



FINNISH NATIONAL
AGENCY FOR EDUCATION



ENIC-NARIC
gateway to recognition of qualifications

Digital credentials in Diia: the case of Ukraine

Diploma Supplement network kick-off

28 May 2024



MINISTRY
OF EDUCATION AND SCIENCE
OF UKRAINE



Ministry
of Digital Transformation
of Ukraine



824 DAYS OF **russian WAR** IN UKRAINE

- over **3798** education facilities damaged
- ca. **365** education facilities destroyed completely
- **547** children died, more than **1348** injured
- over **8** million of externally displaced people
- approx. **7** million of internally displaced people





Diia: digital breakthrough with public services

The infographic is divided into two main sections. The left section has a dark background with two rounded rectangular boxes. The top box has a purple-to-green gradient and contains the Diia logo and the text 'state super-app'. The bottom box is dark blue and contains the text '20 million Ukrainians already use Diia' and a paragraph explaining that Diia is a brand of the digital country, meaning 'action' in Ukrainian, and that the Diia ecosystem includes 5 different projects. The right section shows two smartphones. The background phone displays the Diia app's main screen with a user profile for 'Дія Надія Володимирівна' and a list of services. The foreground phone shows a detailed view of the 'Послуги' (Services) section, listing various services like 'Допомога армії', 'COVID-сертифікати', 'Військові облігації', 'Опитування', 'Пошкоджене майно', 'Оформлення допомоги ВПО', and 'Дія.TV'.

Diia state super-app

20 million
Ukrainians already use Diia

Diia is a brand of the digital country. In translation from Ukrainian, this word means "action". The Diia ecosystem includes 5 different projects.

Паспорт громадян України
Дата народження: 24.08.2000
Номер: 0000000000
Дія Надія Володимирівна

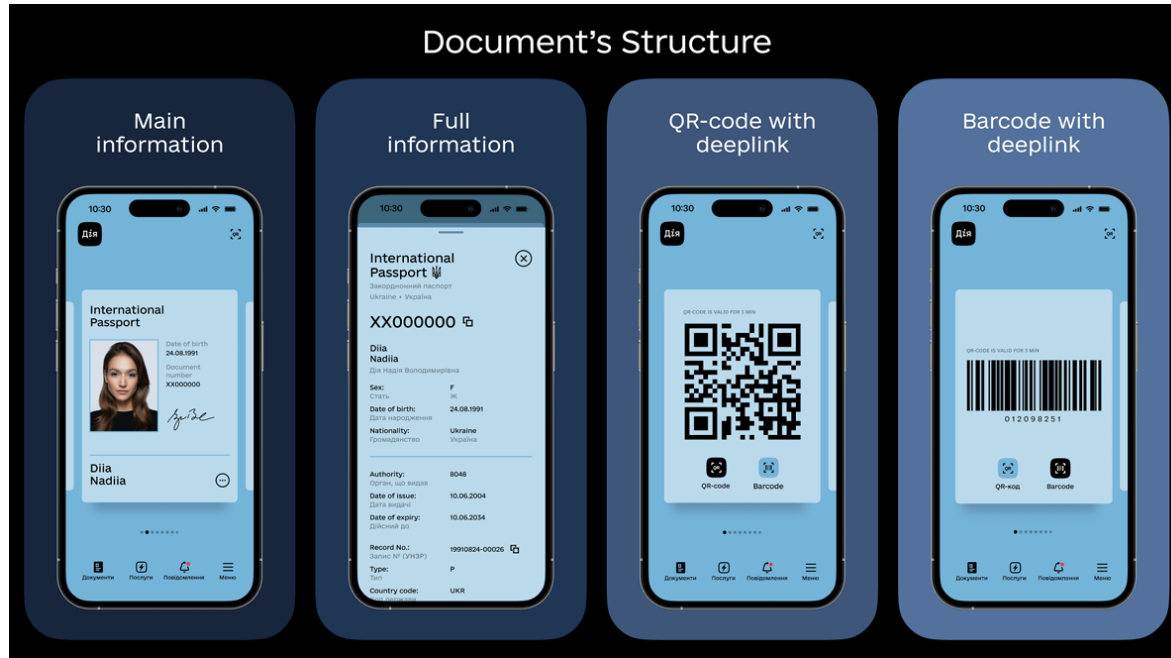
Послуги
Пошук послуги

- Допомога армії
- COVID-сертифікати
- Військові облігації
- Опитування
- Пошкоджене майно
- Оформлення допомоги ВПО
- Дія.TV

