





Interview with Dirk Bochar – ENGINEERS EUROPE

We would like to introduce to you one of members of the EU STEM Coalition, ENGINEERS EUROPE (previously known as FEANI). We spoke to Mr. Dirk Bochar, Secretary General of ENGINEERS EUROPE, and asked him about the added value of the EU STEM Coalition, the "Engineers4Europe" project and his advice to STEM platforms all over Europe.

First of all, what is ENGINEERS EUROPE?

ENGINEERS EUROPE, previously FEANI, was founded in 1951 shortly after the Second World War, mainly by German and French engineers who wanted to build up Europe. We are a professional organization defending and promoting the profession of engineers in all various disciplines, from civil engineering to mechanical, electrical, chemical, biomedical, etc. engineering. ENGINEERS EUROPE represents the interests of around 6 million professional engineers in 33 European markets. We have one national umbrella Organization as member per country. ENGINEERS EUROPE is striving for a single voice for the engineering profession in Europe and we want to affirm and develop the professional identity of engineers. Through activities and services we aim to facilitate the mutual recognition of engineering qualifications in Europe and to strengthen the position, role and responsibility of engineers in society. A concrete example is our EUR ING professional title, which is privately

designed certificate which is issued by ENGINEERS EUROPE and serves as a guarantee of competence for professional engineers. The certificate provides evidence of successfully accomplished appropriate studies in engineering at a European Higher Education Institution, in combination with some years of professional experience and is recognized by the European Commission.



What is for you the added value from the EU STEM Coalition?

We need to inspire young people. And when I say young people, I mean the people between eight and twelve years old, to engage in these STEM disciplines. Not only in science and technology, but especially in engineering. We noticed that many of the people who engage in engineering studies have been inspired by an example within their family, this could be a father, a mother, an uncle, etc. That applies to both girls and boys. The often stated idea that engineering is a very masculine profession is not necessarily the case for all disciplines and we need to engage more women in all various disciplines of engineering.

The tools and the methods that are being used to engage more young people vary from country to country. This is the added value I find in the EU STEM coalition, since you can help us create an overview. We used to have a working group STEM also within ENGINEERS EUROPE, but we've noticed that it is very difficult to streamline that at the European level because there's so many different but equally successful initiatives being conducted at national and even local level. Therefore we renamed our WG STEM to a WG FUTURE ENGINEERS. We can learn from the projects that work in one country and can be used as an example for other countries, in order to engage young people or to motivate young people to engage in a certain professional direction.

What is the "Engineers4Europe" project about?

The consortium of the project consists of four groups of stakeholders; academics, politicians, industrialists, people from professional organizations. They are considering how we could close the gap between what universities deliver as graduates and what industry expects when recruiting engineers. The latter often claim that

they cannot find the people they are actually looking for in order to fill the vacancies stante pede. That's where the idea came from to develop a project, i.e. how can we close that gap? The project started in September 2022 (under Erasmus+) and finishes in August 2025.



What we aim at with the Engineers4Europe project is to develop micro-credentials for already graduated engineers, those who have actually left university already a number of years ago, and who would like to update their knowledge in terms of technology of the field they are working in. These micro-credentials will focus on four fundamental areas: digital, green, entrepreneurial and social or transversal skills. In each of these four areas, we wish to develop three micro-credential courses, so 12 courses in total. They are now being developed by the consortium partners, amongst others some universities (Leuven, Porto, Dublin) who also like to stay in touch with their graduates.

What message would you like to share with national STEM platforms?

One of the major tasks is to make sure that Europe has sufficient brains in the future to remain competitive with other continents and countries such as China, India and the United States. For the moment, Europe is not winning if you consider that we are to a large extend depending from the US for our defense, from China and Asia for our technology and manufacturing industry, from Russia and Arab countries for our energy resources. We depend largely from our service industries, our creativity and our brains to make a shift in all of these areas. We have outsourced much to other and different parts of the world and I don't think that can be the future for Europe. Therefore and to meet the requirements of climate change, renewable energy, AI, etc, we will need engineers to a larger number in the future.

With regard to STEM in particular, I see many initiatives in Europe and everybody's talking about it, but I wonder if there is really a clear overview in existence of what projects are going on in which country or region. I think this could be a challenge for the EU STEM Coalition to bring some transparency in all these initiatives and build a bridge between its members.

Would you like more information about ENGINEERS EUROPE? Visit their website: www.engineerseurope.com or www.engineerseurope.eu

For more information about the EU STEM Coalition you can visit our website at https://www.stemcoalition.eu/