

#eu4digital

**EU4Digital: supporting digital economy  
and society in the Eastern Partnership**

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(July 2019 – December 2019)**



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## List of Acronyms & Abbreviations

Abbreviations	Definition
<b>AEOLIX</b>	Architecture for European Logistics Information exchange. Financed by EU Horizon 2020.
<b>AM</b>	Armenia
<b>AZ</b>	Azerbaijan
<b>BY</b>	Belarus
<b>CA</b>	Certification Authority
<b>CERT</b>	Computer Emergency Response Teams
<b>DVB-T</b>	Digital Video Broadcasting – Terrestrial
<b>DTLF</b>	Digital Transport & Logistics Forum
<b>EaP</b>	Eastern Partnership
<b>EAEU</b>	The Eurasian Economic Union
<b>ETSI</b>	European Telecommunications Standards Institute
<b>eFTI</b>	Electronic freight transport information initiative
<b>Facility, EU4Digital Facility</b>	EU4Digital: supporting digital economy and society in the Eastern Partnership
<b>FENIX</b>	Future business models for the efficient recovery of natural and industrial secondary resources in extended supply chains contexts. EU Horizon 2020 research project.
<b>GE</b>	Georgia
<b>IMTR</b>	International Mobile Termination Rates
<b>MCFN</b>	Mobile fixed communication networks
<b>MD</b>	Republic of Moldova (Moldova)
<b>MRA</b>	Mutual Recognition Agreement
<b>RA</b>	Registration Authority
<b>RO</b>	Romania
<b>RRA</b>	Regional Roaming Agreement
<b>RSA</b>	Regional Spectrum Agreement
<b>RU</b>	Russian Federation
<b>SEED</b>	Systematic Electronic Exchange of Data
<b>SELIS</b>	Shared European Logistics Intelligent Information Space. Financed by EU Horizon 2020.
<b>TSP</b>	Trust Service Providers
<b>UA</b>	Ukraine
<b>WTO</b>	World Trade Organization



## Introduction

This report reflects the activities of the second reporting period of the EU4Digital Facility programme: 30 June 2019 - 31 December 2019. The report summarises the outputs achieved under the six thematic streams during the reporting period. Also, it outlines the objectives for the upcoming six-month reporting period, including events planned (which are known at the time of preparing this report). In this report we highlight the main political and operational challenges encountered and the mitigation measures applied or suggested for the upcoming period.

## 1. State of play & planning of activities

This chapter covers the main EU4Digital Facility results achieved and a short description of the related activities under the six sub-streams and the Communication stream during the reporting period (July 2019 – December 2019). Likewise, under each thematic sub-stream (where applicable) key highlights in the six EaP countries are provided. Additionally, the report provides a planning for the upcoming six-month period under each sub-stream.

### 1.1. Telecom Rules

#### State of play

##### Roaming

In the international roaming field, EU4Digital built further on the previous roaming feasibility study<sup>1</sup> (Study) updating its findings. As a result, roaming pricing calculations and international mobile termination rates (IMTRs) reduction impact assessment calculations were updated. Despite the fact that voluntary decreases of roaming prices are observed, substantial reductions of applicable roaming rates are still to be implemented in order to align with the suggested roaming model. It is expected that there is still room for further decrease of EaP roaming rates (on average by 87%). **An overall monetary impact** of establishing a common EaP roaming area is estimated **at EUR 4.64m**.

In this context, EU4Digital provided **4 viable options for a Regional Roaming Agreement (RRA)** legal framework addressing the preferred way forward of EaP countries deriving from international commitments:

1. Intergovernmental agreement and/or mesh type agreement;
2. Intergovernmental agreement and/or mesh type agreement under broader umbrella of comprehensive free trade agreement;
3. Intergovernmental agreement of Mutual Recognition Agreement (MRA) type;
4. Voluntary (facilitated) agreement among involved operators.

Following consultations with the EaP countries and expressed positions by relevant roaming stakeholders in each country, EU4Digital **started drafting the RRA**. It will be based on the option supported by the majority of EaP countries, namely, an **intergovernmental agreement of MRA type (option 3)**. See further details in the table below.

#### Key outputs:

- Completed **roaming report** covering as-is market situation, impact assessment of the suggested regulatory intervention, relevant best practices and other.
- Conducted RRA and WTO obligations compatibility analysis, identified potential legal frameworks and drafted the main clauses of the RRA in a form of MRA; it includes list of criteria that accession countries need to meet in order to join RRA.

#### Country perspective

Country	Highlights
<b>AM</b>	<ul style="list-style-type: none"> <li>- Price fluctuations for all roaming services, incl. steep price <b>decline</b> (by approx. 98%) for EaP roaming <b>data transmission</b> between 2016 and 2018.</li> <li>- Confirmed intergovernmental agreement of <b>MRA type</b> as preferred option for RRA (option 3).</li> </ul>

<sup>1</sup> Study on 'Harmonising International Roaming Pricing and Reducing Roaming Tariffs among the Eastern Partnership Countries' prepared by the KANTOR Management Consultants - led Consortium (December 2017)



Country	Highlights
<b>AZ</b>	<ul style="list-style-type: none"> <li>- Prices have <b>declined</b> for roaming <b>voice services</b> (by approx. 6%) and <b>data</b> (by approx. 67%) between 2017 and 2018 (in line with EaP region tendencies).</li> <li>- Confirmed intergovernmental agreement of <b>MRA type</b> as preferred option for RRA (option 3).</li> </ul>
<b>BY</b>	<ul style="list-style-type: none"> <li>- Steep <b>decline</b> in roaming price of <b>data transmission</b> (by approx. 96%) between 2016 and 2018. However, price of <b>voice communication services increased</b> (by approx. 50%).</li> <li>- Only country having considerable reservations regarding intergovernmental agreement of MRA type for RRA due to obligations within Eurasian Economic Community (EAEC). Thus, <b>voluntary (facilitated) agreement</b> among involved operators is supported.</li> <li>- <b>Signed a roadmap with RU</b> communications ministry on abolishing roaming charges between the two countries. The relevant legislative framework is expected to be ready by March 2020, and charges between the two countries should be cancelled not later than September 2020.</li> </ul>
<b>GE</b>	<ul style="list-style-type: none"> <li>- <b>Decline</b> in applicable rates for roaming <b>data transmission</b> (by approx. 71%) between 2016 and 2018. However, prices for both <b>incoming and outgoing voice</b> have <b>increased</b> (by approx. 33%).</li> <li>- Confirmed intergovernmental agreement of <b>MRA type</b> as preferred option for RRA (option 3).</li> </ul>
<b>MD</b>	<ul style="list-style-type: none"> <li>- Prices have <b>declined</b> for <b>data</b> (by approx. 39%) and <b>outgoing voice</b> (by approx. 36%) between 2017 and 2018 (in line with EaP region tendencies).</li> <li>- Confirmed intergovernmental agreement of <b>MRA type</b> as preferred option for RRA (option 3).</li> <li>- In addition to EaP region efforts, arrangement to <b>reduce roaming charges between MD and RO</b> has been initiated (in a form of voluntary (facilitated) agreement between mobile operators of both countries). EU4Digital has supported EC and MD stakeholders in assessing feasibility of this arrangement, potential ways forward and related implications on the market.</li> </ul>
<b>UA</b>	<ul style="list-style-type: none"> <li>- Effective prices have <b>declined for all EaP roaming services</b> (data – 89%; SMS – 29%; voice – 39%) between 2016 and 2018.</li> <li>- Confirmed intergovernmental agreement of <b>MRA type</b> as preferred option for RRA (option 3).</li> </ul>

