

2. Overview of measurement networks of the Czech Republic

2.1 Statistical survey

Tab. mer1 Air pollution monitoring localities, based on the owner and the regions, Czech Republic, 2003

Region	CHMI	HS, SZÚ	Z	E+P	KMon	Total
Prague	13	11	1	—	—	25
South Bohemian	8	2	3	—	—	13
South Moravian	14	5	1	—	—	20
Karlovy Vary	8	7	7	3	—	25
Hradec Králové	13	5	2	—	—	20
Liberec	16	2	4	—	—	22
Moravian-Silesian	26	8	3	2	1	40
Olomouc	8	4	3	—	1	16
Pardubice	7	4	2	2	1	16
Plzeň	4	4	6	—	6	20
Central Bohemian	16	15	5	2	—	38
Ústí nad Labem	34	16	6	9	—	65
Vysočina	7	3	1	—	—	11
Zlín	5	6	5	—	—	16
Total	179	92	49	18	9	347

Explanatory notes:

Z agriculture [VÚRV (14), Ekotoxa (29), VÚLHM (6)]

E+P energetics + industry [ČEZ (17), Frantschach (1)]

KMon municipal monitoring [MÚ Třinec (1), Město Plzeň (6), MÚ Pardubice (1), OÚ Šumperk (1)]

Tab. mer2 Air pollution monitoring localities measuring basic pollutants, AMS, based on the regions and the owner, Czech Republic, 2003

Region	SO ₂		NO ₂ , NO _x		PM ₁₀		O ₃		CO		BTX	
	CHMI	Others	CHMI	Others	CHMI	HS, SZÚ, Město Plzeň, ČEZ, MÚ Třinec	CHMI	HS, SZÚ, Město Plzeň, MÚ Pardubice	CHMI	HS, SZÚ, Město Plzeň	CHMI	MÚ Pardubice
Prague	12	—	13	—	12	—	6	—	6	—	4	—
South Bohemian	4	2	4	2	4	2	5	1	1	2	—	—
South Moravian	5	1	5	1	5	1	3	1	1	—	1	—
Karlovy Vary	7	3	7	3	7	1	2	—	3	1	—	—
Hradec Králové	3	1	3	1	3	1	3	1	—	1	—	—
Liberec	9	—	9	—	9	—	3	—	4	—	1	—
Moravian-Silesian	17	3	17	3	16	2	6	—	3	—	2	—
Olomouc	5	1	5	1	5	1	3	1	2	—	—	—
Pardubice	3	5	3	5	3	3	2	1	—	2	—	1
Plzeň	2	8	2	8	2	8	2	5	1	5	—	—
Central Bohemian	9	3	9	3	9	1	3	—	3	1	1	—
Ústí nad Labem	20	7	20	4	20	—	10	—	10	—	3	—
Vysočina	4	2	4	2	4	2	3	1	2	1	—	—
Zlín	4	—	4	—	4	—	1	—	—	—	1	—
Total	104	36	105	33	103	22	52	11	36	13	13	1
Total	140		138		125		63		49		14	

Explanatory notes:

Others: HS, SZÚ, ČEZ, MÚ Třinec, Město Plzeň, MÚ Pardubice

BTX Includes measurement of aromatic hydrocarbons: benzene, toluene, ethylbenzene, o-xylene, m-xylene, p-xylene.

Note: At some stations the measuring programme may be limited.

Tab. mer3 Air pollution monitoring localities measuring other pollutants and supplementary quantities, AMS, based on the regions and the owner, Czech Republic, 2003

Region	SPM	PM _{2,5}		NH ₃	Hg	Meteo	
	HS, SZÚ	CHMI	Město Plzeň	CHMI	CHMI	CHMI	Others
Prague	—	2	—	—	—	1	—
South Bohemian	—	1	—	—	—	1	1
South Moravian	—	1	—	—	—	2	—
Karlovy Vary	—	1	—	—	—	6	2
Hradec Králové	—	—	—	—	—	3	—
Liberec	—	1	—	—	—	8	—
Moravian-Silesian	1	5	—	—	—	14	3
Olomouc	—	1	—	—	—	4	—
Pardubice	—	1	—	—	—	2	3
Plzeň	—	—	1	—	—	1	4
Central Bohemian	2	1	—	—	—	6	2
Ústí nad Labem	1	3	—	1	1	18	7
Vysočina	—	3	—	—	—	—	—
Zlín	—	1	—	—	—	2	—
Total	4	21	1	1	1	68	22
Total	4	22		1	1	90	

Explanatory notes:

Others: HS, SZÚ, ČEZ, MÚ Třinec, Město Plzeň, MÚ Pardubice

Meteo Measurement of meteorological parameters:

WV –wind velocity, WD –wind direction, T10m - temperature 10 m above terrain.

