



MUCI
Międzyuniwersyteckie
Centrum Informatyzacji

Success story 25 years of digitalization of higher education institutions in Poland

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The year was 1999

- 14 Polish Higher Education Institutions (+ several EU partners), started the *Tempus JEP (New Educational Tools)* project.
- Goal: purchase or develop a student information system (SIS).
- Conclusion from market recognition: no central SIS available which could be purchased for all partner HEIs with the available money.
- Decision: develop in-house ([University of Warsaw](#) taking the role of the technical coordinator).

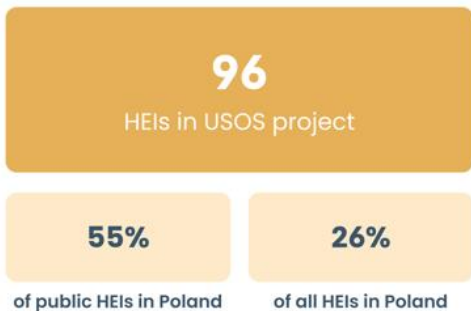


The year is 2024

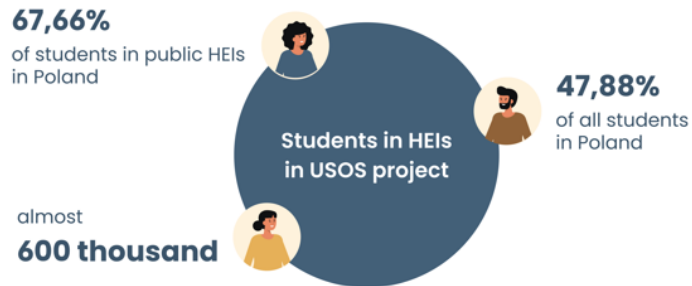
USOS and MUCI



HEIs in USOS project



Students in HEIs in USOS project



Family of USOS applications

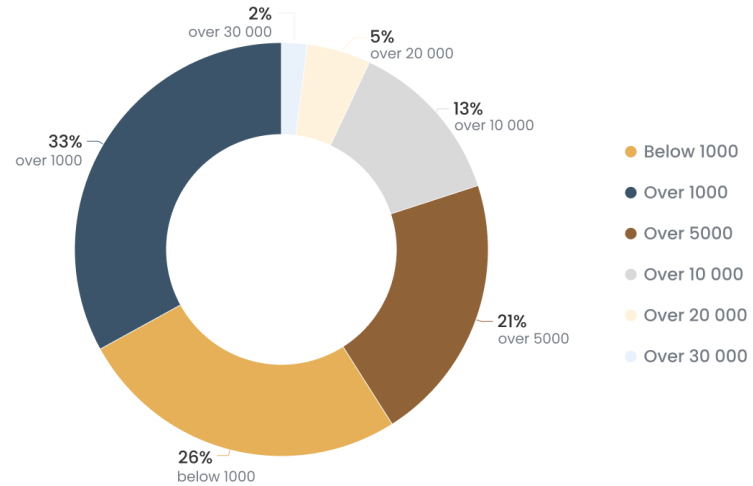


The year is 2024

HEIs in USOS project according to university profile



Universities by number of students



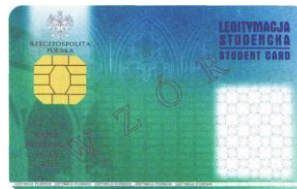
The journey – milestones and key functionalities

- The Tempus project was run in **1999-2001**.
- In **2001** the first version of [USOS](#) was deployed in two faculties in two HEIs.
- In **2001** [MUCI consortium](#) was established by the [Conference of Rectors of Polish Universities](#).
- Oracle database, Oracle Forms (later replaced by Java), open-source technologies.
- Participation in EUNIS congresses each year since 2002 (in Porto). Sharing experience, establishing partnerships, making friends.



