



#### **Outline**

Reporting obligation under the NEC Directive

Data flow

**NECD Status report** 

Examples of analyses



#### NEC Directive (2001/81/EC)

- The aim of NECD is to **limit emissions of acidifying and eutrophying pollutants and ozone precursors** in order to improve the protection in the Community of the environment and human health... by establishing national emission ceilings...'
- NECD also highlights the <u>importance of reporting</u> air pollutant emission data for assessing progress in reducing air pollution in the European Union region and for ascertaining the compliance of the Member States with their commitments

Reporting is mandatory for EU Member States

#### Legal bases (council decision 2001/81/EC)

- Articles 2, 6, 7 and 8 of the NECD (National Emission Ceilings Directive) set forth the requirements for the EU-27 Member States concerning reporting their
  - national inventories, annually
  - projections, annually
  - programmes (reporting of measures), every 3 years
- The inventories and projections of SOx, NOx, NMVOCs, NH<sub>3</sub> shall be made <u>publicly available</u>
- The next deadline for submission of inventories and projections is 31 Dec 2011



#### Reporting obligations - projections

- □ **2010** (upcoming revision of Gothenburg protocol **2020**)
- Projection scenarios as defined in the CAFE WGI reporting guidelines
  - WoM: A business as usual (or without measures) projection should exclude all policies and measures implemented, adopted or planned after the year chosen as the starting year for the projection.
  - WM: A with measures projection takes into account all currently implemented and adopted policies and measures.
  - WaM: A with additional measures projection takes into account all currently implemented and adopted policies and measures plus all those planned .

#### **Emission ceilings**

- Set up in Gothenburg protocol for Parties to the CLRTAP, for EU MS revised in the NECD
- To help protect human health and the environment, the NECD sets pollutant-specific and legally binding emission ceilings for each of the 4 pollutants and for each country, which must be met by 2010
- Ceilings are based on RAINS /GAINS calculation (cost abatement strategies) <a href="http://gains.iiasa.ac.at/index.php/gains-europe">http://gains.iiasa.ac.at/index.php/gains-europe</a>
- By 2010 at the latest, Member States shall <u>limit their annual</u> emissions of NO<sub>x</sub>, NMVOC, SO<sub>2</sub>, and NH<sub>3</sub> to the ceilings defined in the Directive.



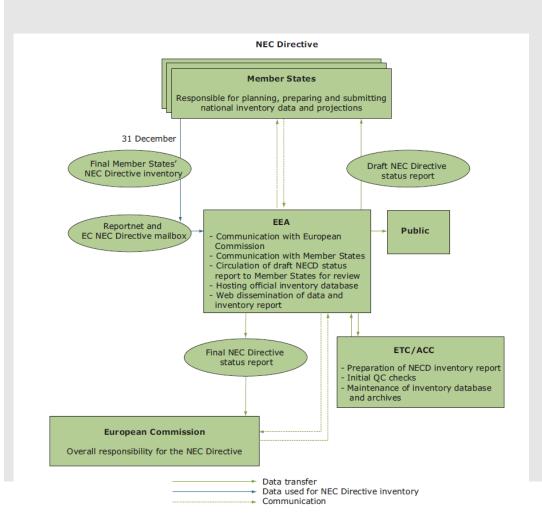
#### **NECD Status report**

- documents the most recent emission and projection data submitted by EU Member States under the NECD
- presents an analysis of the distance to emission ceilings of nitrogen oxides  $(NO_x)$ , non-methane volatile organic compounds (NMVOCs) (), sulphur dioxide  $(SO_2)$ , and ammonia  $(NH_3)$  emissions for the year 2009 and 2010

NECD Status report is annually prepared on behalf of the European Environment Agency (EEA) by its European Topic Centre for Air pollution and Climate change mitigation (ETC/ACM)



#### **Data flow**



- Eionet priority dataflow
- EEA Eionet
   ReportNet tools
- MS shell provide to EEA copy of information supplied to EC



#### **Content of the NECD Status report**

- Executive summary
- Introduction
  - Reporting obligations (scope, accessibility, ceilings)
  - Preparation of NECD Inventories
- Status of Reporting (Timeliness, Completeness, Consistency Comparability, Transparency of information, Reporting of socioeconomic data and incorporation of financial recession effects in 2010 projections)
- MS emission trends and projections
- Potential underestimation of Member State emissions due to non-reporting of sectors
- Conclusions
- Annex : Country profiles

#### Scope of the report

- 27 EU MS Status Report + country profiles
- 5 EEA countries..(...Turkey...) only country profiles
- Pollutants covered are Sox, Nox, NMVOCs, NH<sub>3</sub> (revised Gothenburg protocol + PM<sub>2.5</sub> and BC)
  - mandatory emissions:
    - final year N-2 and
    - provisional year N-1
  - Projections 2010 (revised Gothenburg p. 2020)
- These pollutants harm both human health and the environment by contributing to the formation of ozone and particulate matter and by causing acidification and eutrophication



## Overview of air pollutant emission reporting obligations in the European Union

Legal obligation	Emission reporting requirements	Annual reporting deadline for EU Member States	Annual reporting deadline for the European Union
NEC Directive	Emissions of NO <sub>x</sub> , NMVOCs, SO <sub>2</sub> and NH <sub>3</sub>	31 December	_
LRTAP Convention	Emissions(a) of NO <sub>x</sub> (as NO <sub>2</sub> ), NMVOCs, SO <sub>x</sub> (as SO <sub>2</sub> ), NH <sub>3</sub> , CO, HMs, POPs and PM	15 February	30 April
EU Monitoring Mechanism/U NFCCC	Emissions(b) of CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NO <sub>x</sub> , CO, NMVOCs and SO <sub>2</sub>	15 January (to the European Commission) 15 April (to the UNFCCC)	15 April



