Radio Rijeka. Caffe Europa.

Welcome to the new edition of the Cafe Europa show. Today, we will discuss the Inno2mare project. What is it about? We will learn more from our studio guests, Nikolina Pomenić, the Senior Expert Associate from the Regional Development Agency of Primorje-Gorski Kotar County. Nikolina, good day to you.

Good day.

And Saša Zelenika, Vice-Rector for Strategic Projects of the University of Rijeka. Mr. Zelenika, good day to you, too.

Good day to you and your listeners.

Nikolina, what is it about? So, why this project? How would you describe it, and why is it happening right here at our location?

Well, the Inno2mare project is about maritime innovation ecosystems, or rather, the capacities of strengthening excellence, to support the digital and green transitions of the maritime regions of Western Slovenia and Adriatic Croatia. So, it is a project from the Horizon Europe program, or Horizon, which is the EU's flagship program for research and innovation. The European Commission has selected our Inno2mare project from a very strong competition of 102 project applications. There were about a dozen projects that passed, and we are very excited about it, especially we from The Regional Development Agency (Prigoda), because this is our first Horizon project in which we are participating as a partner.

Great, that sounds a bit bureaucratic to me. Can you tell me what the goals of the project actually are, and who it needs to help the most?

Well, this project needs to help our maritime system the most, especially the companies in that sector. Meaning, ship design and engineering companies, shipbuilding, and innovations related to that. Also, joining our academic communities in the transfer of knowledge and the creation of innovative products in our area. And of course, there are public institutions like ours that are there to, for example, gather all these stakeholders.

And of course, there is also the public, so the project is open to the public through various events, workshops, cooperation with young people, etc. In other words, innovation ecosystems are systems in which all the different stakeholders that I mentioned work together to generate innovative products and commercialize them later.

Excellent. Here, Professor Zelenika is with us, so he defends the colors of the academic community.

What are the goals, and what gave birth to this project that started, if I'm not mistaken, in 2023?

The project is, let's say, a spin-off, in a way of our cooperation within the University of Antwerp and YUFE networks. We cooperate very closely with the University of Antwerp. You know that Antwerp is the second-largest European port.

And this is a project from that so-called WIDERA scheme, the widening instrument, so this is precisely the goal of connecting those who are a little less developed, meaning us and Slovenians, with partners from the ecosystem in Antwerp, to learn from them, to transfer their knowledge, but of course, to develop our capacities.

What can we learn from them, that is, what are the direct goals, the three pillars, if I'm not mistaken, that you gave as a task?

Technologically, yes, there are exactly three goals. One is the use of digital technologies, digital twins, augmented reality, and the like for ship safety in the event of a fire; our colleagues from the Maritime Faculty in Rijeka are leading this task.

The second is green propulsion, so again, digital technologies, modeling and optimization of processes, and the potential use of hydrogen in its own right, from production to use, with all logistical and other aspects, which is the task of colleagues from Slovenia. And the third one regards autonomous shipping technology, so again, digital technologies, how to apply them to vessels, to avoid obstacles at sea, etc. Everything is fully automated, driven again by algorithms.

Can the products you will create through this project be commercialized in some way? I assume that the so-called agencies that deal with firefighting for seamen have something similar to these VR models that you develop. Can you make something new that you can maybe send to the market?

Of course, this is precisely the idea of jointly with our partners developing pre-commercial solutions with partners, meaning the entire development phase from the most theoretical, academic, let's say, part through all the development phases of these so-called technology readiness levels to the stage when it is ready for commercialization, so the project has indicators of how many people will we educate, how many articles will we write, etc. But also, there are indicators of the exploitation potential. So we will have to prove that we have brought all things to the level of exploitation.

Great, you have mentioned partners. Nikolina, who are the partners? So there are a lot of them, right? Both from Belgium and Slovenia. And from Croatia, maybe to name just a few.

That's right, there are 19 partners in the consortium; it's a big consortium from all three countries. So, the project coordinator is the University of Ljubljana, the Faculty of Mechanical Engineering. From Slovenia, we have the companies Iskra, Digitech, BSC Kranj, and the Association for Technical Culture of Slovenia.

On our Croatian side, all partners are from Rijeka: the University of Rijeka, the Faculty of Maritime Studies in Rijeka, the Technical Faculty in Rijeka, and the Faculty of Informatics and

Digital Technologies. There are also our partners from the business sector, namely the Maritime Center of Excellence and the MSTech. Also, there are the Centre of Technical Culture Rijeka and StepRi, and of course, Prigoda.