### Regulators independence

Aiming to assess state-of-play and identify the legislative gaps in the field of regulatory independence against the background of relevant EU legislation, EU4Digital has **developed an elaborated methodology**. Prior to drafting the methodology, EU4Digital and the World Bank made efforts to coordinate activities related to regulatory independence assessment to ensure synergies and avoid duplication (as it is an important enabler of effective broadband strategies implementation).

The assessment criteria included in the methodology are broken down into 2 groups:

- Governance of NRAs (e.g. setup of NRA, appeal and disputes resolution).
- Powers and obligations of NRAs (e.g. market analysis, customer protection, scarce resource management).

#### Key outputs:

- Developed a **methodology to assess NRA independence** dimensions.

### Country perspective

Country	Highlights
<b>AM</b>	There is a NRA, which regulates activity in the electronic communications sector since 2006. No major developments were observed.
<b>AZ</b>	<b>Work started</b> following adoption of the “Strategic Road Map on the development of telecommunications and IT” in AZ (December 2016), envisaging the priority - <b>establishment of telecom regulatory agency by the end of 2020</b> .
<b>BY</b>	The existence of a NRA was reported, but statement requires <b>further verification, whether the identified agency</b> (the Operations and Analysis Centre under the President of the Republic of Belarus) <b>performs typical NRA functions</b> . This will be addressed during NRA independence assessment.
<b>GE</b>	The <b>regulatory system</b> seems to be the <b>most aligned with that of the EU</b> . <b>Legal guarantees of independence of NRAs</b> have been established in the <b>Constitution</b> of GE since 2017 with further technical changes introduced in 2018.
<b>MD</b>	There is a NRA that regulates activity in electronic communications, information technology and postal communication since 2000. No major developments were observed.



Country	Highlights
UA	<b>Delay in adoption of draft law</b> "On Electronic Communications" is a risk <b>potentially affecting regulatory independence</b> promotion and development. Also, there is an <b>on-site assessment</b> of the <b>EU-UA Association Agreement</b> commitments on telecommunication services in terms of assessing and advising on regulatory independence (it is related to EU4Digital activities). Results of on-site assessment project are planned to be ready at the beginning of 2020 and shared for EU4Digital Facility team review.

### Freeing 700 MHz

In order to develop and implement a coordinated approach for reassignment of the 700 MHz band in the six EaP countries in line with the intra-EU efforts and plans, EU4Digital shared experience and best practices regarding EU approaches towards release as well as reassignment of the 700 MHz band. Furthermore, EU4Digital conducted as-is country analysis and as a result started drafting country specific roadmaps. Also, the idea of the Regional Spectrum Agreement (RSA) was launched at the EaPeReg Plenary meeting (November 2019). The document is intended to strengthen and reassure the commitment of EaP countries to implement 700 MHz freeing roadmap. The expected signing date of the RSA by the six EaP ministers is December 2020.

#### Key outputs:

- Completed the **report on EU best practice** in releasing the 700 MHz band as well as **as-is situation analysis** in each EaP country.
- Drafted **4 country specific roadmaps (AZ, BY, GE, MD)** for reassignment of 700 MHz band.

#### Country perspective

Country	Highlights
AM	Mobile fixed communication networks (MFCN) services <b>lag behind</b> the EaP region. Also, there are <b>no official documents regarding the 700 MHz band reassignment</b> . Cross-border coordination may be hindered due to conflict with AZ.
AZ	Main issue is the cross-border coordination with Iran and AM. Shutdown of TV transmitters and <b>new licences for MFCN</b> shall be issued <b>by the end of 2020</b> . In case of unresolved cross-border coordination issues, schedule may be delayed by up to 2 years.
BY	<b>Ready to reassign the 700 MHz band</b> . The next step is to get financing (not included in the state budget) to <b>replace the DVB-T network<sup>2</sup></b> .
GE	The <b>band is ready to use</b> for international mobile telecommunications (IMT) services. The <b>auction</b> of the 700 MHz band is planned to take place at the <b>beginning of 2020</b> . However, some <b>issues regarding negotiations with RU</b> occur which might result in interferences in the border area.
MD	Plan to <b>switch off analogue TV on 1st March 2020</b> . Need to clarify the usage of TV transmitters located in the Transnistria region - the <b>ATV/DTV in the Transnistria region might block the use of the MFCN</b> within the 700 MHz in MD.
UA	<b>No official documents regarding the 700 MHz band reassignment</b> . A decree considering establishing a group of experts to create a <b>plan to implement 5G was signed in May 2019</b> . Some <b>issues regarding negotiations with RU</b> might occur.

### Planning for the upcoming six months

#### Roaming - key objectives:

- Draft proposal on the RRA content, implementation procedure (incl. its alignment).
- Provide initial proposals for national frameworks and legislation changes to enable RRA adoption.
- Start negotiation on signing the RRA among the EaP countries.

#### Regulators independence - key objectives:

- Identify gaps and shortages in terms of legislation in the field of governance of NRA independence. As a result, NRA independence gap assessment report and recommendations for improvements will be drafted.