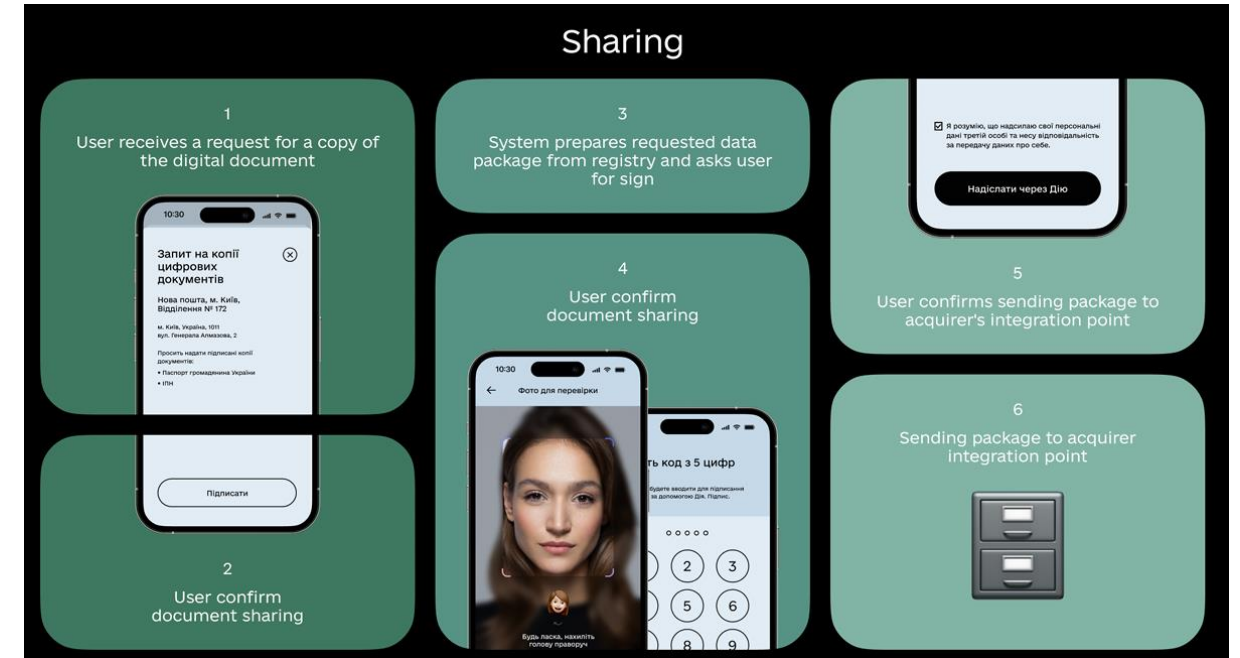


Unified approach for easy use

Document's Structure



Sharing





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Personal IDs at arm's length





Diia success: 2023 user numbers

11+ million documents shared through Diia

7+ million uses of Diia.Signature

2.5+ million military bonds purchased by Diia users worth 2.6+ billion UAH

241,000+ internally displaced persons used Diia service

229,000+ automatic registrations of private entrepreneurs

187,000 replacements of driver's license

176,000+ cars share services activated

119,000 uses of YeMalyatko service (newborn services)

48,000+ applications for construction services submitted

UAH 31+ million returned deposits in bankrupt banks





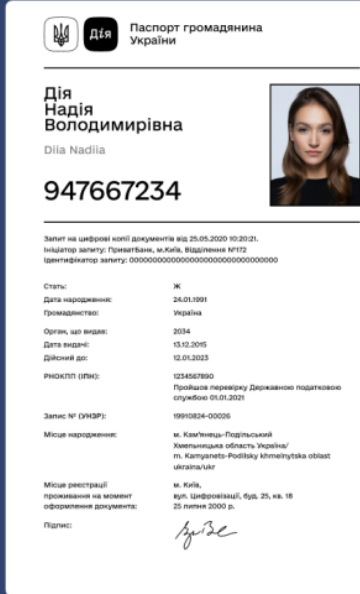
Focus on data ownership

Sharing

The service allows you to receive electronic copies of digital documents of Diia users.

A copy of a digital document is information about a person in electronic form contained in state registers.

