Convention on Long-range Transboundary Air Pollution



Co - operative programme for monitoring and evaluation of the long-range transmissions of air pollutants in Europe



# CEIP work plan 2014/2015

Katarina Mareckova, Robert Wankmueller EMEP SB bureau meeting, Geneva, 16 March 2015

### Activities planed for 2014 - 2015

- 1.4.1. Compilation of reported data and basic checks
- 1.4.2 Maintenance and improvement of DB system and website
- 1.4.3 Management of centralized review (S3)
- 1.4.4 Development of gridded data for modelers

• 1.3.1 Development of new gridding system in finer resolution (0.1x0.1 long/lat resolution)

• 1.7.1 Review of adjustment applications (separate presentation)

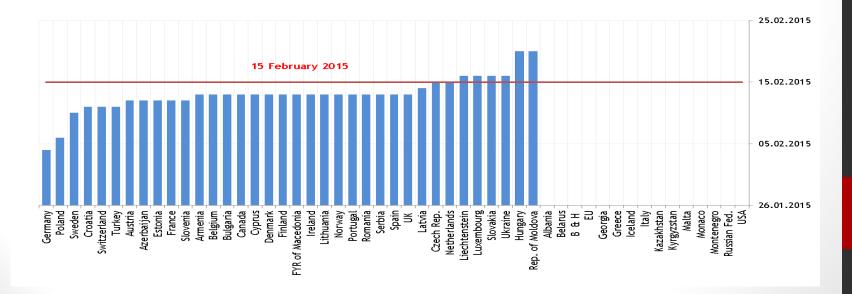
# Compilation of reported data and basic review (item 1.4.1)

- Country data checked and imported in DB
- S1 and S2 reviews completed , country reports posted on CEIP website (March, May)
- Assessment of IIRs
- Annual Inventory review report produced
- 4-5 times a year overview and trend tables for IC (import and processing of resubmissions on request of UNECE secretariat/IC)
- "Status on reporting" annual report to EMP SB
  Plan for 2015/2016 /2017
  - improvement of S1 and S2 checks and formats
  - Revision of Review Guidelines



# Status of reporting as of 13/03/2015 (1.4.1)

- 35 countries (29 on time), 9 resubmissions
- 34 PM, 23 BC
- 1 gridded data in new resolution (Switzerland
- Slightly improved reporting from EECCA (Armenia, Azerbaijan, Moldova, Ukraine)



# DB system and website (item 1.4.2)

- NFR categories harmonized with UNFCCC system
- All reporting templates revised and uploaded on the web
- WebDab system, the RepDab check, and the database adopted to the new reporting formats
- Transition to virtual back up server
- Website regularly updated and improved
- Visualization of gridded data and LPS on google maps
- Online support to Parties
- Countries asked for feedback via online questionnaire



### 2015: S3 review (item1.4.3)

- 10 countries: Azerbaijan, Belarus, Czech rep., Ireland, Netherlands, Rep. of Moldova , Slovakia, Slovenia, Switzerland and Ukraine
- No IIR from Azerbaijan, Belarus (no submission at all), Czech Rep., Ireland, Rep. of Moldova, and Ukraine
- Requirements
  - 20 reviewers (10 to 15 w-days each)
  - CEIP
    - Planning and management
    - Setting up the teams
    - Data for reviewers (data viewer), wiki update , website update
    - Communication with Parties
    - Finalization of country reports
    - Archiving of the data
- 2015/2016/2017 : Update guidance for reviewers and review report template ?

Roster: 21 countries/ 78 reviewers

### S3 Long term plan (2<sup>nd</sup> round) 2013 - 2018

2013 Bulgaria, France, Italy, Latvia, Lithuania, Norway, Poland, Portugal, Romania and Sweden

2014 Belgium, Greece, Cyprus, Croatia, Denmark, Germany, Hungary, and Spain

2015 Azerbaijan\*\*, Belarus, Czech Republic \*, Ireland, Rep. of Moldova, Netherlands, Slovakia, Slovenia, Switzerland and Ukraine

2016 Armenia\*, Estonia, Finnland, Kazakhstan\*\*, Luxembourg\*, The FYR of Macedonia, Montenegro, Serbia, Turkey and United Kingdom

2017 Austria, Albania, Bosnia & Herzegovina\*\*, European Union, Georgia\*, Iceland, Kyrgyzstan\*\*, Liechtenstein, Malta and Monaco

2018 Russian Federation\*\*

### **2015: New EMEP grid** (0,1x0,1 long /lat) gridded emissions **(item 1.3.1)**

- Gridding planned for 10 (13) pollutants (year 2013, 2012?)
  - NO<sub>x</sub>, NMVOC, SO<sub>x</sub>, NH<sub>3</sub>, CO, PM<sub>2.5</sub>, PM<sub>10</sub>, Cd, Hg, Pb, PCDD/PCDF, B[a]P, HCB
- 13 GNFR14 sector categories
- Activities :
  - Gap-filling on GNFR14 sector level
  - Gridding (169 grid maps á 600k cells)
  - Assessment of the results
  - Further documentation of the system
  - Comparison with TNO data (if available)
- Planned delivery: Q3/Q4 2015
- Key challenges:
  - expert estimates for EECCA countries (all pollutants)
  - expert estimates and distribution for POPs
  - data for shipping



### **2015: Gridded emissions for HMs and POPs** (50x50 km) (item 1.4.4)

- MSC-E requirements
  - 10 pollutants (comparing to 6 in previous years)