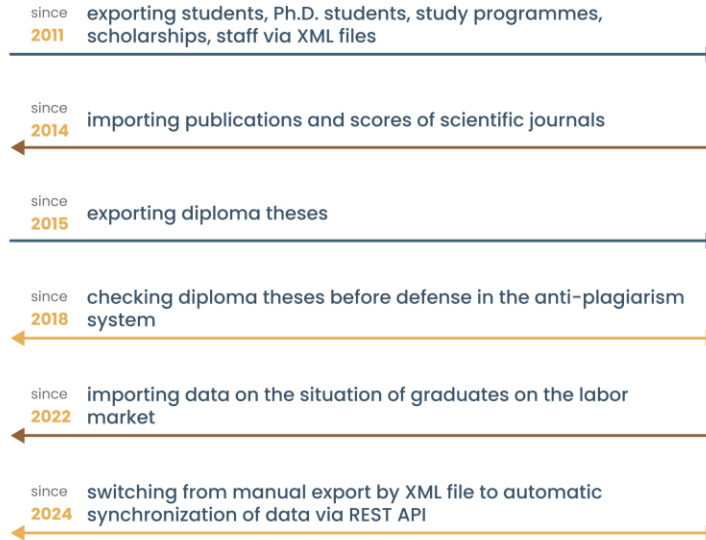
The journey – milestones and key functionalities

- **2004:** first (in Poland) central admission system at a university scale – it supports a completely remote recruitment which starts from submitting the application and ends when a digitally signed admission decision is issued.
- **2006:** a system to collect Matura examination results from all examination boards in Poland and transfer them to admission systems of HEIs for recruitment purposes.
- **2007:** a module for issuing, printing and digitally signing a plastic student card with a chip.



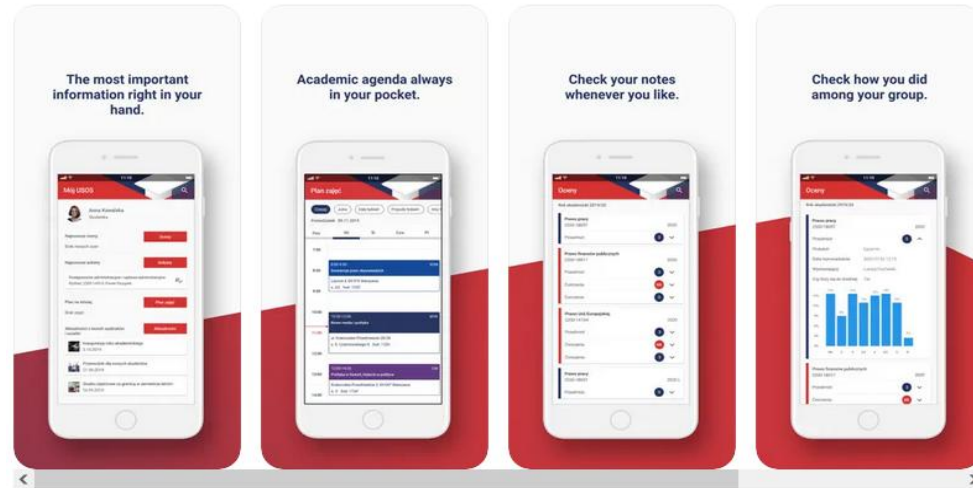
- **2008:** first talks (in Arhus at EUNIS) about the electronic transfer of data on student and staff mobility across borders.

