

# Digital educational credentials in Ukraine: Diia

TPG-LRC CoRE PLA on digital solutions for the recognition agenda. Input phase

19 September 2023









## **572 DAYS OF**

### russian WAR

### IN UKRAINE

- over **3416** education facilities damaged
- ca. 363 education facilities destroyed completely
- 504 children died, more than 1123 injured
- over 8 million of externally displaced people
- approx. **7** million of internally displaced people





at least 1/3 of Ukrainian citizens may have paper-based educational documents destroyed/flooded/burnt/lost...







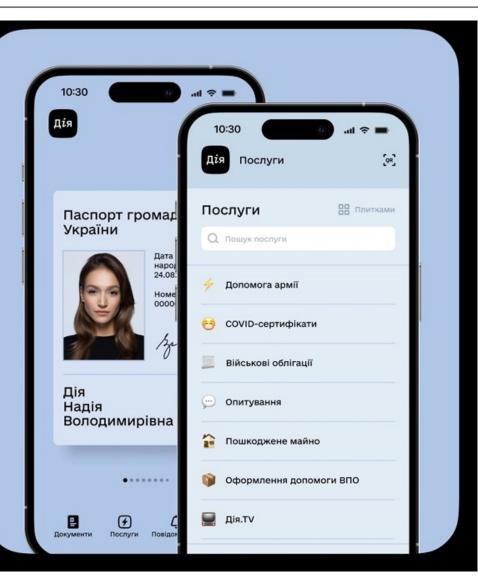


state super-app

#### 19 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.



Source: <u>Diia presentation</u>, Ministry of Digital Transformation of Ukraine, e-Governance Conference 2023









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Source: Diia presentation, Ministry of Digital Transformation of Ukraine, e-Governance Conference 2023





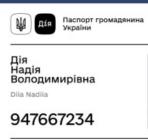


Sharing

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



Залит на цифрові копії документів від 25.05.2020 10:20:21. Ініціатор запиту: ПриватБанк, м.Кнів, Відділення №172 Ідентифікатор запиту: 0000000000000000000000000000000000

24.01.1991 Дата народ Україна 2034 INCOME. LAND BRAIDS 1312.2015 Data sepasi Дійсний до: 12.01.2023 PHOKER (IPH) 1234567890 Пройшов перевірку Державною податковою службою 01.01.2021 Same: NF (VH3P): 19910824-00026 Місце народжени

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pube

#### Metadata

#### data = {

"residenceUA": "УКРАЇНА М. КИЇВ ВУЛ.ЦИФРОВІЗАЦІЇ БУД.25 КВ.18", "genderUA": "X", "nationalityUA": "Україна", "birthday": "24.01.1991", "birthPlaceUA": "M. KUÏB YKPAÏHA", "expirationDate": "13.12.2023", "genderEN": "F", "lastNameEN": "DIIA", "firstNameEN": "NADIIA", "lastNameUA": "ДІЯ", "firstNameUA": "НАДІЯ", "middleNameUA":"ВОЛОДИМИРІВНА", "docNumber": "123456789", "taxpayerNumber": "1234567890", "recordNumber": "19910824-00026", "issueDate": "13.12.2015", "department": "2034",

Source: Diia presentation, Ministry of Digital Transformation of Ukraine, e-Governance Conference 2023







42,3M: 2000-2023

#### **Educational documents in Diia: intervention scope**

Professional pre-higher School: 22,7M VET: 4,2M Higher education: 15,2M (EQF 5-8) (EQF 2-3) (EQF 4) education: 0,02M (EQF 5) Дія QR Дія [QR] Дія [QR] Дія QR Диплом бакалавра 💹 Диплом фахового Атестат про повну **Диплом** Київський національний унівситет молодшого кваліфікованого загальну середню імені Тараса Шевченка бакалавра 💹 робітника 🕌 освіту 💹 Дата видачі 30.05.2021 Київський професійний коледж Київська спеціалізована школа І-ІІІ Київський професійний коледж інформаційних технологій та поліграфії ступенів №52 з поглибленим вивченням інформаційних технологій та поліграфії української мови Київської міської ради Дата видачі Дата видачі ім. Т.Г. Шевченка 30.05.2021 30.05.2021 Дата видачі 30.05.2021 **AA0000AA** (···) AA0000AA Дані оновлено 17.05.2021 о 10:30  $(\cdots)$ AA0000AA **AA0000AA**  $(\cdots)$  $(\cdots)$ . . . . (4) Δ Дані оновлено 17.05.2021 о 10:30 Документи Послуги Повідомлення Дані оновлено 17.05.2021 о 10:30 Дані оновлено 17.05.2021 о 10:30

