CEIP 2014-2015

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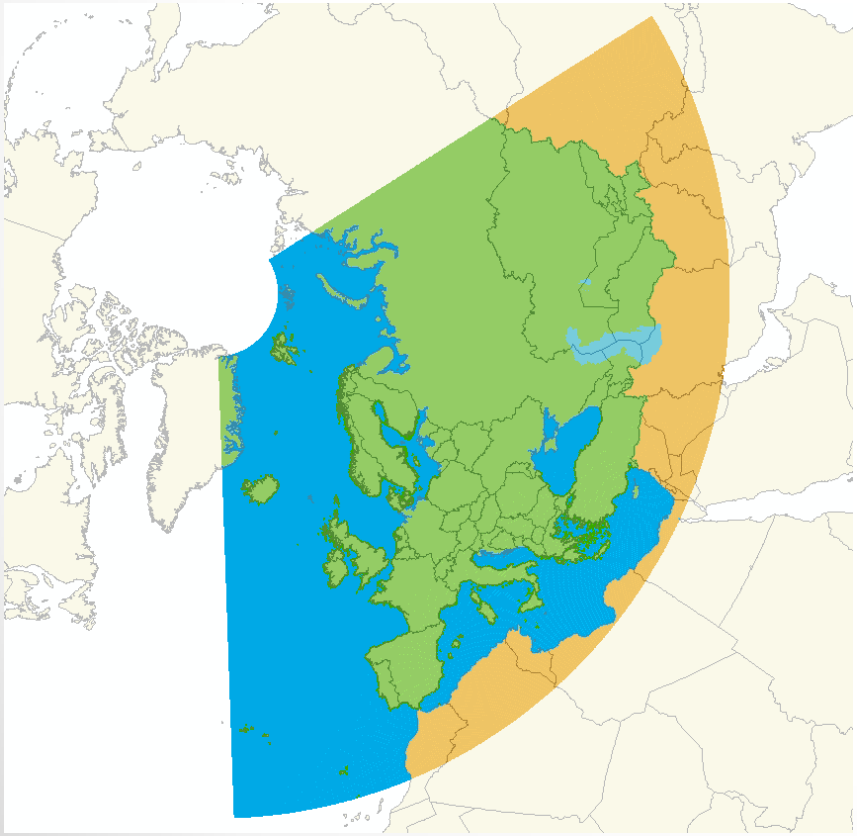
CEIP umweltbundesamt

CEIP WP 2014/2015

- Development of new gridding system
- Maintenance and improvement of DB system and Website
- Compilation and control of reported data
- In depth review of reported data (S3 review)
- Annual production of gridded data sets
- Support to UNECE secretariat and implementation committee

New EMEP area

- The new domain should cover the geographic area between **30°N-82°N latitude** and **30°W-90°E longitude**.



A | B | C | D | E | F | G | H | I | K | L | M | N | P | R | S | T | U

Party	Grid definition tables for 0.1°x0.1° (long-lat) grid	ESRI shape files with 0.1°x0.1° (long-lat) grid definition
ALBANIA	Excel / CSV	Shape file
ARMENIA	Excel / CSV	Shape file
AUSTRIA	Excel / CSV	Shape file
AZERBAIJAN	Excel / CSV	Shape file
BELARUS	Excel / CSV	Shape file
BELGIUM	Excel / CSV	Shape file
BOSNIA & HERZEGOVINA	Excel / CSV	Shape file
BULGARIA	Excel / CSV	Shape file
CROATIA	Excel / CSV	Shape file
CYPRUS	Excel / CSV	Shape file
CZECH REPUBLIC	Excel / CSV	Shape file
DENMARK	Excel / CSV	Shape file
ESTONIA	Excel / CSV	Shape file

http://www.ceip.at/the-new-emep-grid/

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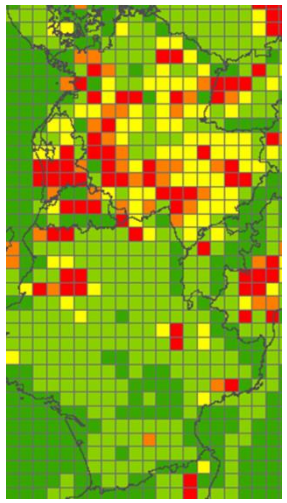
Development of new gridding system