Note: PM_{2,5} – 2 manual programme included

Tab.mer4 Air pollution monitoring localities measuring basic pollutants and supplementary quantities, manual and semiautomatic methods, based on the regions and the owner, Czech Republic 2003

Region	SO ₂		NO ₂ , NO _x		PM ₁₀		SPM		O ₃		CO	Meteo
	CHMI	Others	CHMI	HS, SZÚ, Ekotoxa, OÚ Šumperk	CHMI	HS, SZÚ	CHMI	HS, SZÚ	CHMI	HS, SZÚ	HS, SZÚ	ČEZ
Prague	1	8	1	10	2	1	1	11	—	—	7	—
South Bohemian	3	1	1	2	1	—	—	—	—	—	—	—
South Moravian	10	5	6	5	1	1	7	4	—	—	—	—
Karlovy Vary	1	14	—	8	1	—	1	6	—	—	—	1
Hradec Králové	10	5	3	4	2	—	—	3	1	—	—	—
Liberec	6	4	5	2	3	—	5	2	—	—	—	—
Moravian-Silesian	9	2	5	3	3	1	4	6	—	—	—	—
Olomouc	3	7	2	5	—	—	2	3	—	—	—	—
Pardubice	5	4	4	4	2	—	2	2	—	—	—	—
Plzeň	2	2	2	6	—	—	1	2	—	—	—	—
Central Bohemian	7	14	4	16	—	—	1	14	—	—	—	—
Ústí nad Labem	16	23	13	15	4	3	15	10	—	6	1	1
Vysočina	4	2	3	2	1	—	1	1	—	—	—	—
Zlín	1	9	1	11	1	—	1	6	—	—	—	—
Total	78	100	50	93	21	6	41	70	1	6	8	2
Total	178		143		27		111		7		8	2

Explanatory notes:

Others: HS, SZÚ, ČEZ, VÚRV, Ekotoxa, VÚLHM, Frantschach, OÚ Šumperk

Meteo Measurement of meteorological parameters:

WV – rwind velocity, WD –wind direction, T10m - temperature 10 m above terrain.

Tab. mer5 Total number of monitoring localities with special measurements, based on the owner, Czech Republic, 2003

Region	TK		VOC		POPs		NH ₃		SNO ₃ ⁻ SNH ₄ ⁺	CS ₂	H ₂ S
	CHMI	HS, SZÚ	CHMI	HS, SZÚ	CHMI	HS, SZÚ	CHMI	HS, SZÚ	CHMI	HS, SZÚ	HS, SZÚ, Frantschach
Prague	2	11	1	1	2	1	—	—	1	—	—
South Bohemian	1	1	—	—	—	1	—	—	—	—	—
South Moravian	1	5	—	—	—	1	—	—	—	—	—
Karlovy Vary	1	3	—	1	—	—	—	—	—	—	—
Hradec Králové	1	4	—	1	—	1	—	—	—	—	—
Liberec	1	2	—	—	—	—	—	—	—	—	—
Moravian-Silesian	3	8	—	2	—	2	—	—	—	—	—
Olomouc	—	1	—	—	—	—	—	—	—	—	—
Pardubice	2	2	—	—	—	—	—	—	1	—	—
Plzeň	—	4	—	—	—	1	—	—	—	—	—
Central Bohemian	—	9	—	—	—	—	—	—	—	—	—
Ústí nad Labem	4	8	—	1	—	2	1	1	—	2	5
Vysočina	1	3	1	—	1	1	—	—	1	—	—
Zlín	—	6	—	—	—	—	—	—	—	—	—
Total	17	67	2	6	3	10	1	1	3	2	5
Total	84		8		13		2		3	2	5

Explanatory notes:

TK/HM As, Cd, Pb, Cr, Ni, Be, Hg, Mn, Fe, Cu, Zn, Se, Sb, V.

VOC Includes measurement of separately analyzed hydrocarbons:

benzene, methane, ethane, ethene, propane, propene, i-butane, n-butane, acetylene, sum of butene, i-pentane, n-pentane, sum of pentene, methyl cyclopentane, n-hexane, cyclohexane, n-heptane, isoprene, toluene, ethylbenzene, m,p-xylene, o-xylene, nonane, 2+3 methylpentane, 2+3 methylhexane, cyclopentane, 2,2-dimethylbutane, 2,3 dimethylbutane, 2+3 methylheptane, i-octane, n-octane.

POPs Includes measurement of persistent organic pollutants:

anthracene, acenaphthene, acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, phenanthrene, fluorene, fluoranthene, ideno(1,2,3-cd)pyrene, naphthalene, pyrene, alpha-HCH, beta-HCH, delta-HCH, gamma-HCH, hexachlorbenzene, PCP28, PCB52, PCB101, PCB118, PCB138, PCB153, PCB180, p,p'-DDD, p,p'-DDE, p,p'-DDT.

Note: At some stations the measuring programme may be limited.