And as far as Belgium is concerned, our partner is the University of Antwerp, the Maritime Academy in Antwerp, and we also have some associated partners from Antwerp.

Is there a possibility, or perhaps some regret, that people, or rather, companies from the maritime sector, are not more included, as is generally the case? Are they applying enough to calls and the opportunities for EU projects and financing that PRIGODA promotes?

Well, with companies, it's quite an interesting situation. We can invite them, we can invite them to our events, we can now invite them to the new Industrial transition of Adriatic Croatia call which you have already talked about in your shows, which is very important for companies, for example. This project is about innovations, so by the very nature of the project, only those companies already developing some innovations are eligible, and that could later be well combined with knowledge from Academia.

Professor Zelenika, for companies to have a well-educated workforce who will work today and tomorrow, it is necessary to educate this staff. So, I believe that, in addition to the economic sector and the academic community, our students can also benefit from such projects.

Of course, one of the project goals is precisely this educational element, which is why the CTK is also there, which already works with children at a young age and encourages them towards these technological professions. But of course, our consortium partners are here again. The entire project falls under the so-called Excellence Hubs initiative, meaning centers of innovation excellence. So, these hubs that we at the University have focused on are precisely a way to network and connect all these stakeholders, meaning from the academic sector, business sector, and the wider public, to create new solutions.

There are many educational activities throughout the project itself. We who are in the so-called Innovation Council of the project identified as one of the key problems precisely the sustainability of the profession, which means exactly how to attract new generations to all the professions that Nikolina talked about, and how to make them much more attractive to future students.

And precisely this connection between green and digital technologies, artificial intelligence, and hydrogen use, which Europe insists on a lot, is the way to make it more attractive to students.

Technological progress is moving at an incredible speed, especially in Artificial Intelligence. You have also implemented, or you will implement, some AI solutions in this project, Inno2mare, that you are working on.

Did that help you? This rapid progress, or I don't know, maybe it made it more complicated for you, did you suddenly want to do some other things in the project, since, I guess, things were quite different in 2023 and today?

Well, it helped us to speed up some of those activities ourselves, but they were already foreseen in the project. So, our colleagues who deal with artificial intelligence, you know that at the University we also have a Center for Artificial Intelligence and Cybersecurity, which is certainly among the leaders in Europe and beyond.

Of course, I say, partners from the Universities, from other sectors, both from Slovenia and Belgium, are also there at a very high level, and this is all connected to our other big project, which is EDIH Adria, which means the European Center for Digital Innovation where even more intense work is being done on this networking in the field of Artificial Intelligence between the academic sector and companies, and the public sector, that is, working on the development of concrete solutions for companies and the public sector.

Before we conclude this conversation, tell me, Professor Zelenika, in what phase is the Hydrogen Valley project? Where are we from the realization of some kind? Are we close?

Well, it is a very, very ambitious project. This is led by our colleagues from Trieste, i.e., from the Italian region of Friuli-Venezia Giulia. We work very, very actively there. What is important is that the partners are similar again, so again our colleagues from Slovenia, and in this case, from Italy. We are working very actively on this, you will see that very soon, there will be some demonstration installations in the economic sector, but also in the academic sector. We are looking forward to it, we are looking forward to these developments.

Finally, Nikolina, why Rijeka, why Prigoda in this whole project, in fact, why are you one of the key partners?

We are one of the key partners because, as a public institution, we can influence all the other partners, but on the other hand, in this project, we have confirmed and further proven that Rijeka is truly an engineering hub. Here are about forty companies that are actively involved in ship design, and almost 70% of their products are export-oriented. So we have top people here who work on top projects, and also many subsidiaries from foreign companies. We are proud of that. The only thing is that many innovations happen in the headquarters of these companies, and not in Rijeka; we have to work on that.

Well, among other things, and through projects like this, maybe these innovations will start here, that is, from the roots, from our area.

That's right, that's right.

Thank you very much for coming to the Radio Rijeka studio and being a guest on the Cafe Europa show.

We were joined by Nikolina Pomenić, a Senior Expert Associate from the Regional Development Agency of the Primorje-Gorski Kotar County, and Saša Zelenika, Vice-rector for strategic projects of the University of Rijeka.

Thank you, thank you, listeners. Thank you. The show was produced with the support of the Regional Development Agency of the Primorje-Gorski Kotar County.