#### Freeing 700 MHz - key objectives:

<sup>2</sup> Digital Video Broadcasting – Terrestrial



- Finalise regional EaP roadmap for reassignment of 700 MHz band.
- Coordinating efforts and negotiations with adjacent countries.

## 1.2. Trust and Security

### State of play

#### eID / eSignature

During the reporting period the initial scope definition of eSignature pilot has been developed:

*Pilot definition:* eSignature pilot definition has been defined with the goal to test the cross-border e-Signature operation between 2 EaP countries and between an EU MS and EaP country. The expected outcome of the pilot:

- Parties from pilot countries trialed exchange of digitally signed documents and validated the signatures using eSignature pilot solution.
- Prepared and validated functional and non-functional requirements for eSignature solution to use in cross-border interaction prepared and shared with interested stakeholders.

The necessary training and coordination will be carried out among piloted countries' decision-makers and high-level stakeholders to practically verify the solution in the cross-border interactions and identify needs for the needed improvements in legal, organisational and technical infrastructure.

To evaluate eID and eSignature maturity in the EaP region, EU4Digital developed the methodology for maturity assessment of digital trust services. The methodology takes into account all aspects of the eID services as well as the use and maturity of eSignature services. Based on the the developed methodology the self-assessment of the digital trust services in the six EaP countries was conducted. The preliminary results of assessment show a wide variance in the maturity of eID and eSignature services across EaP countries: on a scale from 0 to 5, scoring varies from 1.89 (GE) up to 4.42 (UA) (preliminary results are provided in the table below). To validate the information collected about the countries, site visits to 2 EaP countries have been carried out and will be continued during January and February, 2020.

General observations and insights:

- The laws and regulations related to the trust services are generally mature and offer complete guidelines for trust service providers (TSPs) on how to offer and manage trust services.
- The encryption schemes and cryptographic algorithms used in EaP countries, except for Belarus, are compatible with the requirements of the European Telecommunications Standards Institute (ETSI) and Webtrust standards and compatible with the eIDAS Regulation.

#### Key outputs:

Developed methodology and questionnaire to assess technical and judicial maturity of eID and eSignature services in the EaP region.

#### Country perspective

The below table presents the results of eID and eSignature maturity analysis in the EaP region. The maturity assessment is measured on a scaled score from 1 to 5, representing the maturity level between ad-hoc (1), managed (2), defined (3), measured (4) and optimized (5). A maturity score higher than (2) suggests that processes are in place to ensure that trust services can be delivered in a continuous, repeatable and predictable way. Higher maturity scores like (3) and (4) mean that the process is being constantly measured and reviewed while adopting international best practices to optimize the process outcomes. A score above (4) suggests that the process follows most of the guidelines described in the eIDAS Regulation and GDPR while being constantly measured and optimized in order to adopt and implement the latest best practices related to digital trust services.

Country	Highlights
AM	<ul style="list-style-type: none"> <li>- Preliminary weighted score – <b>2.43*</b> (from managed to defined level)</li> <li>- There is only one certification authority (CA) and one registration authority (RA) in one entity. The <b>primary or secondary level regulations need amendments</b> to ensure <b>better compatibility with eIDAS</b> Regulation when more types of trust services will be provided in the country. Currently eSignature and eID services are offered together with the timestamping and validation services. The <b>service of e-seals</b> for entities/organisations <b>is currently being implemented</b>.</li> </ul>
AZ	<ul style="list-style-type: none"> <li>- Preliminary weighted score – <b>2.98*</b> (from managed to defined level)</li> </ul>





Country	Highlights
	<ul style="list-style-type: none"> <li>- There is a <b>need for secondary and tertiary legislation</b> to enforce best practices and <b>to ensure an adequate level of confidence</b> in operation of trust services at the TSP level (e.g. rules and specific policies for the audit of TSPs in order to accept their signatures for specific e-services or a specific set of rules, policies and procedures that third parties and entities who are part of the eID issuance process should comply with in order to ensure the security of these services).</li> <li>- There is an adequate offering of trust services with 2 public entities in operation.</li> </ul>
<b>BY</b>	<ul style="list-style-type: none"> <li>- Preliminary weighted score – <b>2.74*</b> (from managed to defined level)</li> <li>- There is only one CA in BY with several RAs. The national regulations are being implemented and followed by all registration authorities in BY rigorously.</li> <li>- There is an adequate offering of trust services with 8 public entities and 3 private entities. However, the <b>encryption schemes and cryptographic algorithms</b> used by BY currently are <b>not compatible</b> with the requirements of the ETSI and Webtrust standards and thus technological adaptations are required to be compatible with the eIDAS Regulation.</li> </ul>
<b>GE</b>	<ul style="list-style-type: none"> <li>- Preliminary weighted score – <b>1.89*</b> (from ad-hoc to managed level)</li> <li>- There is only one CA in GE and one RA in one public entity.</li> <li>- <b>Amendments of primary or secondary regulations are needed</b> to ensure better compatibility of certificate lifecycle management processes with eIDAS Regulation.</li> </ul>
<b>MD</b>	<ul style="list-style-type: none"> <li>- Preliminary weighted score – <b>2.90*</b> (from managed to defined level)</li> <li>- To ensure better compatibility with eIDAS Regulation on certificate lifecycle management processes and enforcement of technical controls, <b>Trust services best practices should be addressed at the primary or secondary regulations</b>. There is a strong offering of trust services with 3 public entities and 3 private entities in operation.</li> </ul>
<b>UA</b>	<ul style="list-style-type: none"> <li>- Preliminary weighted score – <b>4.42*</b> (from measured to optimized level)</li> <li>- The laws and regulations on trust services are generally mature and compatible with the EU eIDAS Regulation. UA has <b>very strong offering related of trust services</b> with 14 public entities and 7 private entities which offer various trust services.</li> </ul>

\* The preliminary scores are based on the initially gathered information from all EaP countries – the initial information is currently being validated during the country visits from December 2019 till February 2020. The scoring will be adjusted and final results presented in the eID and eSignature services maturity assessment report.

## Cybersecurity

EU4Digital identified the main obstacles and gaps that need to be addressed in the area of strengthening the cybersecurity capabilities and cybersecurity resilience. It was acknowledged that cybersecurity domains in EaP countries are exhibiting rather different maturity levels - some are still in the process of developing the first national cybersecurity strategies, some are in the process of reviewing and updating it for the second time, some countries have got national and sectorial computer emergency response teams (CERTs) and some are still in the process of establishment of national CERT.

