Statement from Winston P Nagan, chair program committee WAAS.

The initiative relating to the New Scientific Networks brings together an astonishing range of diverse initiatives and processes which in part requires that there be a serious stock taking of both the promise and the potentials that the New Networks have for improving the global human prospect. The term chaos has been used to sort through the thicket of the scientific complexity and range of technologies that are now in some form of operational dynamism. The first and probably the most challenging insight is that every innovation and technological advance has a multiplier effect by the revolution in human communications processes which create networks which exponentially have a multiplier effect on creativity and innovation.

The networks initiative is driven by a better understanding of the modern processes of communication and technology. The advances in these fields shape the emergence inter *alia* of scientific networks and human network groupings in general. As Garry Jacobs has reminded us, it is useful to see the advances in communications and technology in the context of human evolution. These processes are connected to human migrations and had the consequence of generating an anthropomorphic network of human groups. Such a process became accelerated by scientific advances in communication and technological systems. In historical terms, technology such as steam power, airplanes, sailing ships and later steam powered ships as well as developments in printing, electronic and radio communications permitted an exponential and accelerated development of technologies that have revolutionized human communication systems.

The broader importance of these developments were foreseen early in the last century by former president of the World Academy of Art and Science, Harold D. Laswell. He is recognized as the scholar who created modern communications theory. The formula he generated maybe of value as a background to our discussion of scientific networks. The model reads as follows:
Who?; communicates what?; about what?; through what channel?;to what target audience?; with what result and what effects?

It is possible that many of the networks that emerge may well be joined with other networks in the global social process which could include international and national governments as well as industrial networks focused on the for-profit possibilities that emerge from these networks. This would suggest that participants should keep in the back of their minds that the multitude of networks and how they are constituted will generate important problems that require a better understanding of their social consequences on humanity and very importantly, a careful consideration of what the networks suggest for responsible global policy making. Let me give one illustration. In medical science there are nutrition networks. Some of these networks have done profoundly good science demonstrating that plant-based foods are infinitely better for human health than animal-based foods. The problem with the science here is that there are political constituencies in for example, the US Department of Agriculture, as well as the institutions that are very powerful food producers. What has become apparent is that the plant- based emphasis if converted into policy will have significant detrimental effects on the producers who rely primarily on producing animal-based food products. This would appear to be a case where the scientific network on plant-based nutrition appears to be seriously suppressed and its work kept hidden from public discourse. On the other hand, developments in the bio-chemical world, neural and brain exploration, diseases such as cancer which are asking for specific target medications, this science of networks opens new paths for discovering links within these very complex structures. In eco- and sustainability domains similar expectations do exist.
I hope that this first E-seminar will be the beginning of a multitude of E-seminars generating important insights into these important interdisciplinary problems of global salience.

Hopefully, this scientific networks seminar will be the start of an important discourse in the academy with important implications for science and the well-being of humanity.