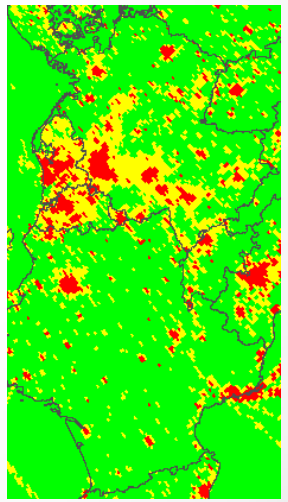
- Development of new Gridding system (calculates the distribution)
  - Collect Reported emissions (sectorial and gridded) and LPS
  - Identify gaps - >expert estimates
  - Identify and collect Proxy data fro spatial distribution
  - Set up Base grids for selected pollutants in new geographical coordinates (0,1x0,1)
  - Provide shape files for "new" EMEP area
- Development of data control system

- 1 map = 620 000 cells
- 1 year = 105 000 000 values

(13 pollutants, 13 GNFR sectors)



50 x 50 km²



0.1° x 0.1°

(e.g. 5,1 x11,1 km Norway, 7,4 x11,1 km in Vienna, 9,1x11,1 in Cyprus)

New GNFR sectors: 13

GNFR09 - curent	GNFR14	CHANGES
A_PublicPower	A_PublicPower	No changes
B_IndustrialComb	B_Industry	Former B_IndustrialComb and D_IndProcess together
D_IndProcess	B_Industry	Former B_IndustrialComb and D_IndProcess together
C_SmallComb	C_OtherStationaryComb	No changes
E_Fugitive	D_Fugitive	Former E_Fugitive
F_Solvents	E_Solvents	Former F_Solvents
G_RoadRail	F_RoadTransport	Former G_RoadRail without railways (1A3c)
H_Shipping	G_Shipping	Former H_Shipping
J_AviLTO	H_Aviation	Former J_AviLTO
I_OffRoadMob	I_Offroad	Former I_OffRoadMob and railways (1A3c)
L_OtherWasteDisp	J_Waste	
M_WasteWater	J_Waste	
N_WasteIncin	J_Waste	Former L_OtherWasteDisp and M_WasteWater and N_WasteIncin together
Q_AgriWastes	J_Waste	
O_AgriLivestock	K_AgriLivestock	Former O_AgriLivestock
P_AgriOther	L_AgriOther	Former P_AgriOther and Q_AgriWastes together
R_Other	M_Other	Former R_Other
S_Natural	N_Natural	Former S_Natural
K_CivilAviCruise	O_AviCruise	Former K_CivilAviCruise and T_IntAviCruise together
T_IntAviCruise	O_AviCruise	Former K_CivilAviCruise and T_IntAviCruise together
z_memo	P_IntShipping	Part of former z_Memo
z-memo	z_Meno	Part of former z_Memo

NEW

MERGED

SPLITT

Without railways

Including railways

Maintain and improve CEIP database system

- **Adjustment of the DB system** to new Reporting Guidelines
- **Adjustment of RepDab** (tool for countries to check reported data)
- Adjustment of reporting formats
- **Harmonize historical data** (to the extent possible) with new reporting formats
- Improvement of interface

- Improved online access to submitted information
- Provision of new reporting templates and instruction on the CEIP website
- Publication of time series, maps, reports, etc….

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Compile and control reported data

- **Compile reported emission data, import into the CEIP database.** Evaluate timeliness and completeness of submitted data
- **Carry out annual quality control** of inventories reported under the CLRTAP.
- **Communicate the results to the Parties and public**.
- Develop/update long-term strategy for the review of emission data.
- Improve/develop new tests for emission checking.

- Annual status report for EMEP SB
- Annual country review reports
- Annual Inventory review report
- Updated database
- Updated website
- Updated methodology report
- Ad –hoc support to Parties

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In-depth review of emission data

- Manage centralized in-depth review process, including preparation of long term plan.
- Maintain the roster of inventory experts.
- Set up two review teams annually.
- Development of templates and tools for reviewers and web space (wiki) for communication and data exchange between teams.
- Communication with reviewed countries.
- Communication with IC.

- Long term plan for S3 reviews
- Roster of review experts
- Annual centralized review of 10 countries.
- 10 country reports with findings and recommendations.

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Annual production of gridded data

- **Compilation and QA/QC** of reported gridded and Large Point Source data.
- **Expert estimates** for missing data. Annual gridding of emission data for 13 pollutants.
- **Re-gridding** of historical emissions (to the extent possible).

- Annually updated web-based **sets of gridded data** for 13 pollutants for use by modellers in current year
- Updated (re-gridded) emissions for selected pollutants/ years

Expected increase of processed data by factor 30 !