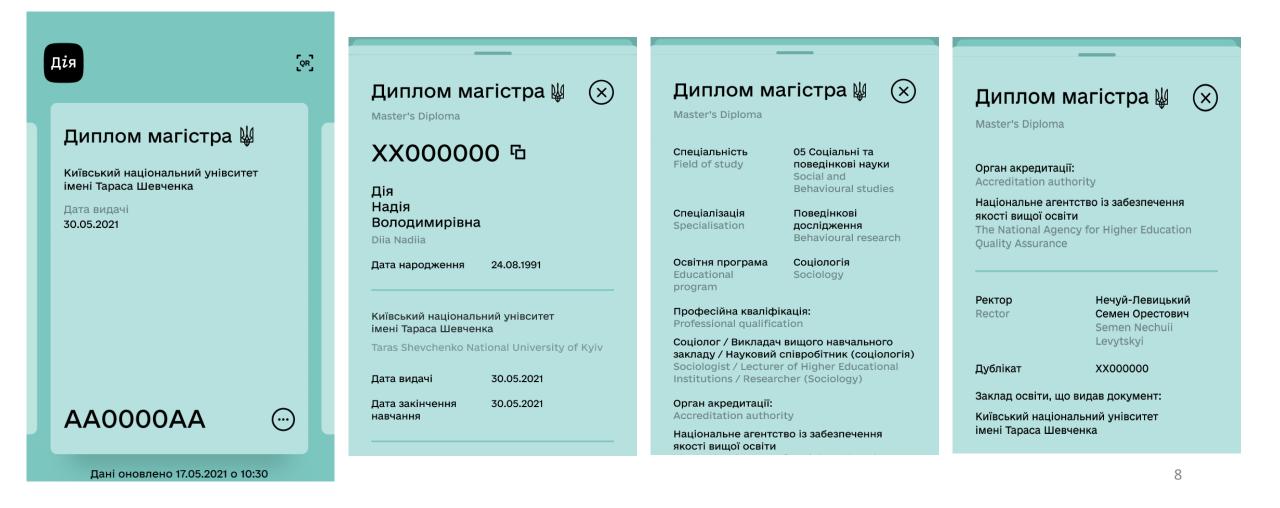
Information from both currently and previously in force educational documents will be demonstrated in Diia.







#### **Educational documents in Diia: pre-launch demo**







Signature SIGNATURE

Timestamps 2



20230525-1518

#### **Diia.Signature signature compliance with eIDAS standards**

			Signature Storiki oke	
European Commission	DSS Demons	stration WebApp (europa.eu)	Signature filename: Qualification:	META-INF/signature001.p7s AdESig 🚯
DSS Demonstration WebApp			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!
uropean Commission > DIGITAL	. > eSignature > Digital Signature S	Services > Validate a signature		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
e-Signature	Validate a	signature		or seals created in third countries of actinate 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.
Sign a document		Privacy notice: Please note that by using the below functionality of the DSS demonstration, your files are going to be		CAdES-C
Sign a digest		tructure of the European Commission. With your action to do so, you consent to this I we strongly advise you to use documents that do not contain sensitive material.	Signature format: Indication:	TOTAL_PASSED
Sign a PDF		Files that have been transmitted are not retained.		8 I
Sign with JAdES	Signed file	Choose File No file chosen		<ul> <li>"DIIA". Qualified Trust Services Provider </li> <li>State enterprise "DIIA"</li> <li>Central certification authority</li> </ul>
Sign multiple documents	Original file(s)	Choose Files No file chosen	On claimed time:	2023-05-25 15:18:38 (UTC)
Counter sign a signature		Complete documents	Best signature time:	2023-05-25 15:18:39 (UTC) 🚯
0 0	Send original file(s) as	○ SHA1 ○ SHA256 ○ SHA384 ○ SHA512	Signature position:	1 out of 1
Standalone application			Signature scope:	META-INF/ASiCManifest001.xml (FULL) Manifest document
REST/SOAP WebServices	More options		Signature scope:	photo_2023-05-24 12.35.14.jpeg (FULL)
Server side		Submit Clear		Full document

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 voluntarybased AdES recognition.