Copy in PDF



Metadata

```
data = {  
  "residenceUA": "УКРАЇНА М. КИЇВ  
  ВУЛ.ЦИФРОВІЗАЦІЇ БУД.25 КВ.18",  
  "genderUA": "Ж",  
  "nationalityUA": "Україна",  
  "birthday": "24.01.1991",  
  "birthPlaceUA": "М. КИЇВ УКРАЇНА",  
  "expirationDate": "13.12.2023",  
  "genderEN": "F",  
  "lastNameEN": "DIIA",  
  "firstNameEN": "NADIYA",  
  "lastNameUA": "ДІЯ",  
  "firstNameUA": "НАДІЯ",  
  "middleNameUA": "ВОЛОДИМИРІВНА",  
  "docNumber": "123456789",  
  "taxpayerNumber": "1234567890",  
  "recordNumber": "19910824-00026",  
  "issueDate": "13.12.2015",  
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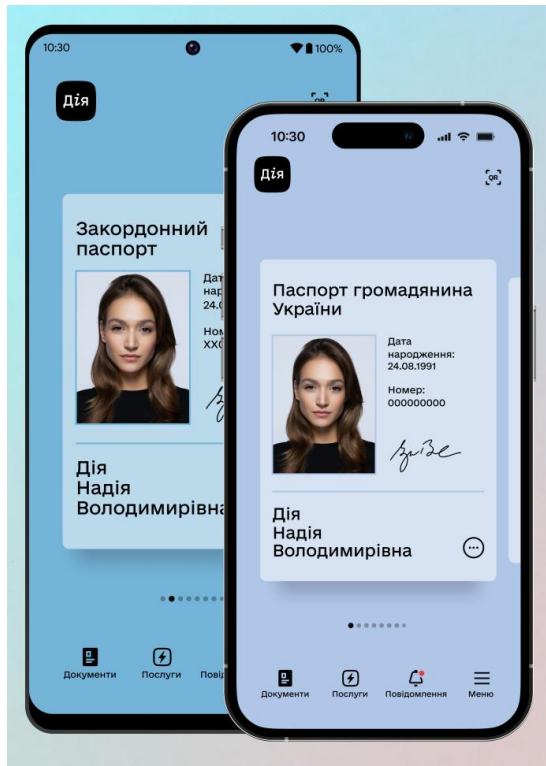
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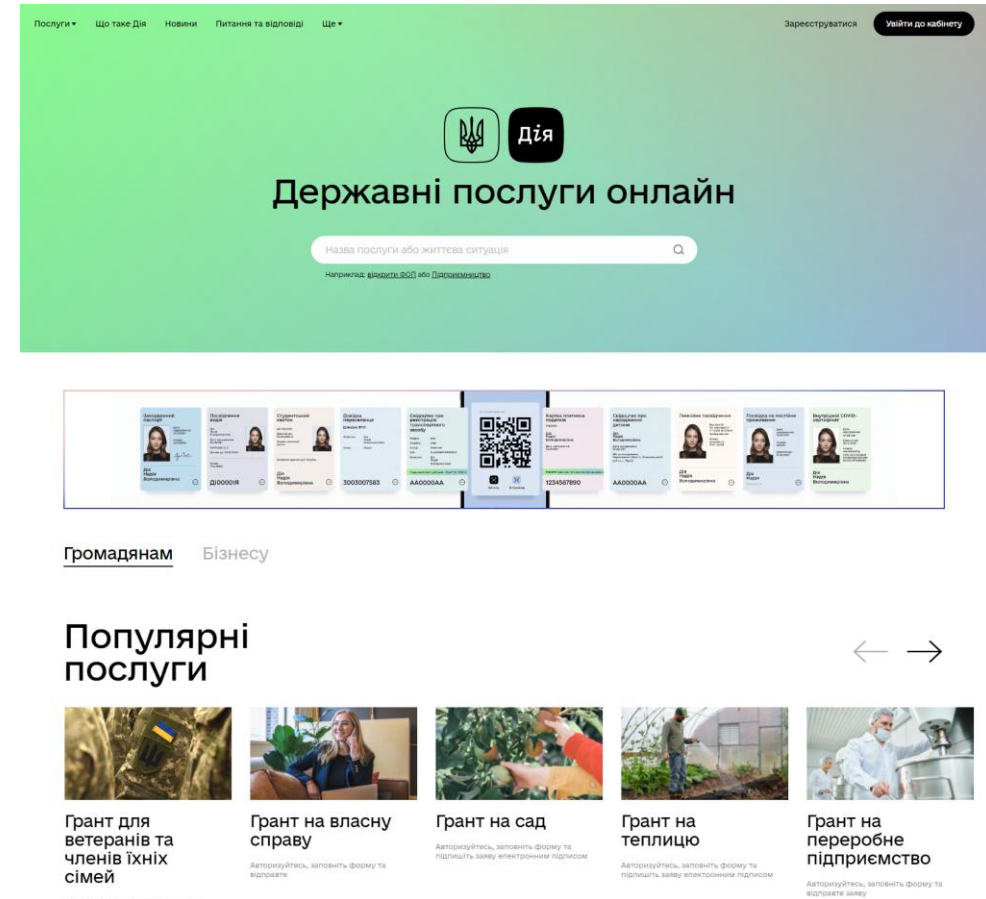
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of Ukraine



Diia: mobile app + web-portal



15 e-documents
30 + e-services



150+ e-services
up to 9M provided e-services in 2023



What's in the background

State Registers.

Basic: 7 registers

Others registers and systems

Interoperability.

Trembita system - System of
electronic interaction of state
electronic information resources

<https://trembita.gov.ua/>

trembita

E-identification.

IDGOVUA - Integrated
electronic identification
system

<https://id.gov.ua/>

ID GOV UA

Rules and knowledge, studies.

Competence center + CDTO campus:
standards, guidelines, reusable tools, knowledge base,
learning

<https://www.cdto-campus.com/>

Digital Competence
Centre.



CDTO campus



Diia.Signature compliance with eIDAS standards



DSS Demonstration WebApp

European Commission > DIGITAL > eSignature > Digital Signature Services > Validate a signature

e-Signature

Sign a document

Sign a digest

Sign a PDF

