial sites		
Nuclear waste sites		
Diffuse contamination		
Accidents		
Natural contamination		
Abandoned military sites		
Operating military sites		
Other		

1.3. Geographical reference

- Please indicate the type of sub-regions you have selected for this exercise and try to regard the advice as explained in the guideline (Part 1, page 7) or look at the example table beneath.

Aspect	Answer format	Information
Total number of sub-regions	Number	
Type of sub-regions (in case different types of sub-regions are mixed, please indicate their number)	i.e. municipalities, provinces, rural areas, urban areas, etc.	

Example table: Specification of sub-regions

Aspect	Answer format	Information
Total number of sub-regions	Number	53
Type of sub-regions (in case different types of sub-regions are mixed please indicate their number)	i.e. municipalities, provinces, rural areas, urban areas, etc.	Municipalities: 50 Provinces: 3

1.4. Progress in contaminated sites management

- With regard to the investigation steps as described in Part 1, can you refer to the completion of these steps within the selected test region based on expert knowledge? An example table is attached beneath.

CS management steps	Name of best corresponding (matching) national step	Estimated level of completion (%)
Preliminary surveys		
Preliminary investigations		
Main site investigations		
Feasibility study and remediation investigation		

Example table: Progress in contaminated sites management according to the Austrian methodology

CS management steps	Name of best corresponding (matching) national step	Estimated level of completion (%)
Preliminary survey	'Erfassung': regional inventory of potentially polluting activities 'Erhebung': desk study, investigation of a minimal data set for a specific site	95 %
Preliminary investigation	'Voruntersuchung': limited technical investigation	20 %
Main site investigation	'Detailuntersuchung': detailed technical investigation of sites	< 5 %
Remediation investigation	'Sanierungsuntersuchung': remediation investigation	-

1.5. Identification of potentially contaminated sites

- Potentially contaminated sites are identified along preliminary surveys. On which basis is the identification process carried out?

Identification of potentially contaminated sites	Yes/No
On a case-by-case basis (individually)	
On a regional basis (systematic screening of entire regions)	

2. Number of sites

2.1. Potentially contaminated sites

- Can you specify the number of identified potentially contaminated sites per defined sub-region (municipality, city, province)?
geographical reference = sub-region

Sub-region (name)	Identified potentially contaminated sites per sub-region (number)
.....	
.....	
.....	
.....	
.....	
.....	
.....	
.....	
.....	
.....	

- Can you specify the share of the type of sites (as specified in Section 1.1) for the total number of identified potentially contaminated sites in the test region? (See example table)
geographical reference = total test region

Type of site (see Section 1.2, page 2) (name)	Share of identified potentially contaminated sites (%)
	100 % identified PCS

Example table: identified potentially contaminated sites split into the different type of sites

Type of site (see Section 1.1, page 2) (name)	Share of identified potentially contaminated sites (%)
Name	%
Abandoned waste sites	4
Operating waste sites	6
Abandoned industrial sites	60
Operating industrial sites	28
Abandoned military sites	< 1
Operating military sites	< 1
	100 % identified PCS

2.2. Contaminated sites

The ETC/S wants to find out whether or not the specification of different impact levels as explained in the guideline (Part 1, page 5, Table 1) is in general possible.

- Referring to the classification of your country, which impact levels can you specify in general? What are the corresponding definitions according to the national methodology? Indicate the name in your language and (or) try to give a rough translation (see example table).

Contaminated sites	Specification is possible (Yes/No)	According to national methodology corresponds to ...
Sites at impact level 3		
Sites at impact level 2		
Sites at impact level 1		

Example table: Specification of impact levels in relation to the Austrian methodology.

Contaminated sites	Specification is possible (Yes/No)	According to national methodology corresponds to ...
Sites at impact level 3	Yes	Altlast mit Priorität 1, 2 3 (contaminated site with a priority of 1, 2 or 3)
Sites at impact level 2	No	
Sites at impact level 1	Yes	Beobachtungsfläche (monitoring site)

- With regard to those impact levels which you can specify, please list the number of identified sites per sub-region.
Geographical reference = sub-region

Sub-region (name)	Impact level 3 (number of sites)	Impact level 2 (number of sites)	Impact level 1 (number of sites)
.....			
.....			
.....			
.....			
.....			