The detailed overview on Cybersecurity of each EaP country state of play, main challenges and next actions is provided in the individual EaP country reports, which will serve as an input into the CyberEast project<sup>3</sup>. The summary of the key observations is provided in the table below.

### Key outputs:

- Prepared and validated list of security measures (6 individual EaP country reports).

### Country perspective

Country	Highlights
<b>AM</b>	The main challenges are insufficient funds and interest of authorities, lack of knowledge and expertise, legacy hardware and software which present a very high risk to cybersecurity incidents. In cybersecurity, the next steps for AM are adoption of a National cybersecurity strategy, establishment of national CERT, identification of critical infrastructure (CI) and critical information infrastructure (CII) operators.

<sup>3</sup> CyberEast - Action on Cybercrime for Cyber Resilience in the Eastern Partnership region is a joint project of the EU and the Council of Europe, implemented in the EaP region by the Council of Europe under the European Neighbourhood East Instrument (ENI), which aims at adopting legislative and policy frameworks compliant to the Budapest Convention on Cybercrime and related instruments, reinforcing the capacities of judicial and law enforcement authorities and interagency cooperation, and increasing efficient international cooperation and trust on criminal justice, cybercrime and electronic evidence, including between service providers and law enforcement.



Country	Highlights
<b>AZ</b>	The main challenges are insufficient funding, lack of qualified personnel and resources in cybersecurity area and insufficient commitment of national authorities to cybersecurity matters. The next steps for AZ are the creation of security operations centre (SOC) within National CERT, harmonisation of personal data legislation with GDPR, development of legislation related to CII.
<b>BY</b>	The lack of national cyber risk management methodology is the major challenge in BY, as well as lack of qualified personnel and resources in cyber area. The next steps for BY are the creation and use of trusted/secure channels and services for constant (real time) information exchange in the cybersecurity field and effective international cooperation between BY and EU MSs and other EaP countries.
<b>GE</b>	The main cybersecurity challenges in GE are insufficient funding, insufficient commitment of national authorities to cybersecurity matters, lack of awareness and lack of qualified personnel and resources. The next steps in the cybersecurity area are strengthening the law on information security, implementing the NIS directive, enhancing international cooperation, development of legislation related to CII.
<b>MD</b>	The main challenges in MD are the lack of national CERT, lack of qualified personnel and resources and Insufficient funds dedicated cybersecurity aspects. The next steps for MD to strengthen cybersecurity resilience should be the establishment of national CERT, development of cyber related skills, transposition of NIS directive, control and monitoring the application of minimum cyber security requirements.
<b>UA</b>	The main challenges in UA are insufficient funds and interest of authorities in cybersecurity aspects, lack of qualified personnel and resources and legacy hardware and software presenting high cyber risks. The next steps for UA are enhancement of cross-border cooperation, implementation of NIS directive, updating cybersecurity strategy, launching public/private cooperation.

## Planning for the upcoming six months

### eID/eSignature - key objectives:

- Draft a common set of requirements for supporting the process of bi-lateral agreements between EaP countries to accept eIDs notified to each other.
- Prepare regional roadmap and country based action plans to become eIDAS compliant.
- Identify possible requirements and aspects influencing eSignature in EaP countries for use in cross-border interaction.
- Prepare eSignature requirements for EaP countries.

### Cybersecurity - key objectives:

- Finalise Cybersecurity guidelines for the EaP region and hand over the results to the CyberEast project team.

## 1.3. eTrade

### State of play

#### Pilot cross-border eTrade solutions

During the reporting period the initial scope definition of eDelivery pilot has been developed:

*Pilot definition:* In the Cross-border eTrade pilot, cross-border trade partners (companies) will exchange agreed documents using eDelivery solution (CEF building block).

During the piloting, feedback from participants will be collected on how to improve the process for full scale solution implementation. The findings and recommendations (legal, infrastructure, political and other) will be prepared and shared with the interested stakeholders.

In addition, site visits will be organised for EaP country representatives to observe pilots. This will facilitate informative decisions regarding eDelivery implementation in other countries.

EU4Digital performed preparatory activities to pilot eDelivery solution in 2020:

- Developed possible use cases for piloting: (1) eInvoicing; (2) Letter of credit (requires involvement of banks); (3) eContract. Most EaP countries prioritised eInvoicing case, which is preliminary selected for piloting.
- Based on information provided by countries regarding readiness and willingness to pilot eDelivery, the following pilot country pairs were proposed for EC consideration.



**Key outputs:**

- The list of possible eDelivery use cases for solution development and piloting.
- The first draft of legal environment scan of eTrade area in the EaP countries for policy and legislation recommendations packages.

**Country perspective**

Country	Highlights
<b>AM</b>	Currently there is no legal base for eDelivery implementation. eInvoicing is already being used inside the country and applicability of other international technical standards for document exchange is being considered. Also, AM has already assigned the institution responsible for cross-border eDelivery implementation in the country.
<b>AZ</b>	Currently there is no legal base for eDelivery implementation. eInvoicing is used only inside the country and other technical standards for document exchange are not being considered. The country has identified potential responsible institutions for eDelivery implementation, though they are not officially assigned yet.
<b>BY</b>	Legal base development for eDelivery implementation is in progress. eInvoicing and electronic transport security standards are already being used on a national level. The country has identified potential responsible institutions for eDelivery implementation, though they are not officially assigned yet.
<b>GE</b>	Currently there is no legal base for eDelivery implementation. eInvoicing and other international technical standards are not being used. The country has identified potential responsible institutions for eDelivery implementation, though they are not officially assigned yet.
<b>MD</b>	Legal base in the country is sufficient for eDelivery implementation. eInvoicing is not applied in the country but is considered. The country has identified potential responsible institutions for eDelivery implementation, though they are not officially assigned yet.
<b>UA</b>	Legal base development for eDelivery implementation is in progress. National eInvoicing implementation is in progress. The country has identified potential responsible institutions for eDelivery implementation, though they are not officially assigned yet.

