

PRESENTATION BY THE ITALIAN DELEGATION

In starting this brief report we would like to recall, first of all, that in Italy for the year 1980 sulphur dioxide emissions have been assessed at 3.800.000 tons and nitrogen dioxide emissions, between 1.410.000 and 1.500.000 tons for the same period. In 1983 these figures were reduced, respectively, to 3.150.000 tons for SO₂ and 1.387.000 to 1.537.000 tons for NO_x.

All these data^x have been regularly forwarded to all concerned international organizations, among them the Executive Body of the 1979 Geneva Convention.

As to the Italian attitude with reference to the ECE initiatives on atmospheric pollution, we may point out that on the 15th of July 1982 Italy has registered its ratification of the Geneva Convention and that on the 9th of July 1985 we have signed the Protocol to the Convention, related to the 30% reduction in SO₂ emissions by 1993.

Italy also takes part in the deployment of the European Communities policies aiming at controlling and reducing dangerous emissions. These policies have already attained a relevant milestone through the adoption, in the spring of 1984, of a directive on the control of emissions by industrial plants. Within the framework of the latter, which is a so-called "mother directive", we now take part in the preparation of a new directive leading to the reduction of emissions by large combustion plants. Since the matters raised by this proposal are rather complex, talks have been proceeding for some time now, and it is well known that the whole matter has been somewhat slowed down. This ruling however, when finally approved, will provide a relevant contribution in terms of reducing national and transboundary atmospheric pollution.

Italian legislation on air pollution control is presently founded both upon Air Quality Standards provisions as well as upon emission limits for industrial plants established by the various Regions.

On the 28th of March 1983 in Italy which, following rulings set down by the European Community, established the highest levels of concentration permitted for seven polluting substances: SO₂, NO_x, O₃, CO, F, Pb,

suspended particulated matter. The decree thus established AQS which are in effect over the whole national territory, regardless of the polluting source.

This AQS adoption has brought forward a new system superseding the former control procedures based on a 1966 anti pollution law by which concentration levels were fixed only for some given industry originated pollutants and this, only in some so-called "controlled" areas of our territory.

According to the 1983 decree, whenever AQS happen to be surpassed, the pertinent Regions must implement specific plans aiming at re-establishing the previous situation: these plans should imply enforcement upon emission sources in all sectors contributing to air degradation, so as to attain more desirable levels as soon as possible.

In any case, and leaving aside these particular contingencies, the decree on AQS meets with the basic preventive strategies with a definite repudiation of the former systems based upon sporadic and isolated anti pollution interventions, carried on mainly if not only in particularly endangered areas.

We shall now come to the various provisions by which we plan to further achieve containment of dangerous emissions in the future.

By the National Energetic Plan various thermo electric plants running on fuel oil (with a sulphur content of 3%) shall be substituted by plants running on coal whose sulphur content must not exceed, by law, 1%. If one takes in account the related thermic capacities, this switch may bring about a reduction by 30% in sulphur emissions.

Again, sulphur content in gasoil, which at the beginning of 1983 was about 1.1% has gone down since the 1st of July 1985 to 0.3% following a decree which brought implementation in Italy of a pertinent Community ruling.

Another positive factor is provided by the switch, which is under way in many Italian centres, from gasoil methane, mainly in the field of domestic usage.

Coming now to the theme of research performed in Italy on acid deposition, we should at first recall the establishment in our country of 4

sampling stations operating within EMEP Programme of the Geneva Convention. Again on EMEP, Italy has signed the related financial protocol and is presently proceeding with its ratification.

We are also studying our possible accession into the Geneva Convention Working Group which is dealing with damages to various materials as well as monuments, always in relation to atmospheric pollution.

Again, an official research has been recently carried out in Italy on the matter of our forests. It has led to the conclusion that about 5% of forests are damaged quite probably by pollution and not by other causes such as forest fires.

On a regional level, there has been in recent months an extensive research carried on by a "Study Group on the chemical characteristics of rainfalls in Northern Italy". This group, formed by 20 Italian and 3 foreign laboratories, has mainly devoted its attention upon the effects of acid depositions on the environment, and particularly on the lakes in the Alpine area.

The research so far conducted has shown that damages from atmospheric pollution have largely concerned our artistic and historical heritage, and the forests in a lesser way.

On the matter of the research performed within the Geneva Convention concerning damages upon various structures and materials, it is our opinion that the same amount of importance which is presently conferred to the effects upon various industrial materials should be now attributed as well to the consequences suffered by stones, bronze and other materials present in monuments.

In all Italian centres it is possible to ascertain damage to monuments caused by atmospheric pollution typical of an urban environment. One can find, the same as in other European towns, sulphur dioxide produced by domestic heating and by industrial combustion plants; then, nitrogen dioxide coming from all kinds of combustion and above all, from vehicular circulation, and then again, carbonic particulated matter produced, among others, by diesel engines.

Lastly, we should still recall that in the case of Italy, pollution is threatening, other than by the dangerous substances existing in Northern and Central Europe, also by photochemical pollutants, mainly including ozone, all of which are produced by the increased solar irradiation.