- Can you specify the share (percentage) of the different type of sites (as specified in Section 1.1) per **impact** level.
geographical reference = total test region

Type of sites (see Section 1.2, page 2) (name)	Identified sites at impact level 1 (number of sites)	Identified sites at impact level 2 (number of sites)	Identified sites at impact level 3 (number of sites)
Name	%	%	%
.....			
.....			
.....			
.....			
.....			
.....			
	100 % of sites at impact level 1	100 % of sites at impact level 2	100 % of sites at impact level 3

2.3. Remediated sites

- Can you specify the number of remediated sites in the test region according to the quality of the implemented remediation measures?
Geographical reference: test region

Type of remediation measure	Number of sites
Impact level 3 → 2	
Impact level 3 → 1	
Impact level 3 → 0	
Impact level 2 → 1	
Impact level 2 → 0	
Impact level 1 → 0	
Total number of remediated sites	

- Regarding the quality of the different remediation measures, how frequently are they implemented?
In case only very few remediation measures have been implemented within the test region, you can also refer to national data.
Geographical reference: please indicate
 - test region
 - national level

Remediation type	Frequency of occurrence ⁽¹⁾	Most common technologies, applied at this level ⁽²⁾
Impact level 3 → 2		
Impact level 3 → 1		
Impact level 3 → 0		
Impact level 2 → 1		
Impact level 2 → 0		
Impact level 1 → 0		

⁽¹⁾ Frequency of occurrence: never, rarely, often, mostly applied.

⁽²⁾ Remediation technologies:

- (1) Soil excavation
- (2) Soil treatment on site
- (3) Groundwater pumping and treating
- (4) Soil air extraction and treatment
- (5) Soil venting
- (6) Containment barriers
- (7) Immobilisation
- (8) Surface sealing
- (9) Other (please specify).....

2.4. Size categories

When talking about the size of a site, which aspects are considered?

	Potentially contaminated sites	Sites at impact levels 1 to 3
	Yes/No	Yes/No
The size of property (real estate)		
The size of the (presumably) contaminated area		

- Can you specify size categories for the identified potentially contaminated sites and for sites at **impact** level 1, 2 or 3?
Geographical reference: test region

Size category	Identified potentially contaminated sites	Identified sites at impact levels 1 to 3
	100 % PCS	100 % sites at impact level 1, 2 or 3

3. Costs

3.1. Investigation

- Can you refer to cost ranges per investigation step?
Please indicate the currency

Step of investigation	Cost range per site (costs/currency)	Cost range per m ² (costs/currency)
Preliminary survey		
Preliminary investigation		
Main site investigation		
Feasibility study & remediation investigation		

3.2. Remediation

- Can you specify cost ranges of the most frequently applied remediation technologies? You can refer to national data, in case only very few remediation measures have been implemented within the test region.

Please indicate the currency.

Geographical reference: please indicate

- test region
 national level

Remediation type	Cost range per site (costs/currency)	Cost range per m ² (costs/currency) ¹	Cost range per m ³ (costs/currency)
Impact level 3 → 2			
Impact level 3 → 1			
Impact level 3 → 0			
Impact level 2 → 1			
Impact level 2 → 0			
Impact level 1 → 0			

4. Industrial branches

A long-term objective within the development of a contaminated sites data-collection and assessment framework is to define a list of relevant economic activities with a high potential for local soil contamination. Many European countries have already produced such lists at the national level. It is natural that Member States have different priorities due to their industrial history and their tradition of commercial activities. These differences might already exist within Member States, in particular, in countries with a strict federal structure. The proposed list has been elaborated empirically and based on experience from Austria and Denmark. In order to elaborate a more comprehensive list of relevant branches, please indicate which branches are relevant within your region/country and which branches need to be added.

In view of the future applicability of such a list, links to the European nomenclature for economic activities (NACE Rev.1) are indicated in the last column of the attached table. The need for international comparability of economic data has led the Member States and Community institutions to adopt common classifications so that the contents of the categories, in particular, activities and products, will be interpreted in a standard fashion in all the Member States ⁽¹⁾.

- ❑ Please indicate in the first column with 'yes' or 'no' whether or not the indicated branch is relevant for the contaminated sites management which is currently applied for the test region.
- ❑ Assign a priority based on your expert knowledge in the second column (reflecting the national situation): 1 = very relevant; 2 = relevant; 3 = of minor importance.
- ❑ At the end of the table you can add additional branches and refer to their priority.

	Included Yes/No	National priority 1/2/3	Relevant economic activities for contaminated sites (empirical list)	Best matching NACE codes
1			Energy production and mining	
2			Production of gas and coke coke oven plants gasworks (coking, hard coal degassing)	EA.40.2. Manufacture of gas. Distribution of gaseous fuels through mains
3			Power plants — gas-fired power station — oil-fired power station — coal-fired power station	EA.40.1. Production and distribution of electricity
4			Nuclear power plants	No corresponding NACE code found
5			Mining industry — brown coal and hard coal mines — ore mines — quarrying of stones and soils	CB. Mining and quarrying except energy producing materials CA.10.1. Mining and agglomeration of hard coal CA.13.1. Mining of iron ores CB.13.2. Mining of non-ferrous metal ores (except uranium and thorium) CB.14.1. Quarrying of stone CB.14.2. Quarrying of sand and clay
6			Exploitation of natural gas and mineral oil	CA.11.1. Extraction of crude petroleum and natural gas
7			Oil industry	CA.11. Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction excluding surveying

⁽¹⁾ 995/377/EC: Commission recommendation of 13 September 1995 on the use of the statistical classification of economic activities in the European Communities for breaking down net turnover by type of activity.