New: Depending on data availability

- Cd, Hg, Pb, PCDD/PCDF, *B*[*a*]*P*, *B*[*b*]*F*, *B*[*k*]*F*, *Indeno*, PCB, HCB
- 13 GNFR14 sector categories (comparing to NT in previous years)
- 50 x 50 km<sup>2</sup> (PS projection)
- <u>Proposal</u>:
  - Improvement from NT to GNFR14 sectoral gridding (130 grip maps á 21 thous. cells) -
  - Gridding for sectors cca 22-24 countries as reported (other ones like HMs distribute like PM, or ?? )
- Challenges:
  - Requires expert estimates for 10 -15 countries
- <u>Planned delivery</u> for gap-filled data : end of April 2015
- <u>Considered deadline for gridded data for 6 blue pollutants</u>: mid May 2015\*
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## Emission gridding: HMs and POPs challenges

Reported gridded data (22-24 countries)

Cd	Hg	Pb	PCDD/PCDF	РАН	PCB	НСВ
AT	AT	AT	AT	AT		AT
BY	BY	BY	BY	BY	BY	BY
BE	BE	BE	BE	BE	BE	BE
BG	BG	BG	BG	BG	BG	BG
HR	HR	HR	HR	HR	HR	HR
CY	CY	CY	CY	CY	CY	CY
CZ	CZ	CZ	CZ	CZ	CZ	CZ
DK	DK	DK	DK	DK		DK
EE	EE	EE	EE	EE	EE	EE
FI	FI	FI	FI	FI	FI	FI
FR	FR	FR	FR	FR	FR	FR
DE	DE	DE	DE	DE	DE	DE
			IS	IS		IS
IE	IE	IE	IE	IE	IE	IE
IT	IT	IT	IT	IT	IT	IT
LV	LV	LV	LV	LV	LV	LV
NL	NL	NL	NL	NL	NL*	NL*
PL	PL	PL	PL	PL	PL	PL
PT	PT	PT	РТ	PT		PT
SI	SI	SI	SI	SI	SI	SI
ES	ES	ES	ES	ES	ES	ES
SE	SE	SE	SE	SE	SE	SE
UA	UA	UA	UA	UA	UA	UA
GB	GB	GB	GB	GB		GB

#### No information on distribution

#### **23** countries

Armenia Azerbaijan Bosnia & Herzegovina FYR of Macedonia Georgia Greece Hungary Kazakhstan Kyrgyzstan Liechtenstein
Bosnia & Herzegovina FYR of Macedonia Georgia Greece Hungary Kazakhstan Kyrgyzstan
FYR of Macedonia Georgia Greece Hungary Kazakhstan Kyrgyzstan
Georgia Greece Hungary Kazakhstan Kyrgyzstan
Greece Hungary Kazakhstan Kyrgyzstan
Hungary Kazakhstan Kyrgyzstan
Kazakhstan Kyrgyzstan
Kyrgyzstan
Liechtenstein
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Norway
Republic of Moldova
Romania
Russian Federation
Serbia
Slovakia
Switzerland
Turkey

### **2014: New EMEP grid** (0,1x0,1 long /lat) gridded emissions **(item 1.3.1)**

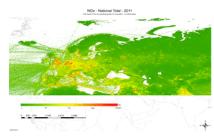
- 0.1° x 0.1° (long/lat) resolution gridding system in place
- ESRI shape files for countries available for download
- 2011 NO<sub>x</sub>, NMVOC, SO<sub>x</sub>, NH<sub>3</sub>, CO, PM<sub>2.5</sub>, PM<sub>10</sub> gridded in 13 GNFR14 sector categories and published on web
- Gap filling and gridding is documented
- Comparison of old and new distribution performed

#### 2011 grid data in 0.1°x0.1° (long-lat) resolution

First results of the new gridding system are now available for countries and modellers. Below you can download first results of the new gridding system: SOx, NOx, NMVOC, NH<sub>3</sub>, CO, PM<sub>2.5</sub>, PM<sub>10</sub> and PM<sub>coarse</sub> gridded emissions in 0.1° x 0.1° (long-lat) geographical coordinates for the year 2011. Information on the gap-filling of reported data and on the spatial disaggregation of emissions for 13 aggregated GNFR14 sectors can be downloaded as well. Parties are encouraged to check the emission distribution and provide feedback to CEIP.

#### NOx | NMVOC | SOx | NH3 | PM2.5 | PMcoarse | CO







http://www.ceip.at/new\_emepgrid/01 grid data 2011/



### 2015: gridded emissions (**50x50 km)** for **main pollutants and PM** (item 1.4.4)

- MSC-W requirements
  - 7 pollutants: NO<sub>x</sub>, NMVOC, SO<sub>x</sub>, NH<sub>3</sub>, CO, PM<sub>2.5</sub>, PM<sub>Coarse</sub>
  - 10 aggregated SNAP sector categories, 50 x 50 km<sup>2</sup> PS resolution
  - Years 1990 2013, for PM only 2000 2012
- <u>Activities</u>:
  - Gap-filling on SNAP sector level for 24 years
  - Update of international shipping trends
  - Gridding (1940 grid maps á 21 thous. cells)
  - Consistency checks,
  - Assessment of differences
  - Improvement of shipping emissions?
  - Chapter for the report : Transboundary particulate matter, photo-oxidants, acidifying and eutrophying components (June)

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- <u>Planned delivery</u>: mid April 2013
  - end May 1990-2012