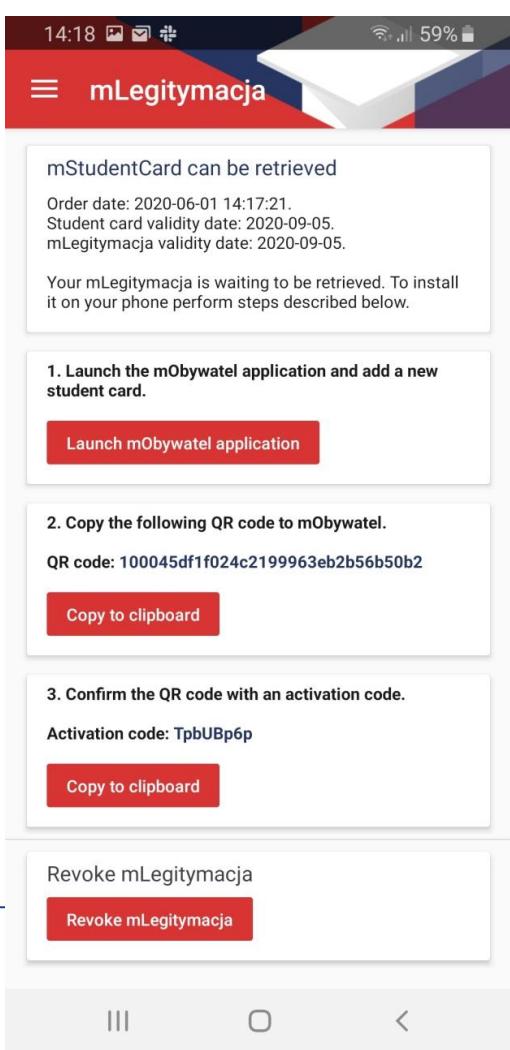
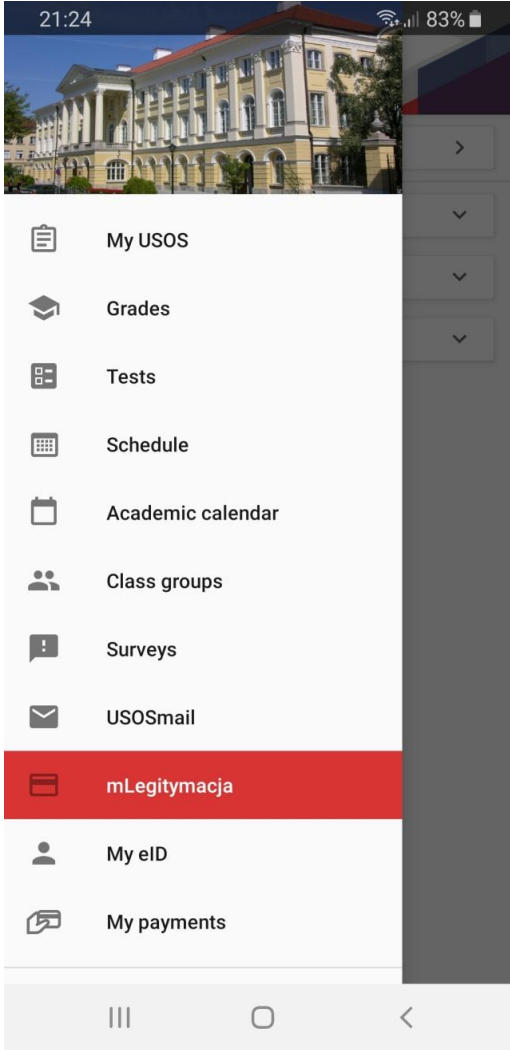
Integration with POL-on



The journey – milestones and key functionalities

- **2016-2019:** Mobile USOS was created, a mobile application for the Android and iOS platforms, which quickly became a basic tool for students to communicate with the university.





mLegitymacja is the full-fledged equivalent of the plastic student ID card.



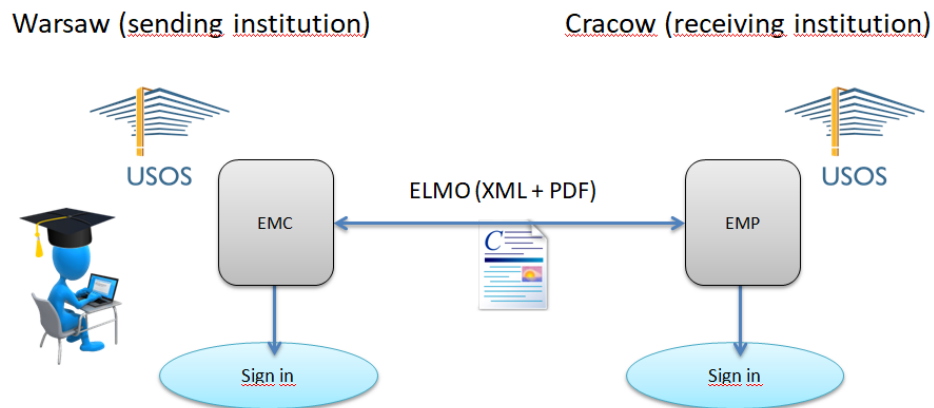
The journey – milestones and key functionalities

- **2016:** as part of the [EMREX project](#), the USOSweb system was enriched with the **EMREX Data Access Point** and the **EMREX Client**. EMREX is the solution for electronic transfer of student records between higher education institutions.

