

02 Mar 2018

Setting up a South-East Europe International Institute for Sustainable Technologies

by Nicholas Sammut (University of Malta)

[science for peace](#) [SEEIIST accelerators](#)

CERN's model of 'science for peace' is being adopted in the set up of a new research infrastructure: The South-East Europe International Institute for Sustainable Technologies (SEEIIST).



The Balkan states are joining forces to set up a South-East Europe International Institute for Sustainable Technologies (SEEIIST) with the primary goal of promoting 'science for peace' and the development of science and technology. This research infrastructure will be based on the CERN model and is intended to further mitigate tensions between the countries in the region by encouraging scientists and engineers to work together on one

common goal.

Two scientific options are currently being discussed: the first is a fourth-generation synchrotron light source with intense beams from infrared to X-ray wavelengths; and the second is a state-of-the-art cancer therapy machine using protons and heavy ions for patient treatment with a strong research programme. Both options will be based on scientific excellence and hence on innovative cutting-edge science and technology. This international collaboration platform is also being designed to educate young scientists and engineers in the region and reverse the brain drain. Studies are currently underway to ensure the facility's sustainability and a layer of technology transfer is also being included for the technology to be exploited by industry.

The concept of setting up a science institute promoting 'science for peace' in South-East Europe was first proposed by Herwig Schopper in autumn 2016 at a meeting of the World Academy of Art and Science in Dubrovnik, Croatia. At around the same time, the setting up of a regional synchrotron light source or cancer therapy machine was also being discussed in Montenegro by the Minister of Science Sanja Damjanovich and her two international advisors Hans Specht (Heidelberg University & Former DG GSI) and Nicholas Sammut (University of Malta). This was the perfect opportunity to join both ideas together and to propose the setting up of such an institute for the benefit of all the Balkan states.

The idea took traction immediately and on the 25th of October 2017, a Declaration of Intent to establish SEEIIST, was signed at CERN by ministers of science or their representatives, independent of where the final location would be. The initial signatories were Albania, Bosnia and Herzegovina, Bulgaria, Kosovo[1], The Former Yugoslav Republic of Macedonia, Montenegro, Serbia and Slovenia. Croatia also agreed in principle and Greece participated as an observer.

Just a few months later at the end of January 2018, a scientific forum was organised at the International Centre for Theoretical Physics (ICTP) in Trieste, Italy where the concept studies worked out by two groups of distinguished international specialists were presented and discussed. The forum was supported by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the International Atomic Energy Agency (IAEA) and the European Physical Society (EPS). Over 100 participants including scientists, engineers and policy makers from universities, industry, government and regional or international organisations attended the meeting. Amongst others, the event was also attended by the European Strategic Forum on Research Infrastructures (ESFRI) and by the European Commission, which was represented by Robert-Jan Smits (DG Research and Innovation, European Commission).

At the Forum, representatives from the IAEA declared an interest in supporting the initiative through training programmes and the European Union representatives also

showed favourable support of the project potentially providing resources to support the preparation of the detailed conceptual design.

Just one week after the Trieste forum, the SEEIIST first steering committee meeting took place in Sofia, Bulgaria, which currently holds the EU presidency. The committee consisted of representatives from each of the signatory countries and was initially chaired by the Minister of Science of Montenegro. The meeting was introduced by the Bulgarian president Rumen Radew who showed strong interest and promised support of the initiative.

With the initiative gaining more and more momentum, the next step is to take a decision on which of the two scientific options to choose to build and to set up the first executive team to be governed by the steering committee.

You can read a viewpoint on "Shaping science in South-East Europe" by Herwig Schopper in March's issue of CERN Courier: [here](#)

[1] This designation is without prejudice to positions on status and is in line with UNSC 1244/1999 and the ICJ opinion on the Kosovo Declaration of Independence.

Header image: Participants at the Trieste Forum.