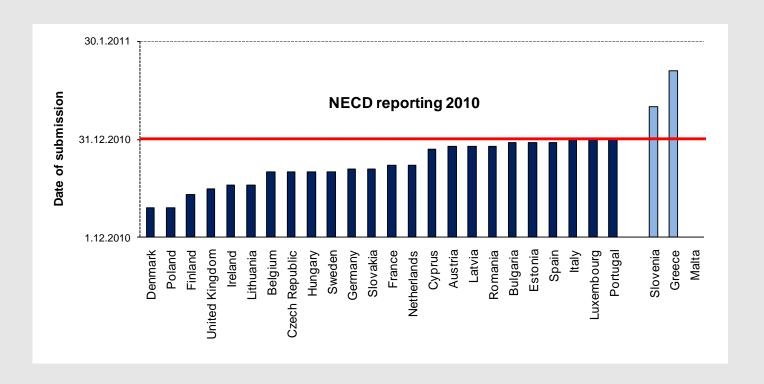
## Major differences between the reporting obligations of the CLRTAP, NECD and UNFCCC

	EU NECD	LRTAP Convention — NFR	EU MM/UNFCCC — CRF
Air pollutants	NO <sub>x</sub> , SO <sub>2</sub> , NMVOCs, NH <sub>3</sub>	NO <sub>x</sub> , NMVOCs, SO <sub>x</sub> , NH <sub>3</sub> , CO, HMs, POPs, PM	$CO_2$ , $CH_4$ , $N_2O$ , HFCs, PFCs, $SF_6$ , $NO_x$ , $CO$ , $NMVOCs$ and $SO_2$
Domestic aviation (landing and take-off)	Included in national total	Included in national total	Included in national total
Domestic aviation (cruise)	Not included in national total	Not included in national total	Included in national total
International aviation (landing and take-off)	Included in national total	Included in national total	Not included in national total
International aviation (cruise)	Not included in national total	Not included in national total	Not included in national total
National navigation (domestic shipping)	Included in national total	Included in national total	Included in national total
International inland shipping	Included in national total	Included in national total	Not included in national total
International maritime	Not included in national total	Not included in national total	Not included in national total
Road transport	Emissions calculated based on fuel sold	Emissions calculated based on fuel sold	Emissions calculated based on fuel sold
Emissions from natural sources	Not included in national total	Not included in national total	Not included in national total

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# Timeliness and completeness of reporting



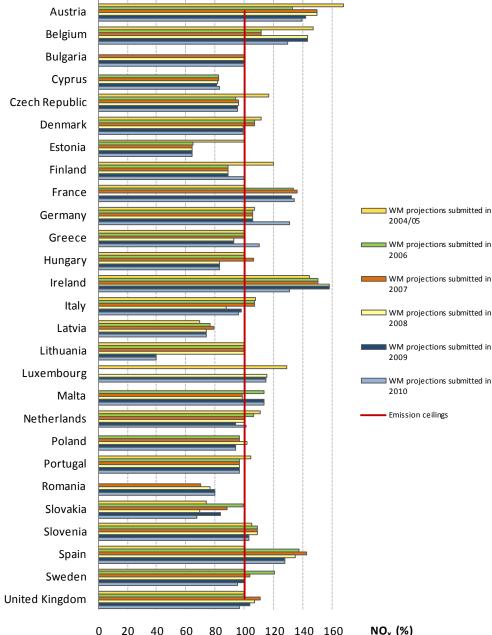
#### IVIRONMENT **umwelt**bundesamt Austria Belgium



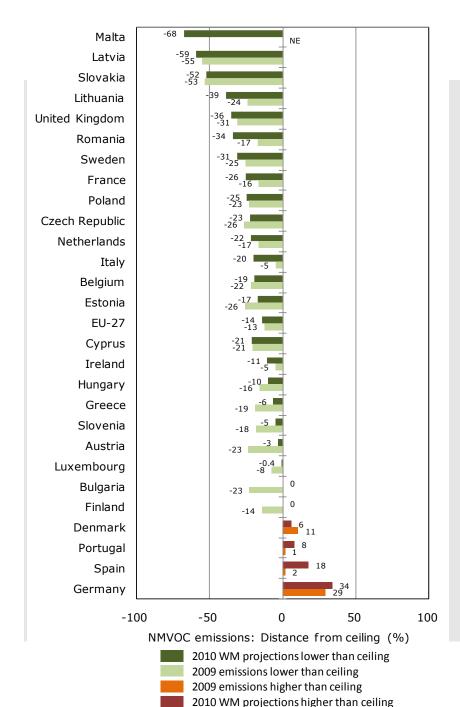
Comparison of NO<sub>x</sub> projections (WM) submitted in:

2005, 2006, 2007, 2008, 2009, 2010

and ceilings in 2010



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### AGENCY AUSTRIA **umwelt**bundesamt

Distance from ceiling for NMVOC emissions in 2009 and for projected NMVOC emissions in 2010 (with measures)



#### **Country profiles**

■ Turkey SO2, NOx, and NMVOC