[How it works video](#)

Recordings for the workshop [4EU+ Alliance](#) on January 26th, 2021:

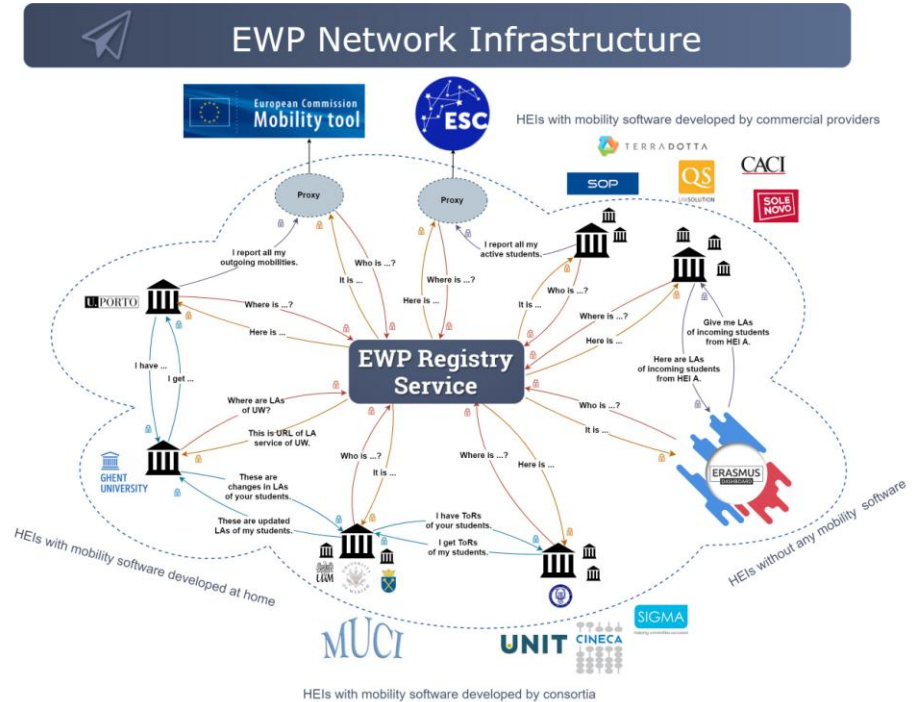
[EMREX in USOS](#), [EWP in USOS](#)

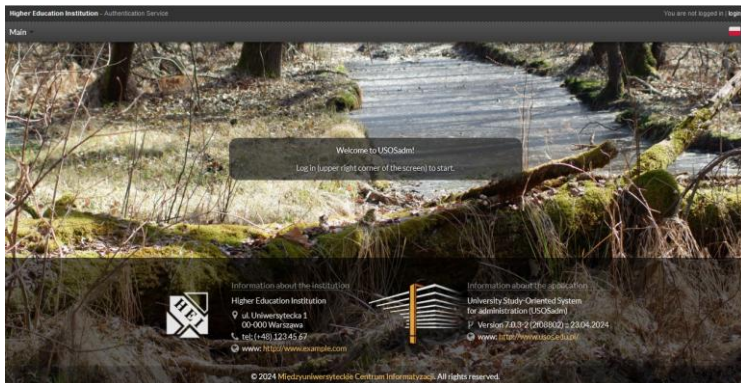
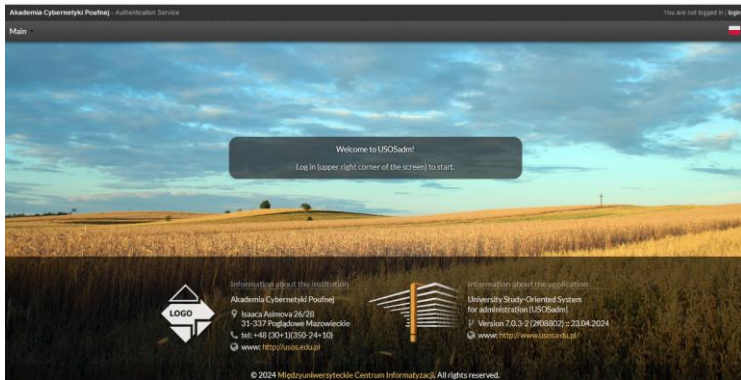


Student returning home to Polish HEI with USOS from another Polish HEI with USOS can easily retrieve his achievement data electronically

The journey – milestones and key functionalities

- 2017:** the first **EWP** project was launched (it was later continued as EWP 2, EDSSI, and currently is implemented under ESCI/EWP+ initiative). USOS with its mobility module supporting daily operation of the International Relation Office has become a full-fledged node in the EWP network.