	Included Yes/No	National priority 1/2/3	Relevant economic activities for contaminated sites (empirical list)	Best matching NACE codes
8			Mineral oil refining — refineries — processing of tar and tar products	DF. Manufacture of coke, refined petroleum products and nuclear fuel DF.23.2. Manufacture of refined petroleum products DF.23.1. Manufacture of coke oven products DF.23.3. Processing of nuclear fuel
9			Fatty acid and wax processing — fatty acid processing — wax processing	DG.24.63. Manufacture of essential oils
0			Scrap oil recycling	No corresponding NACE code found
11			Chemical industry	DG. Manufacture of chemicals, chemical products and man-made fibres
12			Chemical basic industry — production of inorganic bases and chemicals fertiliser production — production of organic bases and chemicals	DG.24.1. Manufacture of basic chemicals DG.24.11. Manufacture of industrial gases DG.24.12. Manufacture of dyes and pigments DG.24.13. Manufacture of other inorganic basic chemicals DG.24.15. Manufacture of fertiliser and nitrogen compounds No corresponding NACE code found
13			Pharmaceutical industry — pharmaceutical products — pharmaceutical preparations (active ingredients)	DG.24.4. Manufacture of pharmaceuticals, medicinal, and botanical products DG.24.41. Manufacture of pharmaceutical products DG.24.42. Manufacture of pharmaceutical preparations
14			Synthetic fibre, plastic and glue industry — production and processing of plastic — production of glues — production of chemical fibres	DG.24.7. Manufacture of man-made fibre DH.25.2. Manufacture of plastic products DG.24.62. Manufacture of glues and gelatine DG.24.70. Manufacture of man-made fibre
15			Rubber industry — production of rubber — rubber processing	DH.25.1. Manufacture of rubber products DH.25.11. Manufacture of rubber tyres and tubes DH.25.12. Retreading of rebuilding of rubber tyres
16			Detergents industry — laundry detergents — cleansing agents — cosmetics	DG.24.4. Manufacture of soap, detergents, cleaning and polishing preparations, perfumes and toilet preparations DG.24.51. Manufacture of soap, detergents, cleaning and polishing preparations, perfumes and toilet preparations
17			Production of paint and varnish	DG.24.30. Manufacture of paints and varnishes and similar coatings, printing ink and mastics
18			Production of chemical weapons and pest control — production of chemical weapons — insecticides, fungicides, pesticides	DG.24.2. Manufacture of pesticides and other agro-chemicals
19			Production of chemical and technical aids — anti-corrosion agents — removers — wood impregnation	No corresponding NACE code found
20			Other chemical and technical products — explosives — photochemical products	DG.24.6. Manufacture of other chemical products DG.24.61. Manufacture of explosives DG.24.64. Manufacture of photographic chemical material
21			Metal working industry	DJ. Manufacture of basic metals and fabricated metal products
22			Metal production — iron and steel production — non-ferrous metal production	DJ.27.1. Manufacture of basic iron and steel and of ferro-alloys DJ.27.10. Manufacture of basic iron and steel and of ferro-alloys DJ.27.4. Manufacture of basic precious and non-ferrous metals