**Stakeholders networking**

A networking plan has been developed for the entire project duration and aligned with beneficiary countries. Networking activities planned for all EaP countries representatives (stakeholders and institutions facilitating eTrade in the region):

- Networking related to piloted solutions of cross-border eTrade, eCommerce and eCustoms (3 events): events in piloting countries to connect with EaP country representatives and observe pilot solutions, share experiences and consider further developments of the piloted solutions in the EaP region.
- Networking related to sharing information on existing solutions that enable more efficient cross-border trade facilitation and data exchange (4 events): events where existing solutions as best practices will be presented outside EaP countries.
- Networking during events and conferences related to latest trends and existing best practices in eTrade area (e.g. TRA2020 in Helsinki is currently considered as one of the networking events) (2 events).

One event has been organised for sharing information on existing solutions related to eCustoms pilot activity. EU4Digital organised site visit to Montenegro for customs representatives from EaP countries to learn about the practical working and benefits of using SEED<sup>4</sup> solution for cross-border data exchange.

**Key outputs:**

- Networking action plan.
- Site visit to Montenegro Customs for potential piloting solution (SEED) evaluation.

**Pilot mechanisms of exchange of information**

During the reporting period the initial scope definition of customs information exchange pilot has been developed and significant progress towards pilot project implementation was made:

<sup>4</sup> Systematic electronic exchange of data



**Pilot definition:** In eCustoms pilot, selected neighbouring EaP countries and EU MS customs authorities will exchange agreed customs data set using selected solution on already existing infrastructure.

During the piloting, feedback from participating customs authorities and logistics operators will be collected on the customs clearance process (if any improvements were noticed and if the solution shall be implemented regionally). Recommendations regarding further development based on the findings and piloting results of the developed solution will be provided.

EU4Digital performed preparatory activities to pilot selected eCustoms solutions in 2020:

1. Analysed existing alternatives for pre-arrival information exchange and selected solution for the pilot – SEED. Its implementation was financed by the EU and it is used in practice by the Western Balkan countries Customs Administrations. SEED was identified as the most favourable option for the piloting activity due to its proven security and data standards, easy adaptation to national systems across region and flexibility in terms of functionalities and data sets exchange requirements.
2. Defined the list of priority data scenarios to be exchanged during the piloting activity (potential data sources for information exchange are transit and export declarations).
3. Moreover, an action plan for piloting countries was drafted, including steps like nominating specialists for the pilot, defining data scope to be piloted, establishing the triggers for information exchange, signing MoU to participate in the pilot.

#### Key outputs:

- Prepared analysis and selection of preliminary piloting countries.
- Prepared initial inputs to be used for the solution development and piloting, such as priority data scenarios, initial action steps for the piloting countries.

#### Country perspective

Regarding the data exchange, there are many agreements among EaP countries, though the data exchange process is unstructured and there are many restrictions. Most of the EaP countries are using / developing electronic means for pre-arrival information exchange with bordering countries and are willing to pilot possible advanced solutions with EU countries.

Country	Highlights
<b>AM</b>	Partnership agreement between AM and EU is in place. Bilateral protocols are signed with Iran and GE. Full data set from transit declaration as well as notifications about arrival is being exchanged on periodic basis. The data is used for risk analysis.
<b>AZ</b>	Bilateral protocols are already signed with GE, UA, RU and BY. With UA full data set from export declaration is being exchanged on periodic basis. With GE data from export and transit as well as information about transport means is exchanged. The data is used for targeted customs controls.
<b>BY</b>	Bilateral protocol is signed with UA (real time) and bilateral cooperation is in place with LT. The data is used for risk analysis and targeted customs controls.
<b>GE</b>	Agreements regarding cross-border information exchange are already in place with TR, AZ and UA. Data from import, export and transit declarations are being exchanged on periodic basis. Also, existing practice of online certificates of origin exchange with China. The data is used for transit declarations.
<b>MD</b>	Agreement on mutual cooperation and assistance with UA and CEFTA agreement to adopt NCTS is in place. Full data from export and transit declarations is being exchanged with UA. The data is used for post-clearance audits and statistics.
<b>UA</b>	Agreements regarding cross-border information exchange are already in place with BY, GE, MD, AZ and EU. Also, full data from export declaration is being exchanged with MD (real time) and AZ, though it is not fully automated and some data elements are not harmonised. With BY export information and transit / entry summary. The data is used for risk analysis and targeted customs controls.

#### Digital transport corridor (DTC)

Draft concept of Digital Transport Corridor between Baltic Sea and the Black Sea has been developed:

1. Developed DTC vision consisting of three levels: (1) Local level; (2) National level, including National eLogistics Systems (NELS); (3) DTC level (country to country). The vision is based on best global practices such as DTLF, FENIX, SELIS & AEOLIX, eFTI and consultations with EaP country stakeholders.



- 2. Developed long list of pilot cases (to be aligned with EC): (1) pilot National eLogistic System; (2) eCMR usage in EaP countries; (3) eSMGS / eCIM way bill acknowledged as transit declaration; (4) Electronic certificate of Origin; (5) Usage of tracking data for faster border crossing; (6) Electronic submission of key logistics documents; (7) eTIR usage in EaP countries. Digitalisation of eLogistics documents received the biggest support among stakeholders in BY, UA and LT as well as during consultations with DG MOVE.

During Digital Transport Corridor development, the key questions raised by stakeholders have been related to centralised versus decentralised approach towards eLogistics platforms; owners and governance set-up; trust between the information sharing parties; closing digital gaps in the countries in relation to DTC components and change of mindset when introducing new ways of working.

**Key outputs:**

- Developed and aligned with countries DTC common vision according to which preparatory actions for Digital Transport Corridor pilot will be defined.

**Country perspective**

Country	Highlights
<b>AZ</b>	eSMGS/eCIM is being exchanged on a bilateral basis with some countries. Other digital key* and supporting logistic documents** are not used in AZ.
<b>BY</b>	eSMGS/eCIM is digital and fully functioning. Other digital key and supporting logistic documents are not used in BY. In July 2019, eCMR project at the level of government agencies was initiated. The pilot of electronic seals and GPS are being carried out by national sealing operator between customs offices in BY for the goods that transit from the Eurasian Economic Union.
<b>GE</b>	eSMGS/eCIM is used though for national operators only. Legal basis is in place and pilots are implemented for electronic Certificate of Origin. Other digital key and supporting logistic documents are not used in GE. The GPS tracking system for high risk trucks will be in place by the end of 2019.
<b>UA</b>	eSMGS/eCIM and eManifest are being used and fully functioning. Other digital key and supporting logistic documents are not used in UA. eCMR pilot project for national logistics system in Ukraine is being developed. Customs Code of Ukraine requires the use of electronic seals with GPS technology for transit movement of cargo regardless of transport means used. RFID is being used for security control on port's borders and in some cargo terminals.

