Issue with using EMEP 0.10x0.10

- EMEP 0.5x0.5 uses SNAPs and EMEP 0.1x0.1 uses NFR. CHIMERE (for example) does not have currently parameters ready for NFR
  - The change from SNAP to NFR is not straightforward. Speciation, temporalization, emissions heights need to be created for NFR for some models. Difficult to use SNAP data for NFR:
    - SNAP10 corresponds NFR K_AgriLivestock and L_AgriOther (two sectors with different temporalization)
    - NFR B_Industry and A_PublicPower corresponds to SNAP 1, 3, 4.
  - May be interesting to create tools that could be used to automatically create the needed database in SNAP and NFR.
  - Perhaps CEIP could provide some information on speciation, temporalization per country, year, sector, etc…
- EMEP 0.1x0.1 data are a bit tedious to download: 1 file per polluant and sector. An automatic tool to automatically emissions may be interesting.

Speciation using NFR level 2 data

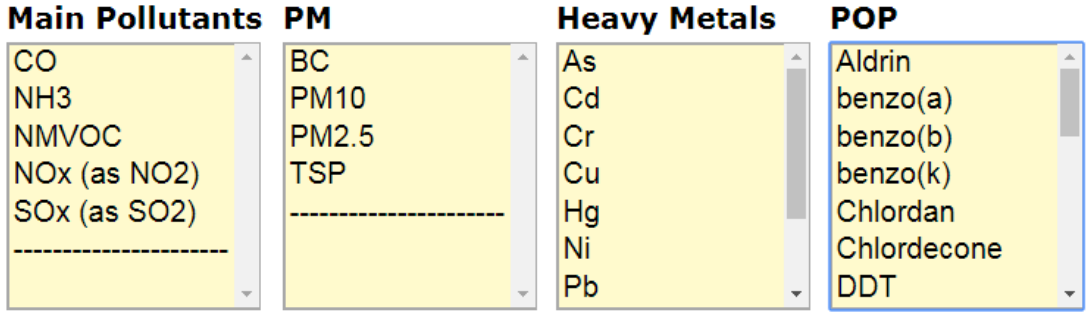
- CITEPA gathered information on speciation from literature on SNAP3/NAPFUEL speciation
- Possibility to use information on emissions totals from countries
  - A NFR level 2 speciation was estimated based on SNAP3/NAPFUEL totals for France
  - Possibility to create SNAP1 and NFR1 by coupling the NFR level 2 speciation with the the NFR level 2 totals reported by countries. Speciation could therefore change for each year and country. Better speciation could be obtained by using better speciation data.
  - Example for CHIMERE (TOL species) for SNAP level 1 (the same could easily be done for NFR level 1). Part of NMVOC emissions:

Snap	1	2	3	4	5	6	7	8	9	10
France 2000	0,6%	0,0%	1,6%	0,9%	2,4%	3,3%	2,2%	1,8%	2,8%	0,0%
France 2012	0,4%	0,0%	1,1%	0,6%	2,0%	2,6%	1,8%	1,7%	2,7%	0,0%
UK 2012	1,1%	0,0%	1,7%	0,2%	0,8%	1,4%	2,0%	1,2%	3,3%	0,1%
Spain 2012	1,0%	0,0%	0,3%	0,2%	0,5%	4,4%	1,7%	0,7%	0,0%	0,0%
Greece 2012	1,7%	0,0%	0,1%	4,4%	0,0%	0,2%	1,9%	1,1%	0,0%	0,0%
Poland 2012	1,9%	0,0%	0,5%	1,3%	1,8%	5,5%	2,4%	1,0%	0,0%	0,0%
Germany 2012	1,8%	0,0%	0,5%	0,4%	1,3%	3,0%	1,8%	1,1%	0,0%	0,0%
Italy 2012	1,3%	0,0%	0,4%	2,0%	1,1%	2,8%	2,1%	2,0%	4,5%	0,0%

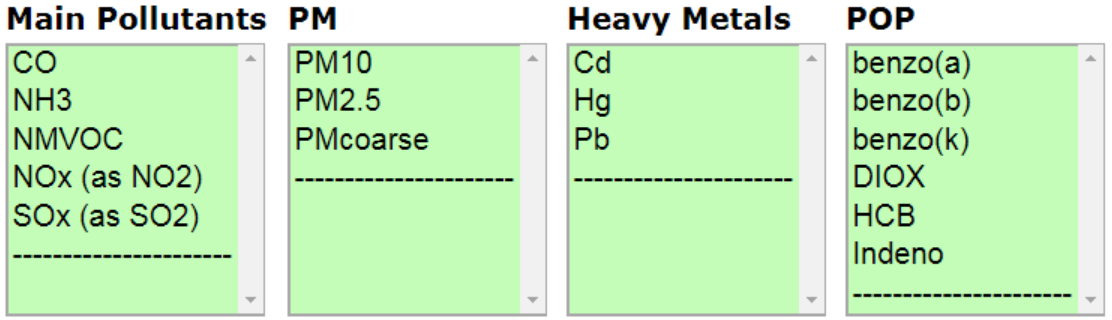
- A similar methodology could perhaps be applied for temporalization

Other issues

- Some information (for POPs and heavy metals) are present in emissions reported by countries (emission totals not gridded) but not in as used in models



Reported



As used in models

- Heavy metals: gridded emissions only for Cd, Pb and Hg. Other metals such as As and Ni are also included in the directives and we do not have gridded emissions for them.
- POP and Heavy metals: Concerns on the precision of the inventory for modeling activities