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ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC



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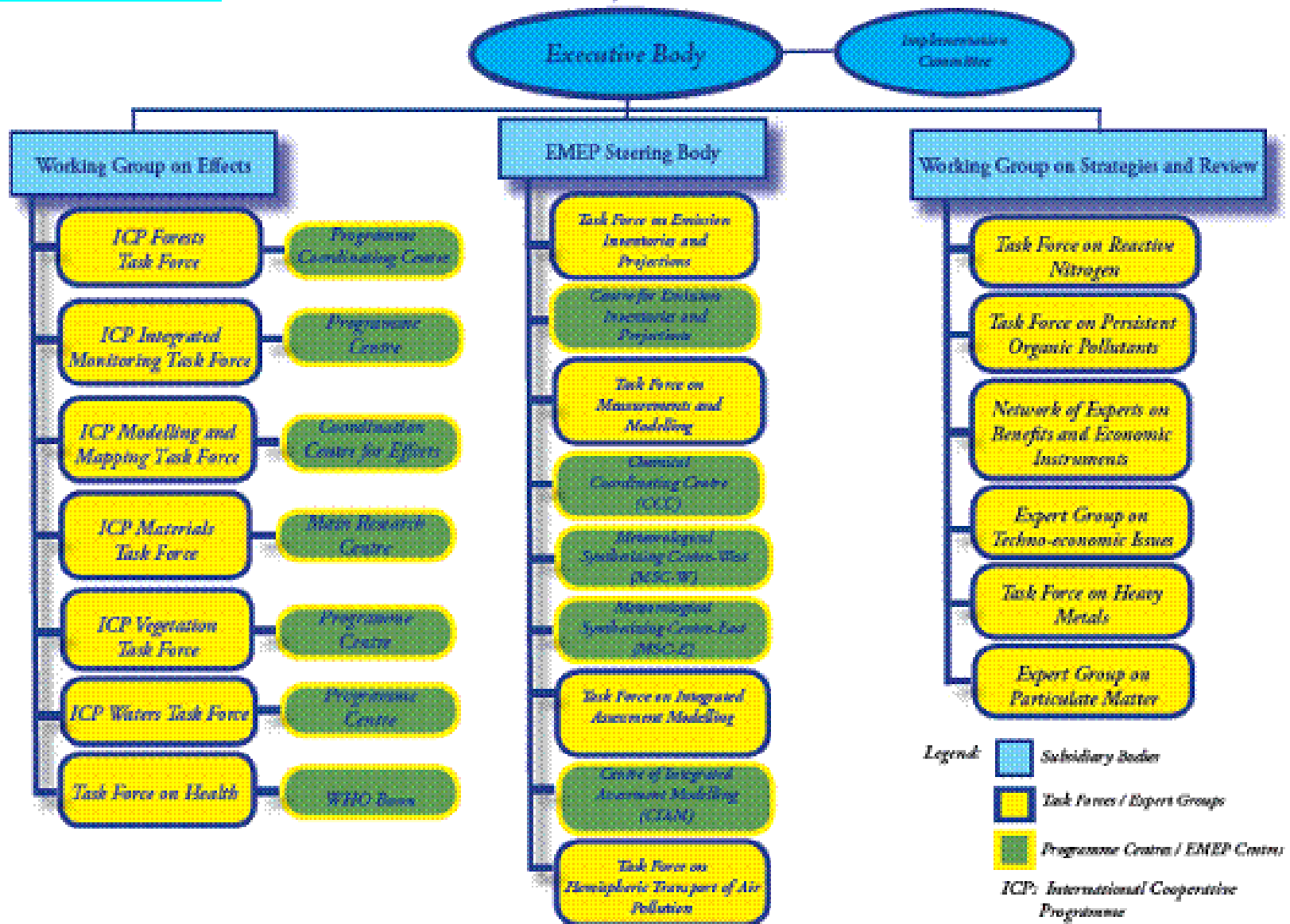
Russian experience within the UNECE LRTAP Convention: Bridging policy with science for effective mitigation of transboundary air pollution



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The organisational structure of Convention

INTERGOVERNMENTAL BODIES, EXPERT GROUPS AND SCIENTIFIC CENTRES





EMEP Steering Body

The Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) is the most advanced European programme specializing in

3 directions of Convention:

- collection of emissions data,
- measurement of air and precipitation quality,
- modelling of atmospheric transport and deposition of air pollutants.