\* Key Logistics Documents: eCMR, eSMGS/eCIM, eBill of Lading.

\*\* Supporting Logistics Documents: eManifest, ePacking list, eATA carnet, eCertificate of Origin, eInsurance.

\*\*\* Radio-frequency identification.

**Planning for the upcoming six months**

**Pilot cross-border eTrade solutions - key objectives:**

- Finalise the analysis of EaP countries' readiness to re-use the eDelivery solution based on filled-in questionnaires, identify priority regarding eDelivery piloting use case, and share with EaP countries.
- Finalise legal environment scan of eTrade area in the EaP countries against EU baseline.
- Prepare recommendations for a harmonised legislative framework for eTrade.
- Prepare eTrade pilot solution concept.
- Prepare eTrade pilot case for implementation from organisational, infrastructure and technical perspective.

**Networking - key objectives:**

- Site visit for exploring eDelivery use in EU is foreseen in February / March, 2020.
- Participation of EaP stakeholders in events and conferences to share and get information about trends, actions and state of play in the eTrade sector of different regions.

**Pilot mechanisms of exchange of information – key objectives:**

- Following agreement with EU on the geographic location of the pilots, pilot countries (local customs authorities) will confirm their participation in eCustoms piloting activities (preparatory and piloting actions).
- Recommendations for legal changes / provisions for long-term full-scale implementation of mechanisms of exchange of information and environment harmonisation with the EU baseline will be drafted.
- Customs information exchange solution concept will be developed and processes and procedures will be designed.



## Digital transport corridor (DTC)

In the coming 6 months, preparatory actions to pilot the DTC shall be completed with the focus on presenting piloting alternatives and roadmap for DTC implementation in the EaP. Following the consultations with DG MOVE, the structure and scope of the end result of preparatory actions to pilot DTC is provided below for EC approval:

- Country state of play related to DTC activity.
- DTC common vision, including high level architecture.
- List of pilot cases, including for each:
  - Description/ Context;
  - List of parties involved;
  - Pilot (business) process;
  - Prerequisites (legal, technical, organisational, etc.);
  - Best EU and global practices.
- Roadmap for DTC implementation in EaP.
- Financial estimation.

### Key objectives:

- Finalise country state of play in AZ, GE, UA, BY, LT and DTC common vision.
- Define business processes.
- Prepare roadmap for DTC implementation in EaP.
- Prepare financial estimation for pilot implementation.

## 1.4. ICT innovation

### State of play

#### Legislative framework

The EU4Digital Facility worked to identify recent developments in EaP national legislation, as well as current and upcoming initiatives related to ICT innovation legislation reforms. Each EaP country was asked to select a priority policy area, where the EU4Digital Facility could develop recommendations for legislative changes. The EaP countries selected the following policy areas:

- AM: Intellectual property rights management for digital innovation.
- AZ: New organisational forms for support of ICT Innovation.
- BY: Digitising industry (digital transformation of SMEs in traditional sectors).
- GE and UA: Digital innovation SMEs' access to finance (and scale-ups).
- MD: ICT Innovation ecosystems for start-ups and scale-ups.

#### Key outputs:

- Report on EU baseline in the selected policy areas.
- Methodology for EaP legislation gap analysis.



## Country perspective

EaP country state of play in the selected policy areas is presented below. The EU4Digital Facility has identified the preliminary needs from the governments of AM and BY. Other countries' needs will be identified at the beginning of 2020.

Country	Highlights
<b>AM</b>	<b>Selected policy area – IPR management for digital innovation.</b> Intellectual property rights is under in-depth policy area study and methodology development by the AM government. AM has a need for recommendations on the framework of commercialisation of R&D results financed by public funds, recommendations on the extension of functions of the National IPR Office and its capacity building, recommendations on development of the digital innovation ecosystem increasing the capacities of IPR.
<b>AZ</b>	<b>Selected policy area – New organisational forms for support of ICT Innovation.</b> Innovation Agency was established; its Chairman and board members have been appointed. The Agency supports innovation-oriented research and projects, including start-ups, by funding them through grants, concessional loans and venture capital fund. It also has a Business Incubation and Acceleration Centre. Azerbaijan's Digital Trade Hub, an electronic public-private partnership platform designed to facilitate the development of e-commerce in Azerbaijan and the broader region, deployed in 2019 and is expected to boost the implementation of innovative digital business models by SMEs.
<b>BY</b>	<b>Selected policy area – Digitising industry (digital transformation of SMEs in traditional sectors).</b> The Ministry of Economy has started an initiative "Smart Industry Belarus". The platform is designed to connect legal entities and citizens interested in shaping the modern industrial sector of Belarus based on the use of key elements of the Industry 4.0 concept and new organisational management principles. Ministry of Informatisation expressed need to support in competence building of policy makers.
<b>GE</b>	<b>Selected policy area – Digital innovation SMEs' access to finance (and scale-ups).</b> From July 2018, small business income is taxed with 1% instead of 5% and the limit of income to be considered a small business was increased 5 times. Implementation of the new tax initiative resulted in a five-fold reduction of the turnover tax for small entrepreneurs. After amendment in the tax law, entrepreneurs are allowed to be registered as the VAT payer and be the small entrepreneurs. With the help of the EU, the Georgian government created the credit guarantee programme, supporting SMEs which operate in sectors where loan issuance is restricted, or do not have enough property for securing a loan (launched 1 April).
<b>MD</b>	<b>Selected policy area – ICT Innovation ecosystems for start-ups and scale-ups.</b> A Law on Virtual IT Parks, which regulates the procedure and tools for registration of member residents of information technology parks as well as tax incentives to which member residents are entitled has been extended to 2020.
<b>UA</b>	<b>Selected policy area – Digital innovation SMEs' access to finance (and scale-ups).</b> The National Start-ups Fund was established in July 2019, with a total amount of UAH 390m (almost EUR 15m) available for funding Ukrainian start-ups in a form similar to grants.