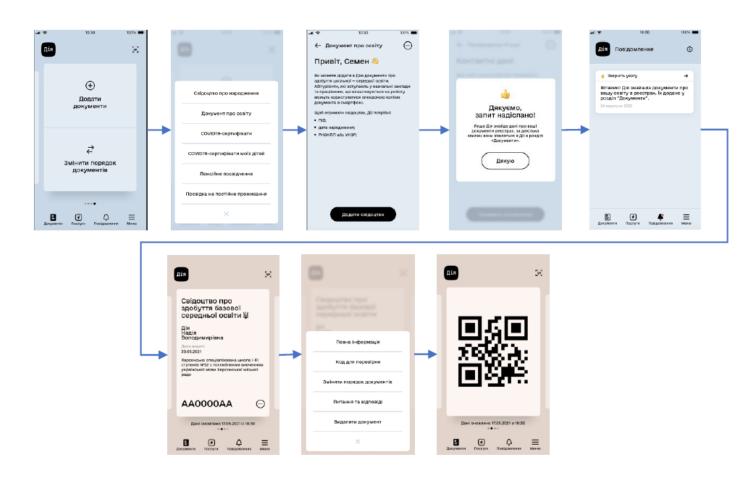
Document Information	
Container type:	ASIC-E
Signatures status:	1 valid signatures, out of 1
Document name:	photo_2023-05-24 12.35.14.jpeg.asice







#### User experience: input phase



### Submission of data by applicants (2 minutes):

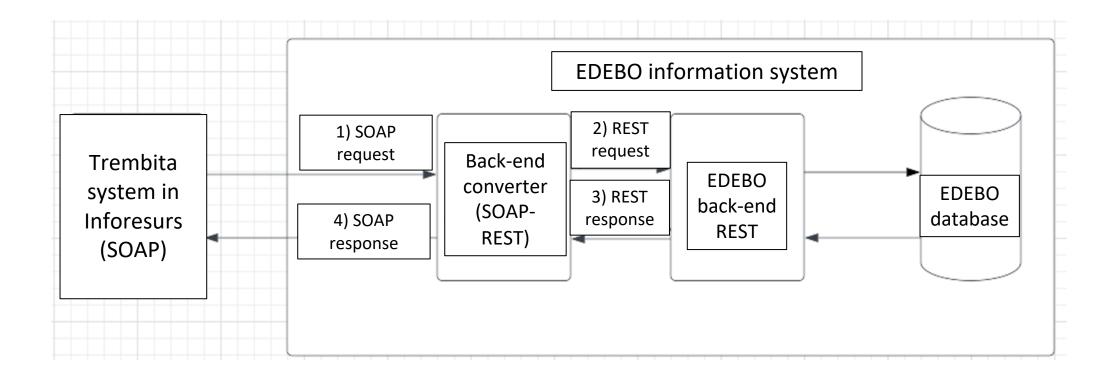
- 1. Log in to Diia
- 2. Select 'Add document'
- Confirm search for documents available using 3 identifies - full name, date of birth, and tax number – that are automatically pre-filled for you
- Documents found with the above identifiers are downloaded to the Diia's folder 'Documents'
- Information on educational documents can be retrieved from Diia within 2 months, after which it can still be requested unlimited number of times, if needed (steps 1-4)







#### Data flow Diia-EDEBO: brief look into throughput ...









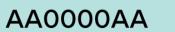
Documents on

vocational education

#### ... and output



#### Дія QR Диплом фахового молодшого бакалавра 👹 Київський професійний коледж інформаційних технологій та поліграфії Дата видачі 30.05.2021



 $(\cdots)$ 







#### Inter-agency cooperation

- Partner commitment (spring 2022): e-Governance Academy support to develop e-services on educational documents in Ukraine
- ✓ Identification phase (spring-summer 2022): concept and technical consultations among MoES, MinDigital, Inforesurs, Diia, eGA – clarity on needs and limitations of the digital solutions (i.e., underaged personal data, authentication, corrupted and incomplete data)
- ✓ Legal enactment (autumn 2022): <u>by-law</u> on digital educational documents supported by the Government
- ✓ Data collation (winter 2023): cross-check between EDEBO (educational documents) and State Tax Service (tax data) to populate EDEBO with more/clean data on tax number as the user identifier
- ✓ Software development (summer-autumn 2023): in progress





### Thank you!

Kateryna Suprun Ukraine National Representative to Bologna Process <u>katerynasuprun@gmail.com</u> +38 (o68) 574-89-48



This PLA is organised within the framework of the EU co-funded project <u>TPG-LRC CoRE</u>