Working Group on Effects

Was established under the Convention in 1980.
Responsible for harmful effect assessment of air pollution:

- **providing data** about the impact on human health and ecosystems of main pollutants, such as sulphur and nitrogen oxides, ozone and heavy metals
- **developing** of multi-pollutants multi-effects approaches
- **identifying** the most endangered **areas** and **informing Executive Body** about the relevant ecological threat.



Working Group on Strategies and Review

Was established in 1988.

Development of the Group was supported by close **interaction with the Task Force on Integrated Assessment Modelling** responsible for implementing model calculations needed for optimized emission reduction strategies research.

The Working Group was charged with **preparing background for negotiating** any Protocols changes.



8 protocols were developed:

The Protocol on Long-term Financing of the EMEP

Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent

Protocol concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes

Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes

Protocol on Further Reduction of Sulphur Emissions

Protocols on Persistent Organic Pollutants

Protocols on Heavy Metals

Protocol to Abate Acidification, Eutrophication and Ground-level Ozone.



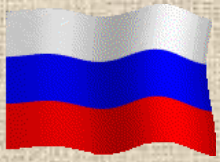
RF as a participant of LRTAP Convention



The **Convention on LRTAP** adopted in 1979 was ratified by USSR in 1980.

The Russian Federation as the subject of international law is now the participant of only three Protocols from eight:

- The EMEP Protocol of 1984,
- The protocol of 1985 on sulfur,
- The Protocol of 1988 on oxides of nitrogen.



RF obligations under Convention

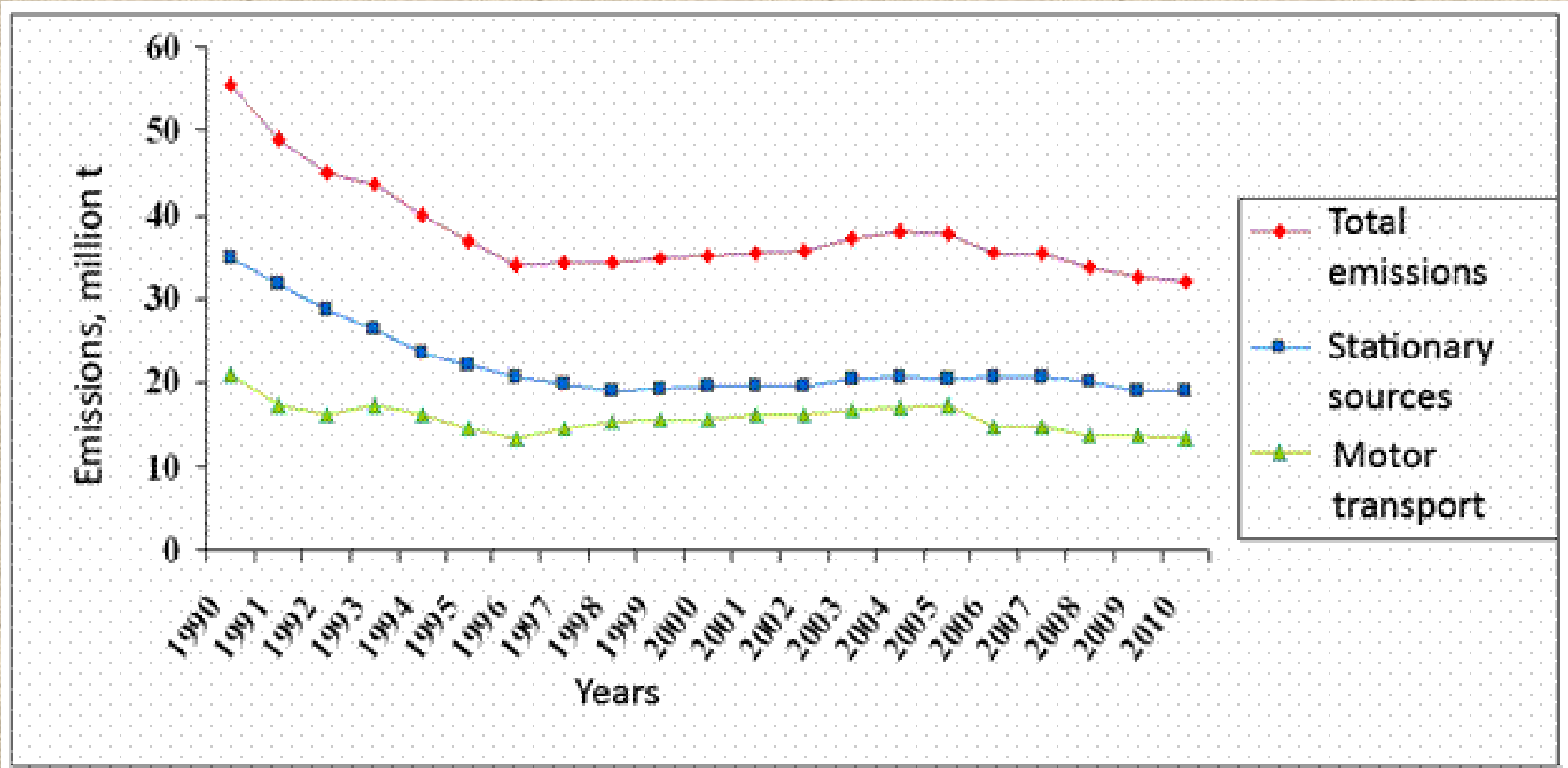
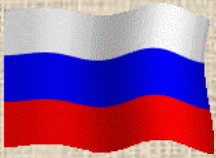
- Periods of validity of **the first two Protocols** have already expired, and **obligations** of Russia on decrease in emissions on ETR containing in them, are **completely kept**.
- The **second sulphur Protocol** was **signed but not ratified**. **Sulphur emissions abatement** for 1990 base year for ETR should come to 38% in 2000, 40% in 2005 and 40% in 2010.
- **Annual emissions reporting** in Executive body of the Convention, total and in breakdown on categories of sources (so called NFR code).