Sign with JAdES

Sign multiple documents

Counter sign a signature

Standalone application

REST/SOAP WebServices

Server side

Validate a signature

Privacy notice: Please note that by using the below functionality of the DSS demonstration, your files are going to be transmitted to the infrastructure of the European Commission. With your action to do so, you consent to this transmission of data and **we strongly advise you to use documents that do not contain sensitive material.** Files that have been transmitted are not retained.

Signed file No file chosen

Original file(s) No file chosen

Send original file(s) as
☒ Complete documents
☐ SHA1 ☐ SHA256 ☐ SHA384 ☐ SHA512

[More options](#)

Signature

SIGNATURE [redacted]_20230525-1518

Signature filename:

META-INF/signature001.p7s

Qualification:

AdESig

Qualification Details:

The certificate is not related to a CA/QC!

The certificate is not qualified at (best) signing time!

The certificate is not qualified at issuance time!

The private key does not reside in a QSCD at (best) signing time!

The validation is relying on the TC AdES List of the lists providing information notified by third countries to facilitate the validation of electronic signatures or seals created in third countries as meeting the requirements of (EU) advanced electronic signatures or seals in accordance with Regulation (EU) No 910/2014.

Signature format:

CAdES-C

Indication:

TOTAL_PASSED

Certificate Chain:

"DIIA". Qualified Trust Services Provider

State enterprise "DIIA"

Central certification authority

On claimed time:

2023-05-25 15:18:38 (UTC)

Best signature time:

2023-05-25 15:18:39 (UTC)

Signature position:

1 out of 1

Signature scope:

META-INF/ASiCManifest001.xml (FULL)
