Good morning Ladies and Gentlemen, distinguished Guests

It seems odd to address you this morning, more especially on this topic. As we say, I have hardly been in the European Science Foundation a wet week — A few interesting ones: Yes, a very cold one: Yes, but not a wet one.

The ESF is an organisation with a distinguished history. Our Members, supporters and financers are the Research Councils and Learned Societies as well as the Research Performing organisations throughout Europe. It was established in 1975 and now comprises 72 Member Organisations in 30 Countries. We have many instruments designed to facilitate and support scientific collaboration and development and one of these is what we style Forward Looks. The current RESCUE initiative – *"Responses to Environmental Challenges for an Unstable Earth"* – arose from the sponsorship and promotion under the leadership of CNRS as a forward look in late 2009.

As an Engineer with a background in the policies related to the Natural Sciences, this is not the topic on which I would have chosen to make one of my first public appearances on behalf of ESF. However, as we shall see when later this morning **Professor Leen Hordijk** and **Professor Gísli Pálsson** address us on the specifics of the mission and recommendations, it is perhaps important that I force myself to do so. As an incentive, I shall indulge in some personal reflections.

Sometimes, in order to see forward, we must look back.

In the beginning, if we can identify one, Science was indistinguishable from Philosophy – indeed until near recent times it was termed Natural Philosophy. The Ph.D., that qualification now seen as vital to our future, as a qualification for young researchers and academics really only came to the fore with the reform of the German universities and the Humboldt University concept in the 1860. In the UK, it only became established from 1917. Arguably, this specialisation and reductionist approach lead to rapid and great advances—but was not without compromise and detriments. I have been reading a **"Personal Narrative of a Journey to the Equinoctial Regions of the New Continent**" by Alexander von Humboldt.

His catholic approach to inquiry, his joy in discovery across a wide range of what we would now see as scientific domains, comes across transparently.

We face global change due to our past and present human behaviour. To tackle the problems ahead, the researchers who model the planet's natural machinery will also have to take future human behaviour and choices into closer account. That is why, again and again, this RESCUE report stresses the need to break down intellectual and cultural barriers. Increasingly researchers should be asking themselves how their research can help address the vicious circle of environmental change, resource scarcity, poverty, and poor health.

The RESCUE report urges many different research communities to collaborate on issues that require transdisciplinarity, and it illustrates the scale of the challenges that face us – and the tools we need to manage them.

I look forward to the formal launch this morning and particularly to the panel discussion. I should like to thank you for your time in contributing to this event and with that hand, back to Paul Egerton.

Martin Hynes, ESF Chief Executive