Performing of obligations

- Commitments of sulphur emission reduction have been met by USSR in **1989** (by Europe – in 1991) and limitation of oxides of nitrogen emissions in USSR has been achieved in **1991** (in Europe – in 1994).
- Information for reporting on emissions by source categories within the UNECE is provided by consolidated data on emissions contained in the form № 2-TP (air). Russian emissions distributed by national categories of economic activities (so called OKVAD) must be transformed.

Emissions of polluting substances from stationary sources and motor transport in the territory of the Russian Federation from 1990 to 2010





RF activity under LRTAP Convention

Launch of the **Meteorological Synthesizing Center – East (MSC-E)** based on the Hydrometeorological Service in Moscow focused on assessment of the transboundary transport of persistent organic pollutants (POPs) and heavy metals (HMs).

The European-scale atmospheric transport **models MSCE-HM** and **MSCE-POP** were especially designed by MSC-E for the operational estimation of the transfer within the EMEP domain of HMs and POPs, respectively.

The recent product of MSC-E research activities is the development of the **Global EMEP Multi-media Modeling System (GLEMOS)**.



RF activity under LRTAP Convention

Work on adaptation of **Russian module of GAINS** launched in 2008 under Russian-Swedish project. **GAINS-Russia** included 3 regions in North West and the rest of Russia. For solution of national problems such division was unsatisfactory. According to recommendations of experts of SRI Atmosphere the model was improved, RF territory was detailed and at the moment RF is represented by 8 regions in compliance of federal districts.

Present activity is focused on gathering needed information and its aggregation for those districts.

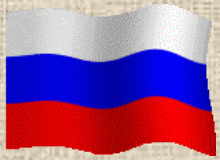


RF activity under LRTAP Convention

Creation of the Coordinating group on promotion of actions towards implementation of the Convention on LRTAP in Eastern Europe, Caucasus and Central Asia under Convention.

The Group has the following **objectives**:

- **development of approaches** to atmospheric air quality regulation on national and transboundary level applying the CLRTAP mechanisms,
- **providing of assistance** to the countries of the region concerning the accounting of air pollutant releases,
- **implementation of the impact assessment** on environmental systems and application of critical loads,
- **analysis** of the corresponding **techno-economic factors**,
- **enhancement** of regional and international **cooperation** in the area of transboundary air pollution abatement.



RF achievements under Convention

Sulphur emission reduction and limitation of oxides of nitrogen emissions have been achieved by USSR in **1989** and in **1991**, respectively.

Emissions of oxides of nitrogen and sulfur dioxide from stationary sources of RF in 2010 decreased by 40 % and 53 %, respectively, in relation to level of emissions for 1990.

Total emissions for the period from 1990 to 2010 decreased for 42 %.



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Thank you for your attention!



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