## Networking of innovation players

During this period, the EU4Digital Facility, developed the ICT innovation networking plan, which outlines ICT innovation networking activities (networking events and the study visit) for the upcoming 2 years. Networking activities planned:

- 6 networking events related to the selected policy areas to connect stakeholders in the EaP and the EU and to facilitate the deeper knowledge of the global agenda in selected policy areas.
- Study visit to the EU to provide hands-on understanding of the EU best practices and tools for the ICT innovation ecosystem and to establish in-person contacts among EaP policy-makers and EU stakeholders.

The [1st networking event on Blockchain](#) was organised in November 11-13, 2019, Malaga (Spain), which brought the main stakeholders in the area of Blockchain from the EaP countries to "Convergence: The Global Blockchain Congress", an international conference organised by the EC and other partners, where the EaP blockchain policy-makers and experts met to gain better knowledge of the situation in the other countries of the EaP region, and to establish contacts with professionals and decision-makers from the EaP region and the EU. The conference also hosted a panel discussion focused on the EaP region – 'Digital innovations, blockchain and scale-ups in emerging markets' – an opportunity for EU4Digital to deliver the vision about the region to the conference participants. The informal EaP Blockchain taskforce was formed and the members are actively sharing information and news through social networks.

**Key outputs:**

- Regional Networking plan.
- 1st Networking event - EaP workshop and panel during “Convergence: The Global Blockchain Congress”, an international conference organised by the EC and other partners.

**Promotion campaigns**

The EU4Digital Facility has developed the ICT innovation promotion plan, which outlines the goals, promotion activities and timeline for the upcoming 2 years. The activities include:

- Development and dissemination of relevant content in internal and external communication channels, such as external websites and magazines dedicated to topics related to ICT innovation.
- Supporting the establishment of women mentorship programmes in the EaP countries.

**Key outputs:**

- Promotion plan, including actions to raise awareness of the ICT innovation in the EaP countries and actions to develop women mentorship program “Women GoTech”.
- Preliminary agreement with women mentorship organisation “Women GoTech” regarding the development of the women mentorship programme know-how package.

**Planning for the upcoming six months****Legislative framework - key objectives:**

- EaP country legislation gap analysis for the 5 selected priority policy areas:
  - IPR management for digital innovation (selected by AM);
  - New organisational forms for support of ICT Innovation (selected by AZ);
  - Digitising industry (digital transformation of SMEs in traditional sectors) (selected by BY);
  - Digital innovation SMEs’ access to finance (and scale-ups) (selected by GE and UA);
  - ICT Innovation ecosystems for start-ups and scale-ups (selected by MD).
- Recommendations for national policy instruments.
- Final recommendations for policy implementation monitoring methodology.
- 6 national policy implementation action plans for the improvement of national legislation for ICT innovation.

**Training packages - key objectives:**

- Concept of trainings for EaP target groups.

**Networking of innovation players - key objectives:**

- 1 networking event (preliminary - on ICT Innovation ecosystems for start-ups and scale-ups).
- Draft Memorandum of Understanding on the establishment of the StartEaP Week.
- Guidebook on organising StartEaP events.

**Extension of networks and platforms - key objectives:**

- Registration of the ICT innovation and start-up ecosystem stakeholders in the relevant Start-up Europe networks and platforms.
- Identification of technical possibilities of the Startup Europe Map and the need to extend its functionality and integrate the data on EaP ICT innovation and start-up ecosystem stakeholders.
- Assessment of the needs of EaP ICT-related techno parks for an additional ICT-based cooperation functionality and the different approaches of implementation.

**Promotion campaigns - key objectives:**

- Selected EU organisation with best practices of organising women mentorship programmes.
- Selected EaP organisations for women mentorship programme knowledge transfer.

## 1.5. eHealth

**State of play****Harmonisation, interoperability guidelines and standards**

During more than 10 workshops (by visiting the countries and remotely) EU4Digital facilitated the collaboration of various stakeholders and capacity building within the countries by involving stakeholders from various areas





of eHealth. EU4Digital has developed an eHealth Assessment Framework and produced a high level Country Update report. The report identified a high segmentation in most of the EaP region – the lack of unified eHealth vision and programme is apparent. The situation varies from a quite developed level in UA, AM, GE to the starting level of eHealth in AZ and MD. At present, most of the Partner countries lack national enabling solutions for a cross-border pilot, and none of the EaP countries have laws regarding cross-border medical data exchange.

At the same time, there is an observed progress and high interest in the further development of the eHealth area.

For further advancing and developing the eHealth ecosystem on a national level the needs were identified for:

- Development of comprehensive and actionable digital health strategy.
- Establishing a robust financing and operational model.
- Establishing and operationalising digital health governance.
- Developing digital health architecture and establishing digital health governance.

These actions are needed to enable common harmonisation and interoperability, and are to be seen as a prerequisite to moving to the development of cross-border eHealth services.

#### Key outputs:

- Established eHealth work groups.
- Performed interviews and workshops with Ministries of Health and other agencies in 4 EaP countries.
- Defined common eHealth assessment framework and criteria for setting priorities for the next steps.
- Defined common reference eHealth architecture.
- As-is analysis of the eHealth on a national level and specified EaP countries' needs for harmonisation and interoperability.

#### Country perspective

Country	Highlights
<b>AM<sup>5</sup></b>	<p>Patient Summary is accessed nationwide (with HL7 CDA integration). ePrescription is running in a pilot mode since December 2018.</p> <p>Country has advanced eHealth interoperability platform. However, national interoperability infrastructure could be utilised more (not all governmental domains - including eHealth - have yet adopted and use it, integrating existing information assets and registers). There is also a lack of one-stop digital access channels for patients.</p>
<b>AZ</b>	<p>Patient Summary is not implemented. ePrescription is not implemented – planned in the Roadmap 2025.</p> <p>Currently, the country is focused on the further development of the Mandatory Social Health Insurance capability planned to be introduced from 2020, the unified web portal as a cloud service to HCPs (EMR cloud service) development is planned by 2025.</p>
<b>BY</b>	<p>Patient Summary is not implemented. ePrescription is centralised and accessed by all state health organisations and most private sector organisations.</p> <p>There is a strong regulation base and operational eHealth services for eHealth in BY, as well as a strong operator team and well established different eHealth systems/services piloting practice in Minsk hospitals.</p>
<b>GE</b>	<p>Patient Summary is included in the EHR system and accessed nationwide. ePrescription is implemented in Tbilisi and planned to be implemented nationwide in 2020.</p> <p>In GE core eHealth services are operational, but no eHDSI as such exists. The challenge to roll out eHealth services all over the country remains due to lack of Digital eHealth user skills (patients and providers) and capabilities at HCPs level. Also, the unified eHealth vocabulary is needed.</p>
<b>MD</b>	<p>Patient Summary is not implemented. ePrescription is not implemented.</p>

<sup>5</sup> Information is not yet validated.