Manifest document

Signature scope:

photo_2023-05-24 12.35.14.jpeg (FULL)
Full document

Timestamps

2

Document Information

Container type:

ASiC-E

Signatures status:

1 valid signatures, out of 1

Document name:

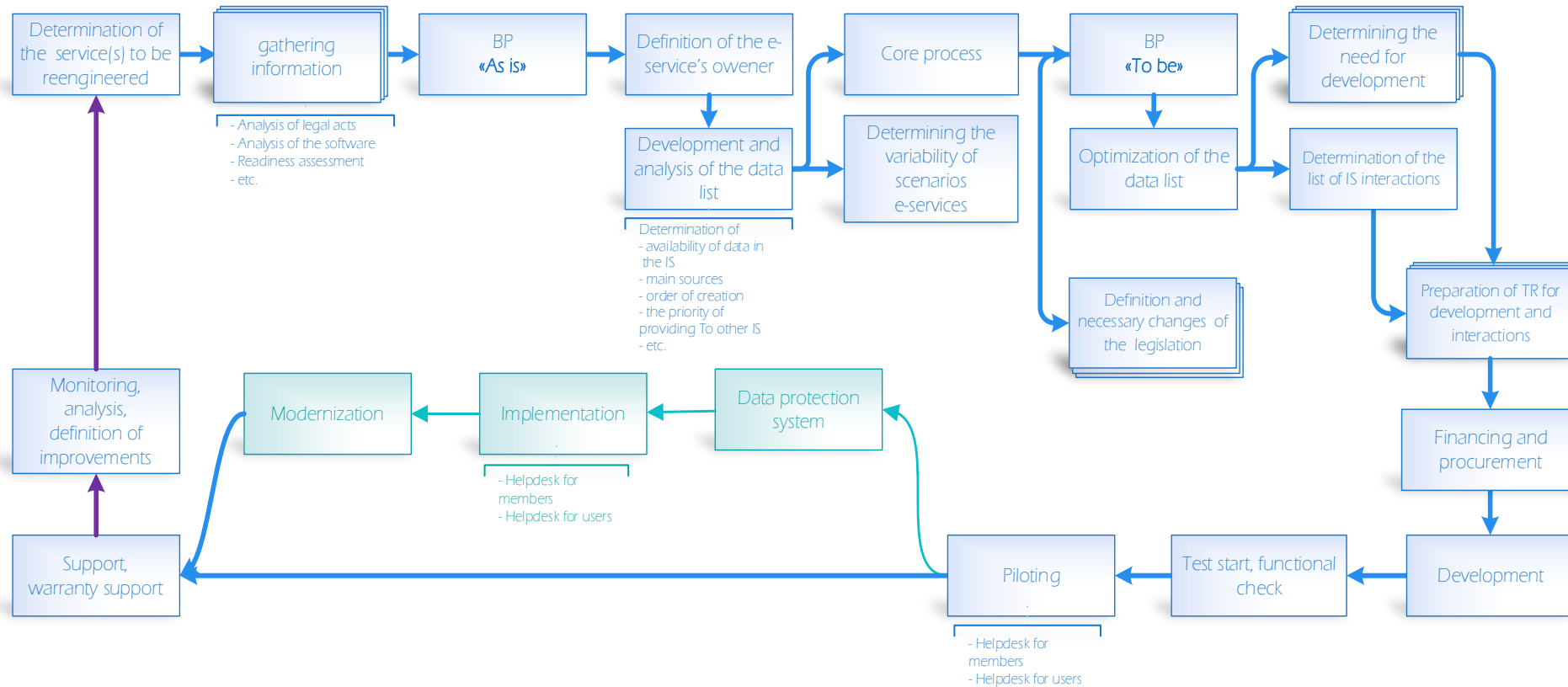
photo_2023-05-24 12.35.14.jpeg.asice

Validation of electronic signatures and indication if they are Advanced electronic Signatures (AdES), AdES supported by a Qualified Certificate (AdES/QC) or a Qualified electronic Signature (QES). Validation against the EU MS Trusted Lists and third country Trusted Lists with voluntary-based AdES recognition.

<https://ec.europa.eu/digital-building-blocks/DSS/webapp-demo/validation>



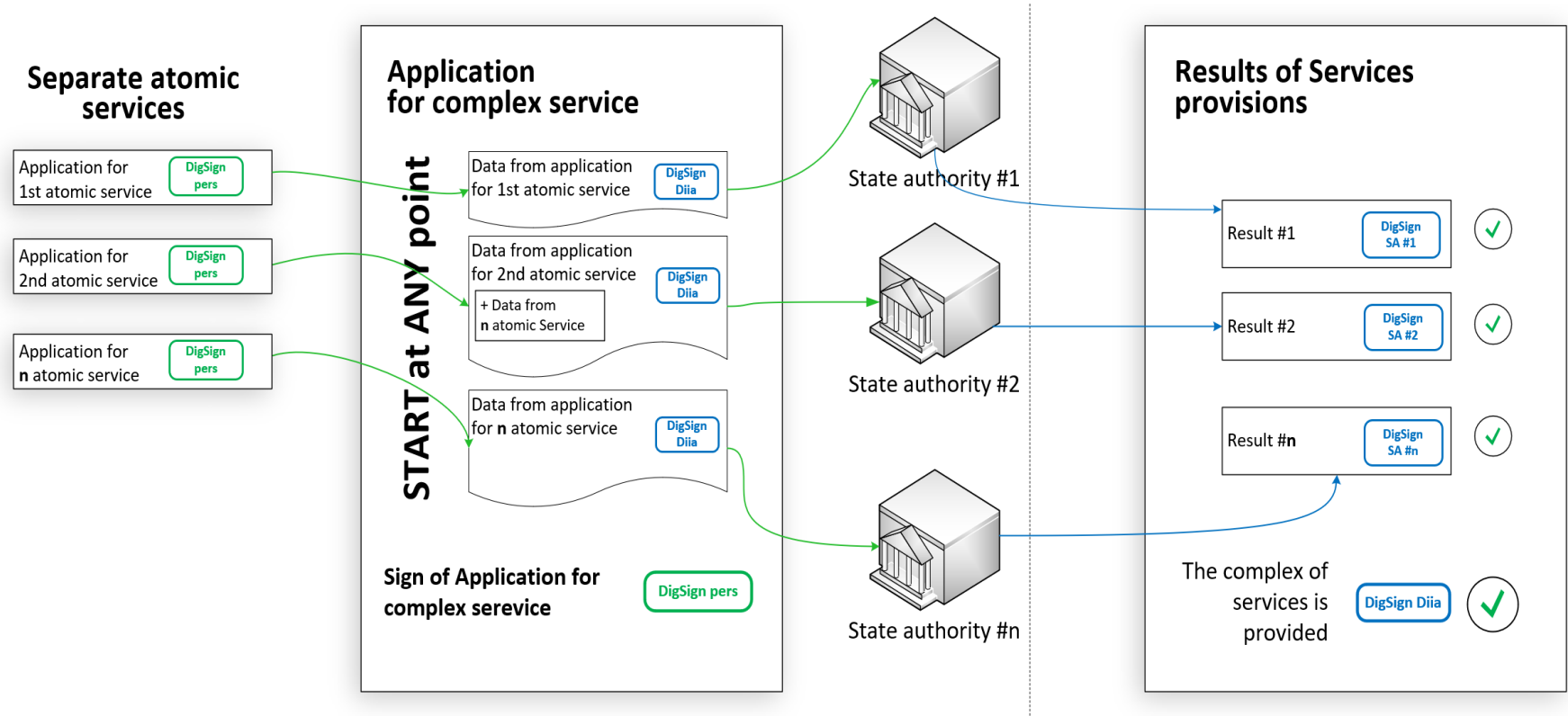
Reengineering of public services





Complex e-services

Complex electronic public service - the applicant receives several services based on one application, including e-services from different authorities



A mechanism that allows combining atomic (separate) services into different complexes was developed



Complex e-services on Diia

E-baby

Event: childbirth

Number of services: 9 services

Status: implemented

2023 – up to 120 000 provided

E-entrepreneur

Event: opening the business

Number of services: 15 services

Status: beta testing

E-permit

Event: business

Number of services: 13-15 services

Status: under development

Admission of foreign citizens at Ukrainian universities

Event: university education

Number of services: 5 services

Status: piloting

Not on Diia

U-resident

Event: opening the business for
foreigners

Number of services: 12 services

Status: beta testing

E-documents on education (incl. Diploma Supplement)

Event: graduation from educational