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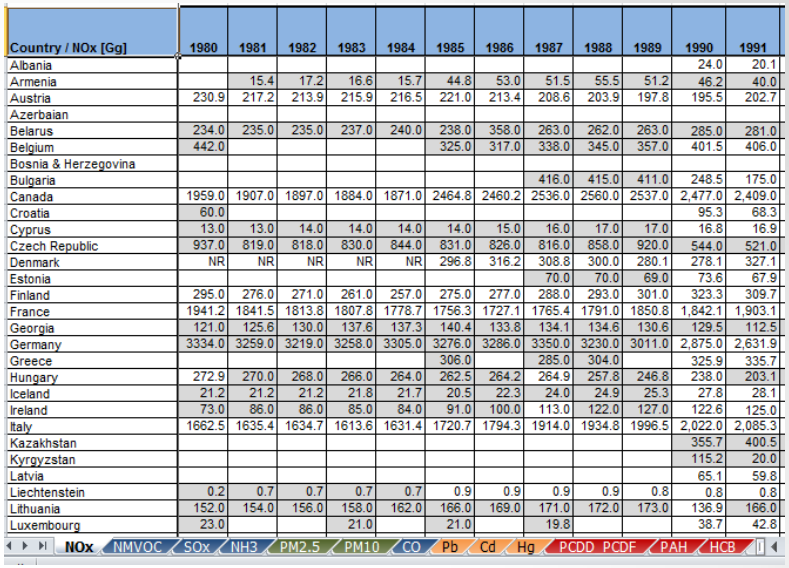
Support to UNECE secretariat and IC

- 2 times a year import and processing of resubmissions requested by IC (e.g. **21 resubmissions** between June and Sept 2103)
- Analyses of information and Data control
- Summary of findings



Country / NOx [Gg]	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Albania											24.0	20.1
Armenia		15.4	17.2	16.6	15.7	44.8	53.0	51.5	55.5	51.2	46.2	40.0
Austria	230.9	217.2	213.9	215.9	216.5	221.0	213.4	208.6	203.9	197.8	195.5	202.7
Azerbaian												
Belarus	234.0	235.0	235.0	237.0	240.0	238.0	358.0	263.0	262.0	263.0	285.0	281.0
Belgium	442.0					325.0	317.0	338.0	345.0	357.0	401.5	406.0
Bosnia & Herzegovina												
Bulgaria								416.0	415.0	411.0	248.5	175.0
Canada	1959.0	1907.0	1897.0	1884.0	1871.0	2464.8	2460.2	2536.0	2560.0	2537.0	2,477.0	2,409.0
Croatia	60.0										95.3	68.3
Cyprus	13.0	13.0	14.0	14.0	14.0	14.0	15.0	16.0	17.0	17.0	16.8	16.9
Czech Republic	937.0	819.0	818.0	830.0	844.0	831.0	826.0	816.0	858.0	920.0	544.0	521.0
Denmark	NR	NR	NR	NR	NR	296.8	316.2	308.8	300.0	280.1	278.1	327.1
Estonia								70.0	70.0	69.0	73.6	67.9
Finland	295.0	276.0	271.0	261.0	257.0	275.0	277.0	288.0	293.0	301.0	323.3	309.7
France	1941.2	1841.5	1813.8	1807.8	1778.7	1756.3	1727.1	1765.4	1791.0	1850.8	1,842.1	1,903.1
Georgia	121.0	125.6	130.0	137.6	137.3	140.4	133.8	134.1	134.6	130.6	129.5	112.5
Germany	3334.0	3259.0	3219.0	3258.0	3305.0	3276.0	3286.0	3350.0	3230.0	3011.0	2,875.0	2,631.9
Greece						306.0		285.0	304.0		325.9	335.7
Hungary	272.9	270.0	268.0	266.0	264.0	262.5	264.2	264.9	257.8	246.8	238.0	203.1
Iceland	21.2	21.2	21.2	21.8	21.7	20.5	22.3	24.0	24.9	25.3	27.8	28.1
Ireland	73.0	86.0	86.0	85.0	84.0	91.0	100.0	113.0	122.0	127.0	122.6	125.0
Italy	1662.5	1635.4	1634.7	1613.6	1631.4	1720.7	1794.3	1914.0	1934.8	1996.5	2,022.0	2,085.3
Kazakhstan											355.7	400.5
Kyrgyzstan											115.2	20.0
Latvia											65.1	59.8
Liechtenstein	0.2	0.7	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.8	0.8	0.8
Lithuania	152.0	154.0	156.0	158.0	162.0	166.0	169.0	171.0	172.0	173.0	136.9	166.0
Luxembourg	23.0			21.0		21.0		19.8			38.7	42.8

NOx | NMVOC | SOx | NH3 | PM2.5 | PM10 | CO | Pb | Cd | Hg | PCDD_PCDF | PAH | HCB

- **Overview tables with national inventory data for each of the 7 Protocols**;
- **Trend tables** with emissions data per pollutant submitted to the secretariat;
- Revised data /tables upon request

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