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# Press release

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## Students of the BFH School of Engineering and Computer Science implement component for the digital euro

**With the European Central Bank (ECB) preparing to launch the digital euro, one of the core components of this initiative takes centre stage: the alias lookup component, which is intended to simplify digital payments and enable peer-to-peer financial transactions. In 2024, the ECB issued a call for tenders for two implementations of this component.**

Given the ever-increasing pace of digitalisation and an increasingly networked society, whose needs often have to be satisfied quickly and immediately, the European Central Bank's initiative is of particular importance.

**Students develop their own solution**

For a university with a practical focus on teaching and research, the 2024 call for proposals represented an opportunity to make a significant contribution to society and the future. However, during the tender process, the members of the project team consisting of Computer Science Bachelor students from the School of Engineering and Computer Science at Bern University of Applied Sciences BFH were confronted with criteria that they were unable to meet. Companies with a certain minimum turnover and experience in similar services were eligible to apply. While the ECB announced in December 2024 that the tender would be awarded in the first quarter of 2025, four students on the Bachelor in Computer Science programme took the initiative, under the supervision of Prof. Dr Kenneth Ritley, to independently develop the alias lookup, an essential component of the digital euro. This was achieved as part of a project involving just over 700 hours of work in total.

**Maximum practical relevance and developer spirit for a scalable open source solution**

The four students, Dominic Wenger, Patrick Stettler, Maximilian Spiess and Philip Stoop, developed a fully functional prototype of the alias lookup component as part of the project assignment. The system uses aliases like phone numbers or e-mail addresses, rather than complex bank account details. Their project, hosted at https://lookup.t-euro.eu/, was developed under the assumption that it would meet the requirements of an EU-wide deployment and enable smooth use by the entire EU community. It is based entirely on transparent open-source technology and has been designed to provide high scalability and low latency, even with heavy usage across all member states. The implementation is publicly available, with the full source code released under the GNU Affero General Public License. "It's amazing to see that simple open-source technology can meet even the highest requirements we could imagine", says Kenneth Ritley, lecturer in Digital Business Systems at BFH's School of Engineering and Computer Science.

The successful project work of the Computer Science students impressively demonstrates that universities, with their close ties to science and high concentration of interdisciplinary skills, can make a significant contribution to a project of such importance.

**The alias lookup component developed by the student project team:**
https://lookup.t-euro.eu/

**Publicly available information on the ECB tender:**

- Tender archive of the European Central Bank ECB
- ECB – Digital euro – Secure Exchange of Payment Information

**More about the GNU Affero General Public License:**
https://www.gnu.org/licenses/agpl-3.0.html

**Quotes by the students of the project team**

Dominic Wenger:
"Working on this project was a great opportunity to put my knowledge to practical use. I am particularly proud of the fact that our solution is open source and promotes transparency."

Patrick Stettler:
"This project was a milestone for me. I have learned how important collaboration is and am pleased that our solution creates real added value."

Maximilian Spiess:
"Developing the alias lookup component was an exciting challenge. It was fascinating to work on a solution with potential for Europe's digital future."

Philip Stoop:
"The project showed me how much we can achieve as students. Our open source solution stands for transparency and efficiency, which I'm very proud of."

**Contacts**

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**Press kit**

Documents

- Press release “Students of the BFH School of Engineering and Computer Science implement component for the digital euro”

Photos

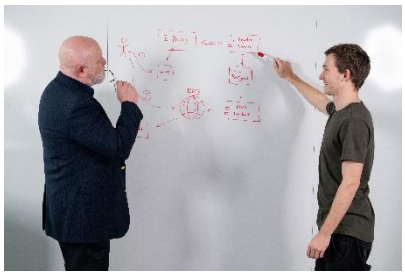

*Photo* 1 *Prof. Dr Kenneth Ritley and Philip Stoop*

*Photo* 2 *from left to right: Philip Stoop, Dominic Wenger, Patrick Stettler, Maximilian Spiess and Prof. Dr Kenneth Ritley*