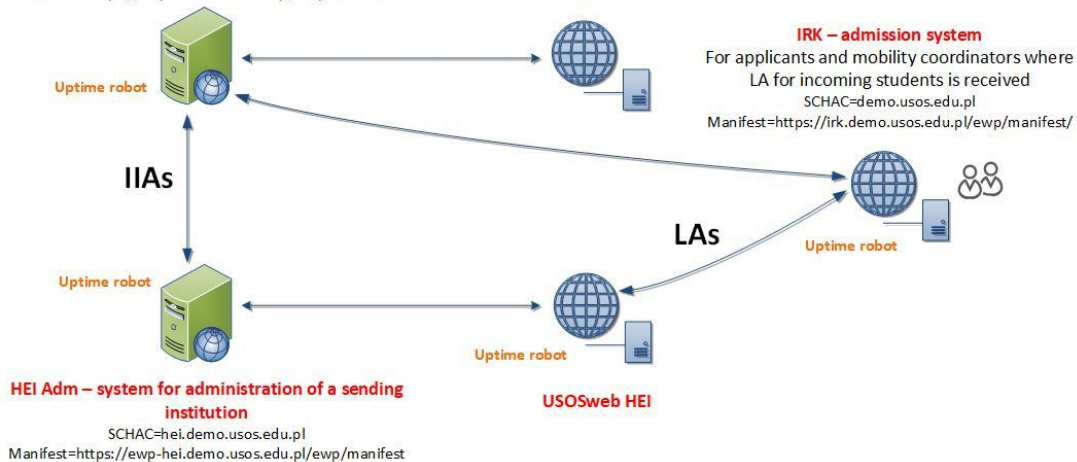


erasmus without paper EWP DEMO testbed

DEMO Adm – system for administration of a receiving institution
 SCHAC=demo.usos.edu.pl
 Manifest=https://ewp.demo.usos.edu.pl/ewp/manifest

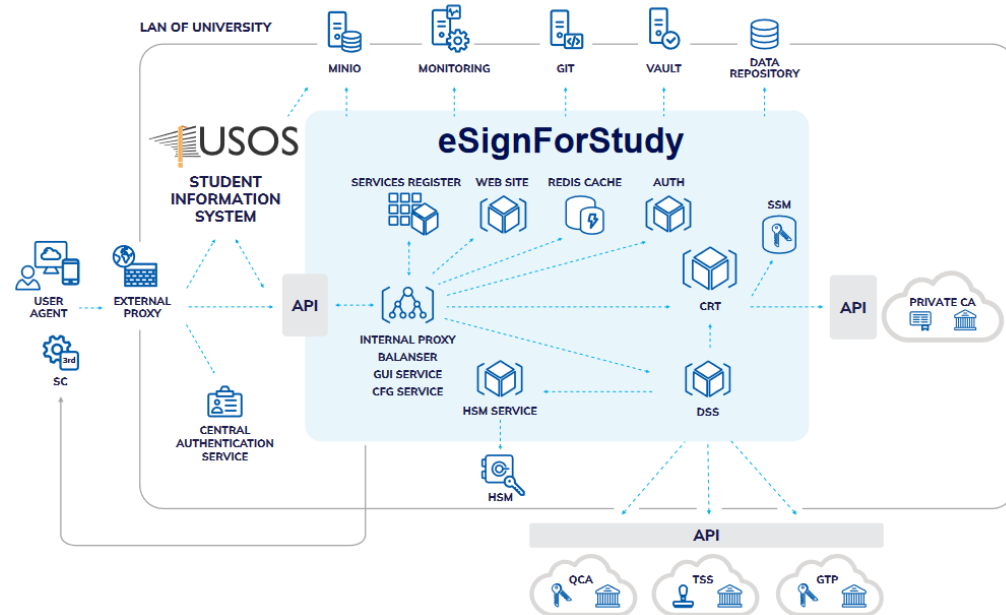
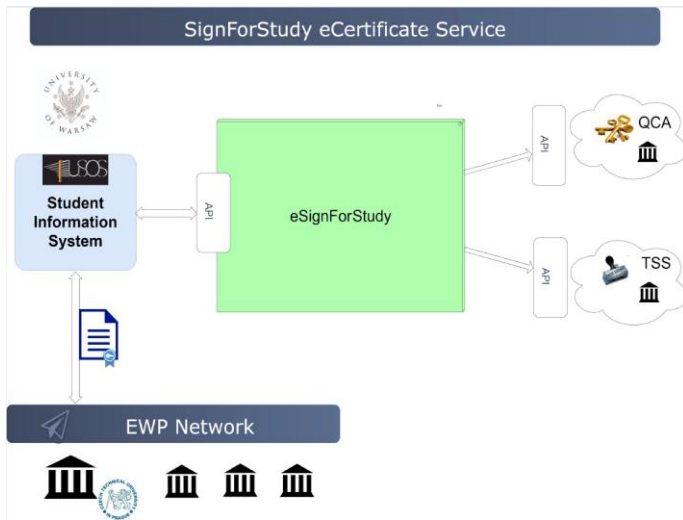
USOSweb DEMO
 Portal for students and mobility coordinators with the mobility module where LA for outgoing students is created