institutions

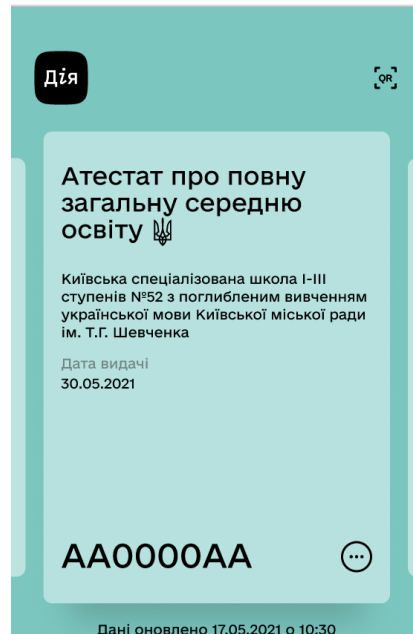
Number of services: 3 services

Status: partly launched & under
development

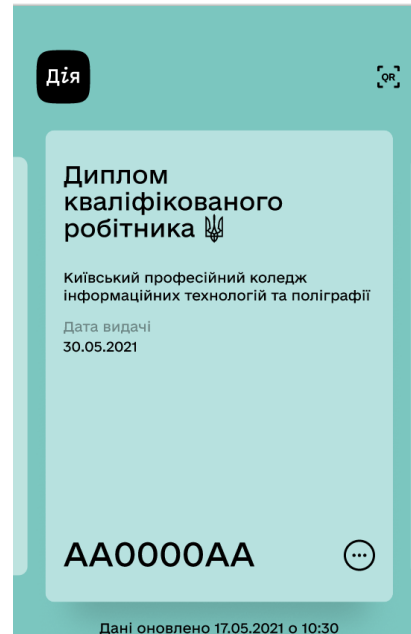


Educational documents: scope of impact

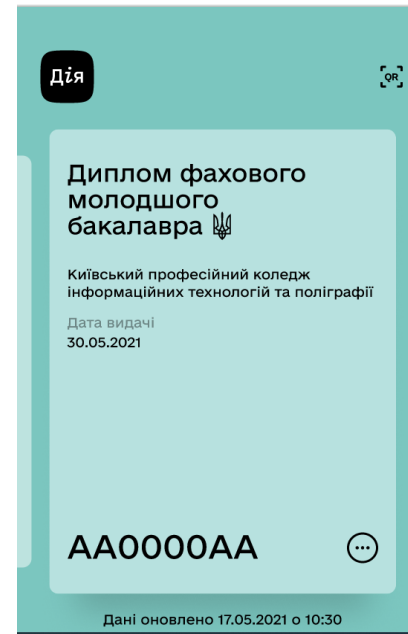
School: 22,7M
(EQF 2-3)



VET: 4,2M
(EQF 4)



Colleges: 0,02M
(EQF 5)



HighEd: 15,2M
(EQF 5-8)





Pre-launch demo

Дія

QR

Диплом магістра

Київський національний університет імені Тараса Шевченка

Дата видачі
30.05.2021

AA0000AA

...

Дані оновлено 17.05.2021 о 10:30

Диплом магістра

Master's Diploma

XX000000

Дія
Надія
Володимирівна
Diia Nadiia

Дата народження
24.08.1991

Київський національний університет імені Тараса Шевченка
Taras Shevchenko National University of Kyiv

Дата видачі
30.05.2021

Дата закінчення навчання
30.05.2021

Диплом магістра

Master's Diploma

Спеціальність
Field of study
05 Соціальні та поведінкові науки
Social and Behavioural studies

Спеціалізація
Specialisation
Поведінкові дослідження
Behavioural research

Освітня програма
Educational program
Соціологія
Sociology

Професійна кваліфікація:
Professional qualification
Соціолог / Викладач вищого навчального закладу / Науковий співробітник (соціологія)
Sociologist / Lecturer of Higher Educational Institutions / Researcher (Sociology)

Орган акредитації:
Accreditation authority
Національне агентство із забезпечення якості вищої освіти

Диплом магістра

Master's Diploma

Орган акредитації:
Accreditation authority
Національне агентство із забезпечення якості вищої освіти
The National Agency for Higher Education Quality Assurance

Ректор
Rector
Нечуй-Левицький
Семен Орестович
Semen Nechuii
Levytskyi

Дублікат
XX000000

Заклад освіти, що видав документ:
Київський національний університет імені Тараса Шевченка

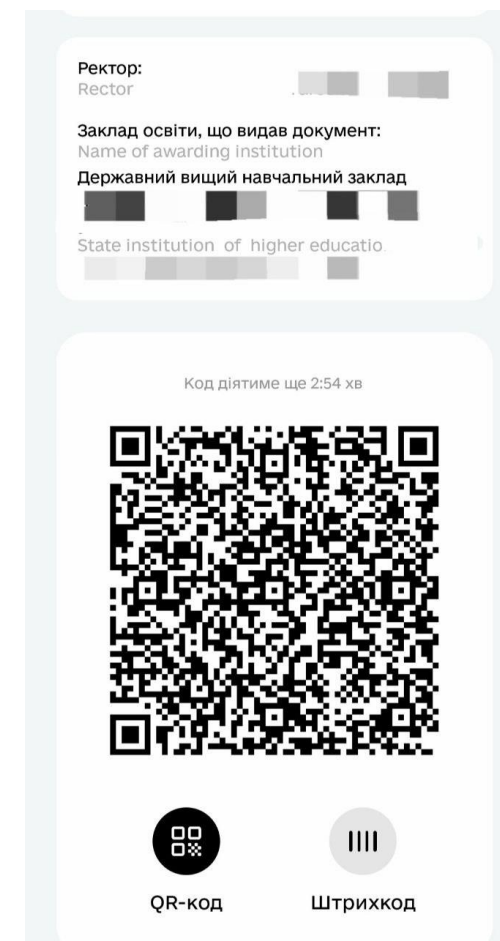
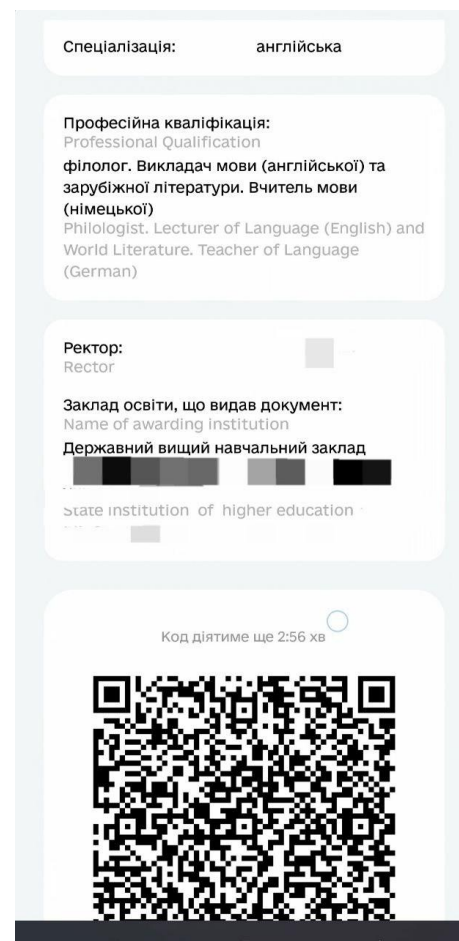
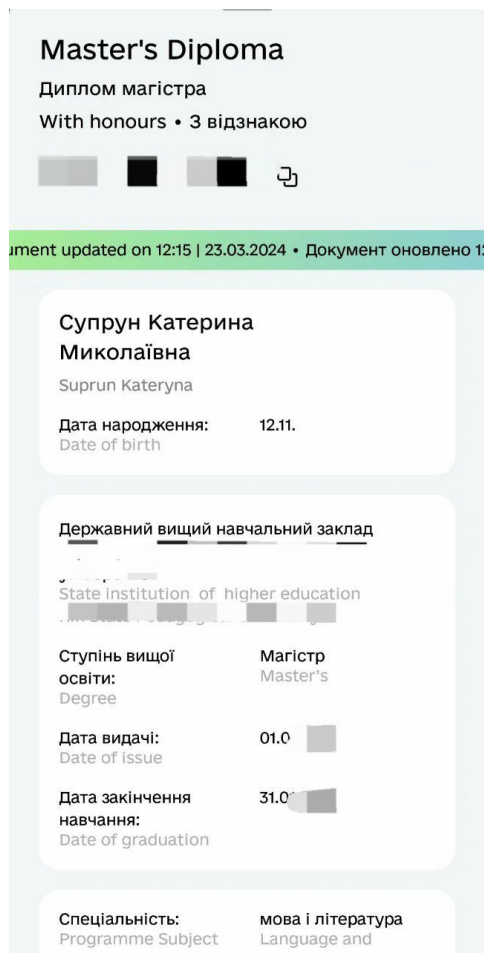
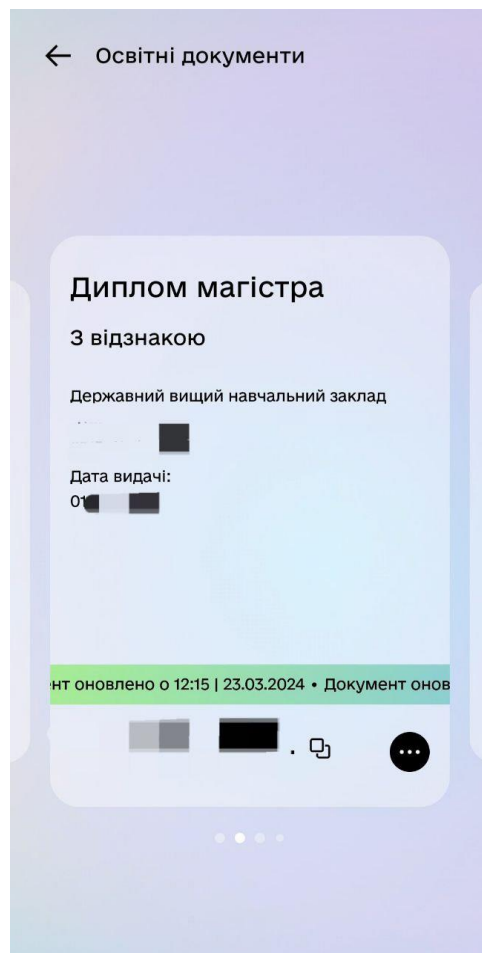


Inter-agency cooperation

- **Spring 2022:** partner commitment as e-Governance Academy supports development of e-services on educational documents in Ukraine
- **Summer 2022:** identification phase - concept and technical consultations among MoES, MinDigital, Inforesurs, Diia, eGA regarding clarity on needs and limitations of the digital solutions (i.e., underaged personal data, authentication, incomplete data)
- **Autumn 2022:** legal enactment of the [by-law](#) on digital educational documents supported by the Government
- **Winter 2023:** data collation through cross-check between EDEBO (educational documents) and State Tax Service (tax data) to populate EDEBO with clean data on tax number as the user identifier
- **Spring 2023 – Winter 2024:** software development
- **Spring 2024:** beta-test with 5000 participants
- **22 March 2024:** full-scale launch
 - 20,5M+ educational credentials in the Diia digital wallet
 - 7,1M+ unique users of Diia who have their educational credentials available in the digital wallet



Demo 1/3





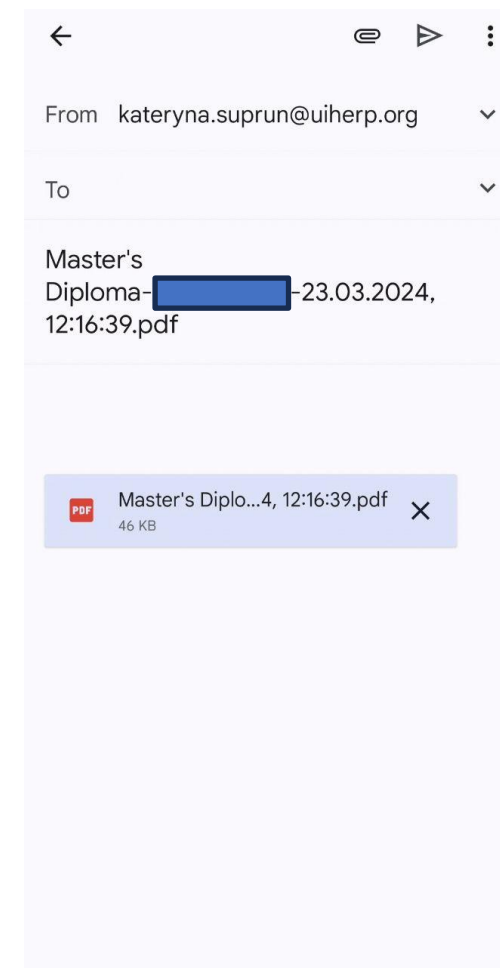
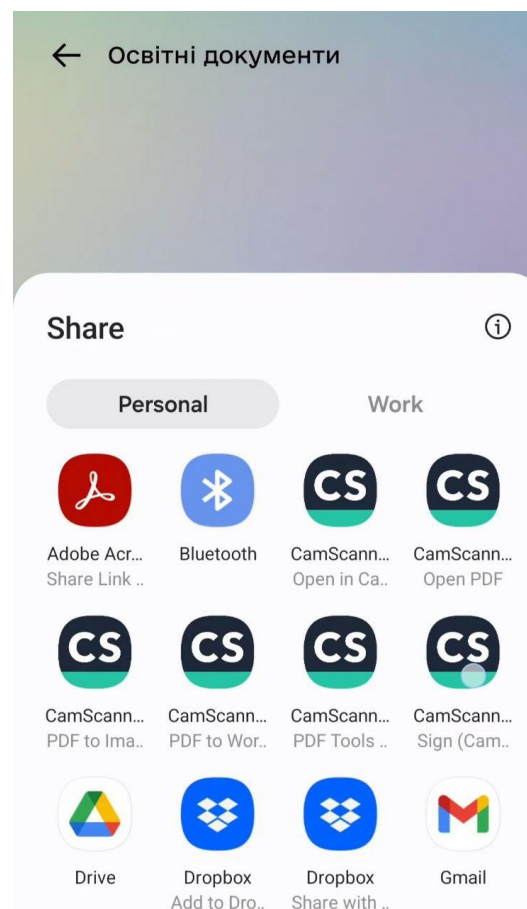
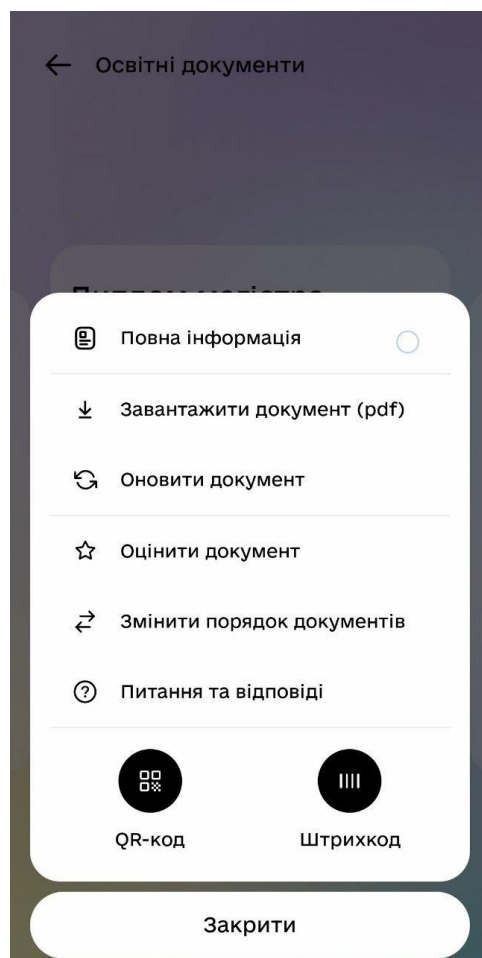
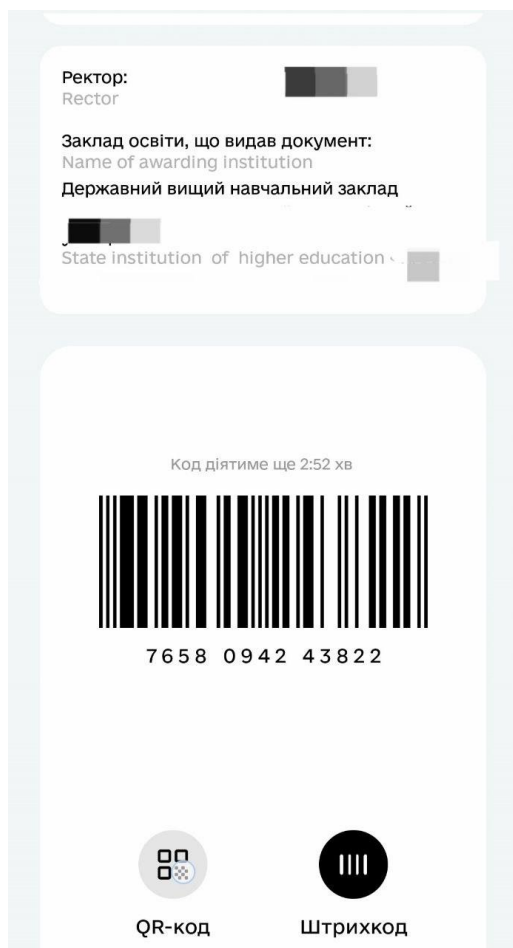
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Demo 2/3





Demo 3/3



Диплом магістра/Master's Diploma

With honours • 3 відзнакою

Супрун Катерина Миколаївна

Suprun Kateryna



The digital document copy requested on 24.04.2024, 10:00:23

Request ID: M17046344

Дата народження:

Date of birth

12.11.

Заклад освіти:

Educational institution

Державний вищий навчальний заклад

State institution of higher education

Ступінь вищої освіти:

Degree

Магістр

Master's

Дата видачі:

Date of issue

01.0

Дата закінчення навчання:

Date of graduation

31.0

Спеціальність:

Programme Subject Area

мова і література

Language and literature

Спеціалізація:

англійська

Професійна кваліфікація:

Professional qualification

філолог. Викладач мови (англійської) та зарубіжної літератури. Вчитель мови (німецької)

Philologist, Lecturer of Language (English) and World Literature, Teacher of Language (German)

Ректор:

Rector



Заклад освіти, що видав документ:

Name of awarding institution

Державний вищий навчальний заклад

State institution of higher education



Digital architecture to support recognition of Ukrainian qualifications

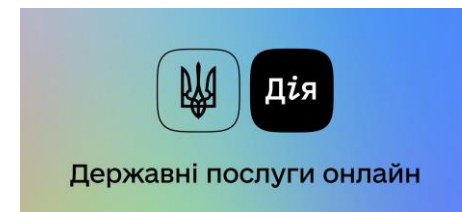
Implemented

- ✓ [EDEBO register](#) of educational documents issued by Ukrainian educational institutions
- ✓ [EDEBO service](#) for self-eliciting information on partial qualifications and issued by Ukrainian educational institutions educational documents
[Presentation](#) of existing tools
[Video recording](#) on explaining existing tools
- ✓ E-documents on education in Diia mobile app & Diia government services portal



In progress

- ✓ Digital diploma supplement:
 - Stage 1. Diploma Supplement to be issued as part of new educational qualifications starting 2025.
 - State 2. Digitalization of already existing Diploma Supplements for previously awarded educational qualifications (under discussion).
- ✓ Sharing of educational credentials (incl. cross-border)



Thank you!



Kateryna Suprun
kateryna.suprun@uiherp.org



Andrii Piskun
andrii.piskun@ega.ee