	Included Yes/No	National priority 1/2/3	Relevant economic activities for contaminated sites (empirical list)	Best matching NACE codes
23			Metal casting — iron casting — non-ferrous metal casting	DJ.27.5. Casting of metals DJ.27.51. Casting of iron DJ.27.54. Casting of non-ferrous metals
24			Metal forgeries	DJ.28.4. Forging, pressing, stamping and roll forming of metal; powder metallurgy
25			Metal coating — electro plating (galvanising) — enamelling — 'fire improvement'	DJ.28.5. Treatment and coating of metals: general mechanical engineering DJ.28.51-04. Galvanising of metals DJ.28.51-02. Hardening of metals
26			Metal processing — production of machines and tools — metal working factories (production of metal goods) — terotechnology, apparatus engineering, vehicle and transformer construction — light engineering	DJ.28. Manufacture of fabricated metal products, except machinery and equipment DK.29. Manufacture of machinery equipment DJ.28.6. Manufacture of cutlery, tools and general hardware DJ.28.7. Manufacture of other fabricated metal products
27			Electronic industry	DK.29. Manufacture of machinery and equipment DL.30. Manufacture of electrical and optical equipment DL.31. Manufacture of electrical machinery and apparatus DL.32. Manufacture of radio, televisions and communication equipment and apparatus
28			Accumulator and battery production	DL.31.4. Manufacture of accumulators, primary cells and primary batteries
29			Production of electronic (appliances) devices and building components	No corresponding NACE code found
30			Electrical industry	DL.31. Manufacture of electrical machinery and apparatus
31			Glass, ceramics, stone and soil industry	Di.26. Manufacture of non-metallic mineral products
32			Glass industry production of glass glass processing optics	DI.26.1. Manufacture of glass and glass products DI.26.11. Manufacture of glass and glass products DI.26.12. Shaping and processing of flat glass DI. Manufacture and processing of other glass including technical glassware
33			Ceramic industry	DI.26.2. Manufacture of ceramic products other than for construction purposes
34			Production of building material isolation material asbestos products cement works brick works	DI.26.6. Manufacture of articles of concrete, plaster and cement DI.26.51. Manufacture of cement DI.26.4. Manufacture of bricks, tiles and construction products, in baked clay
35			Textile, leather, wood & paper industry	DB. Manufacture of textile and textile products DC. Manufacture of leather and leather products, manufacture of footwear DD. Manufacture of wood and wood products DE. Manufacture of pulp, paper and paper products; publishing and printing
36			Textile industry — spinning, weaving, twisting, textile finishing — textile dyeing — production of textiles	DB. Manufacture of textile and textile products DB.17.1. Preparation and spinning of textile fibres DB.17.2. Textile weaving DB.17.3. Finishing of textiles
37			Leather industry — leather tanning — leather finishing — leather dyeing — production of leather products	DC. Manufacture of leather and leather products, manufacture of footwear DC.19.1. Tanning and dressing of leather DC.19.2. Manufacture of luggage, handbags, etc. DC.19.3. Manufacture of footwear

	Included Yes/No	National priority 1/2/3	Relevant economic activities for contaminated sites (empirical list)	Best matching NACE codes
38			Wood industry — wood impregnation — veneer production — production of fibre boards — saw mills — furniture production	DD. Manufacture of wood and wood products DD.20.10-03. Impregnation of wood DD.20.20. Manufacture of veneer sheets, manufacture of plywood, laminboard, particle board, fibre board and other panel and boards DD.20.1. Sawmilling of wood DN.36.36. Manufacture of furniture
39			Pulp and paper industry — paper production — pulp production	DE. Manufacture of pulp, paper and paper products; publishing and printing DE.21.21. Manufacture of pulp, paper
40			Textile cleaning — laundries — dry cleaners	OA.93.01. Washing and dry-cleaning of textile and fur products OA.93.01-01. Laundries OA.93.01-02. Dry-cleaning
41			Printing services and publishers	DE.22.22. Printing and service activities related to printing
42			Film-processing works	KA.74.74. Photograph production and print processing
43			Food industry, processing of agricultural products	DA. Manufacturing of Food Products, beverages and tobacco
44			Processing of animal products — milk products — production of feeding stuffs — slaughterhouses and meat processing — animal cadaver processing	DA.15.1. Production, processing and preserving of meat and meat products DA.15.5. Manufacture of dairy products DA.15.7. Manufacture of prepared animal feeds
45			Processing of plant products — food industry — sugar industry — oil and magerine production — beverage industry — tobacco industry	DA. Processing and preserving of fruit and vegetables DA.15.8. Manufacture of other food products DA.15.83. Manufacture of sugar DA.15.4. Manufacture of vegetable and animal oils and fats DA.15.9. Manufacture of beverages DA.16.0. Manufacture of tobacco products
46			Trade and traffic	No corresponding NACE code found
47			Car maintenance — car workshops — filling stations — paint boxes	GA.50.2. Maintenance and repair of motor vehicles GA.50.20-01. Bodywork repair of motor vehicles CA.11.2. Service activities incidental to oil and gas extraction excluding surveying GA.50.20-02. Spraying and painting of motor vehicles
48			Scrap yards	No corresponding NACE code found
49			Transport industry — railway stations — airports — harbours — transport companies	IA.60.1. Transport via railways IA.62. Air transport IA.61. Water transport IA.63.1. Cargo, handling and storage
50			Storage of liquids and solid substances — liquid gas — mineral oil and fuel stocks — solvents — chemicals — ammunition — hazardous wastes	IA.63.12. Storage and warehousing

For questions and guidance, you are welcome to contact the Austrian Federal Agency.

Mrs Gundula Prokop

E-mail: prokop@ubavie.gv.at

Austrian Federal Environment Agency

Spittelauerlaende 5

A-1090 Vienna

Tel. (43-1) 313 04 33 80; fax (43-1) 313 04 54 00

Completed forms should be submitted electronically to the above e-mail address before 24 September 1999.

Thank you for your efforts and your collaboration!