

## LRTAP Simulation Exercise

The RAINS online simulation is at: [http://www.iiasa.ac.at/~rains/cgi-bin/rains\\_web.pl](http://www.iiasa.ac.at/~rains/cgi-bin/rains_web.pl)

### Instructions:

You are negotiators for a LRTAP convention protocol. Current emissions are consistent with the RAINS1980 simulation (it's "1981" in this scenario). There is general agreement that limiting acidification is a good idea, and that a protocol under the LRTAP convention is the way to do it. The overarching goal is to agree on targets and timetables for your respective countries which will benefit the natural environment in Europe and address the problem of acidification. There are no existing protocols or requirements yet.

You will each play the role of a specific country in the negotiation, though one person will have the role of the LRTAP Secretariat. You can choose to negotiate whatever outcome you wish, but you can only commit to actions by your own country. Focus on SO<sub>2</sub> and NO<sub>x</sub> and the issue of acidification. (Assume that "Germany" is one country in emissions-year 1981, for the sake of this simulation, given the model we have. For the Soviet Union and Czechoslovakia, you will need to add the contributions from several/two countries in the model).

Useful mapping capabilities from RAINS include total sulfur and nitrogen deposited, total acidity deposited, percent of ecosystems unprotected, and maps that show differences between scenarios.

You may feel free to negotiate on how to frame targets, baselines, etc. and any other understandings that may help you reach agreement. You should also, in preparation for the negotiation (and for Problem Set 4 Question 1), flesh out and expand your diplomatic instructions using your judgment as a technically-savvy negotiator. (You might, for example, have received general political instructions which you need to translate into specific targets and timetables based on your technical work. You might also think of particular initial positions to take that are different from your "bottom line.")

At the end of your negotiating session, you should aim to agree on the major elements of a protocol and convey your shared understanding in a short document (it need not be in "legal language" – but, for example, you might include a bulleted list of negotiated elements, a chart indicating baselines and goals, etc.) In addition, for Problem Set #4, using output from the RAINS model for images where appropriate, write a short press release about the outcome of the negotiation **from your role's perspective**. [This will be question 2 for Problem Set 4.]

Tips for the online RAINS simulation:

- you can zero out emissions from countries in RAINS to conduct sensitivity tests. If it won't let you input "0", try "1"
- to save a scenario, after you enter emissions totals, type a name for it and click "save a new scenario"

Instructions for your country will be sent to you by email. You will also be assigned a simulation group and will be given a list of other participants, so that you may identify your fellow negotiators. Further information on where each group should meet for Session 15 will be provided.

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