IRK – admission system
 For applicants and mobility coordinators where LA for incoming students is received
 SCHAC=demo.usos.edu.pl
 Manifest=https://irk.demo.usos.edu.pl/ewp/manifest/



The journey – milestones and key functionalities

- 2022:** eSignForStudy project. USOS has been enriched with a configurable tool supporting all types of digital signatures, built on the basis of DSS libraries.

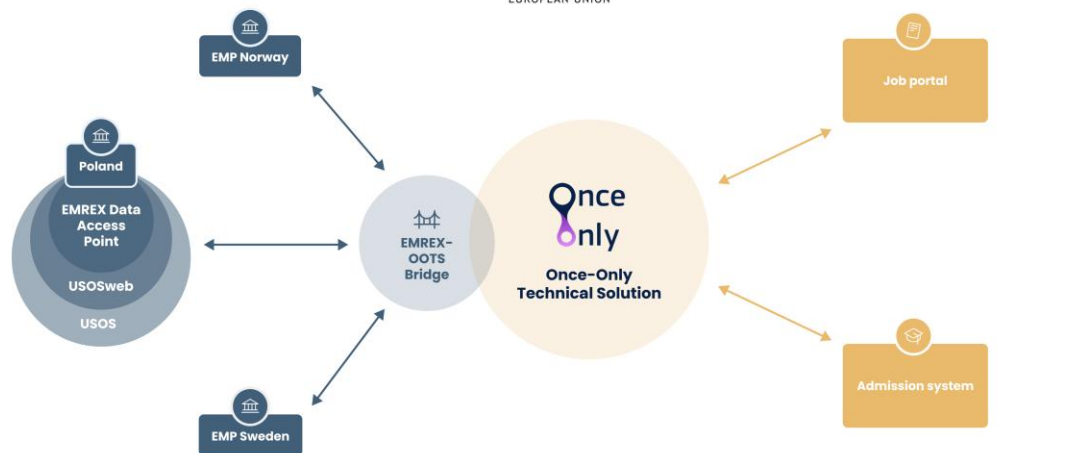


The journey – milestones and key functionalities

- **2023:** eDelivery, eID, SDG regulation and OOTS.



Evidence Provider



Challenges

- Determining development path and priorities for almost 100 diverse institutions. There is one law on higher education in Poland, but rectors and senates have some freedom in how to implement it at the university.
- Maintaining one version of software – good quality, effective, easy to maintain and deploy, flexible within certain limits, ready within externally imposed deadlines.
- Be able to refuse some change requests when proposed solutions do not meet the needs of majority of HEIs.
- Ensure the stability of system development.



Challenges

- Participate in European projects that pave the way for the digitalization of higher education in Europe, without compromising the deadlines for the implementation of the current tasks.
- Regularly adapt the system to new technologies.
- Systematically update the service software used (operating systems, programming languages, libraries) even if it requires deep refactoring (like abandoning Oracle Forms and Reports).
- When possible, using open-source solutions to avoid software licensing.
- Keeping fees low so that the system is within the financial capabilities of each university.
- Keeping a team of developers without being able to offer them fully competitive salary.



Conclusions

- The decision made 25 years ago was fraught with great risk, but the risk paid off.
- Polish universities can join the consortium and use software whose quality is proven by the high and steadily growing number of participating HEIs.
- The fee paid by universities is proportional to the number of students (in five ranges), but for even the largest universities it is a small percentage of the cost of systems of a similar scale available on the market, offered by commercial companies.
- There is a guarantee of continuity and community of interests – even if HEIs compete for students, they cooperate harmoniously in the field of digitalization.

