In so far as scientific publishing is concerned, my experience as a researcher and editor of a major international publication based in America - Clean Air - has given me an insight into some aspects of the publishing industry.

- 1) I know that the EU-27 is the single largest producer of scientific publications in the world (EU 37%, USA 31%). However, the EU contributes less to high impact publications and, at the moment, there is phenomenal growth in scientific publication in China (which has more than doubled in the last six year) and which is now larger than the Japanese contributions in the field.
- 2) The situation of scientists with regard to publication is somewhat particular. In order to further our research, we require a network of reputable, reliable and internationally recognised publication outlets. Our interest in this world by comparison with that of artists

and authors - is not commercial. Indeed, we often actually have to pay ourselves for publication, rather than the other way around.

In this respect, were it possible - through the new electronic media - to create similar reputable, reliable and internationally recognised outlets for publication this would be a highly desirable development. It might even be possible to envisage a network that operated without publishers with a commercial interest.

This is one thing that I wonder about: would it be possible - through the electronic media - to create an outlet for high quality research that was properly peer reviewed, that was really innovative and excellence orientated? For the moment, this is a possibility that remains, perhaps, a little underdeveloped.

3) Publishers of scientific literature will also, of course, have to adapt to this new, emerging reality. For the moment, they are seeking to preserve the legal

frameworks and copyright legislation of the last century to this new world.

Secondly, they are certainly making use of the new technology but, so far, they have tended to simply upload book format texts onto the internet and have not thought through, fully, how best to exploit the new technological opportunities.

3) Finally, there is the question of language. As you will know, English enjoys an unrivalled position of power with regard to scientific publishing. However, the encouragement of publication in languages other than English should allow for a more diverse set of pools of excellence. I am thinking in particular of Brazil where the use of Portuguese allows for the development of high quality specialisation in particular domains. Moreover, we shall see what the exponential growth in Mandarin Chinese publication leads to? Will they too, necessarily adopt English as the only language to publish in?