Country	Highlights
	Country has operating governmental interoperability platform (eGov), Hospital and primary care providers use electronic medical record (EMR) IT solutions/ cloud services, but no operational eHealth (EHR) services in place. To head start with eHealth service development, the actionable eHealth strategy needs to be established with strong healthcare domain ownership for implementation.
UA	<p>Patient Summary is not implemented (initial technical specifications created in 2018, but currently on hold and timeline for its development is not confirmed yet). ePrescription is implemented recently (since 1 April 2019).</p> <p>There is an enormous head start progress of eHealth development in UA achieved by 2019. Ecosystem of more than 10 suppliers providing Cloud services to HCPs using the countries eHDSI. The robust operational and funding model needs to be defined and established.</p>

### eHealth collaboration platform

EU4Digital prepared an operational concept and topicality tree for the EaP eHealth Collaboration and Communication platform. The platform will be accessed via the EU4Digital communication portal, and collaboration platform will be based on SharePoint Online solution.

#### Key outputs:

- Operational concept of eHealth collaboration platform.

### EaP involvement in EU initiatives

This activity included development of Country Priority Assessment questionnaires, and their distribution to the relevant EaP country stakeholders. Five out of the six EaP countries have submitted their Country Priority Assessment questionnaires identifying main areas of interest for collaboration partnerships within EaP region and EU Reference sites.

Based on European Innovation Partnership on Active and Healthy Ageing (EIP on AHA) Blueprint strategic collaboration priorities and countries results, common interests for collaboration and potential applications for Reference sites are identified (see table below).

Based on the results achieved, the next activity will be the organisation and facilitation of targeted communications call between relevant EaP stakeholders in the upcoming period. Main topics of the agenda for calls will be discussion on coinciding collaboration interests and aspects that affect participation in EIP on AHA activities, especially enabling the stakeholders to participate in the 3rd Extended Call for Reference Sites.

Also part of the activity was attendance of the Active and Assisted Living (AAL) Forum 2019 in Aarhus from 23 to 25 September regarding smart and practical implementation of digital solutions to enhance active and healthy ageing – conference featured EIP on AHA topics. As a result, face-to-face meetings were conducted with the FUNKA organisation, which is providing administrative support to the EIP on AHA partnership and dealing with organisation of Calls for Reference sites.

As a result of communication established with the FUNKA representatives, EaP countries were invited to take part in the Extended 3<sup>rd</sup> Call for Reference Sites. Three Information and Q&A Calls were organised by FUNKA and EU4Digital to facilitate EaP countries' involvement in EIP on AHA. Representatives from **AZ** and **GE** participated in the calls expressing commitment for in-depth collaboration and involvement in the EIP on AHA programmes.

#### Key outputs:

- Consortium, AZ and GE representative participation in the FUNKA organised information and Q&A Call for Reference Sites thus facilitating cooperation between EaP countries and EIP on AHA programmes.
- Development of a draft Roadmap and recommendations for EaP region's participation in EU projects, programmes and initiatives.
- Consolidation of EIP on AHA best practices reference material that will be distributed to EaP countries based on countries priority assessments and areas of collaboration interests.

### Country perspective



Country	Highlights
<b>AM</b>	Expressed interest in collaboration regarding all EIP on AHA Blueprint priorities. Highest interest for EIP on AHA involvement needs and priorities indicated for data analytics for predictive risk stratification and maintenance.
<b>AZ</b>	Collaboration interest regarding the following practices: a project in data analytics for predictive risk stratification and prevention area and a project in the digital support for integrated care area.  Cooperation with EIP on AHA Reference Site programme was facilitated by enabling AZ representative's participation for potential commitment to submit Application for Extended 3 <sup>rd</sup> Call for Reference Sites.
<b>BY</b>	Collaboration and sharing interest indicated regarding the following practices: Telemedicine and ePrescription.
<b>GE</b>	Collaboration and sharing interest indicated regarding the following practices: Immunisation Module and ePrescription.  Cooperation with EIP on AHA Reference Site programme was facilitated by enabling GE representative's participation for potential commitment to submit Application for Extended 3 <sup>rd</sup> Call for Reference Sites.
<b>MD</b>	Expressed interest in collaboration regarding all EIP on AHA Blueprint priorities. Interest indicated for all involvement needs and priorities within EIP on AHA.
<b>UA</b>	Elbrus site was awarded Candidate Reference Site status within EIP on AHA Reference Site network. Elbrus Centre provides prophylaxis, sanitation and treatment services.

## Planning for the upcoming six months

### Harmonisation, interoperability guidelines and standards - key objectives:

- EaP country specific extensions for the eHealth architectural reference model.
- Initial set of harmonised interoperability guidelines and standards, including specifications and frameworks.
- 3 workshop events for milestone outputs review, task force groups and capacity building.

### eHealth collaboration platform - key objectives:

- Establishment of the eHealth communication web portal.
- Establishment of the eHealth collaboration space.
- Initial setup and maintenance of content on EaP eHealth harmonisation and interoperability.

### EaP involvement in EU initiatives - key objectives:

- Communication calls between EaP stakeholders with matched contribution interests to facilitate potential participation of countries in extended 3rd call for reference sites
- Workshop regarding EaP stakeholder interests for potential participation of the EaP countries in extended 3rd application call for becoming reference sites.
- Further collaboration with FUNKA, regarding timeframe and requirements for extended 3rd application call for reference sites and potential involvement of EaP countries.

## 1.6. Digital skills

### State of play

#### Digital skills measurement

EU4Digital focused on collecting and validating baseline information on digital skills measurement according to EU MS practices and began work on EaP-wide and country-specific recommendations for the *Methodology for measuring and forecasting digital skills gaps and identifying priority remedial actions*. The baseline questionnaire was developed to identify which indicators are currently monitored in EaP countries and covered 3 main dimensions – General questions (information about data collecting agencies and indicator measurement types), Indicator categories (information about the indicator categories collected in the country) and National Plans (Country policy regarding digital skill measurement and willingness to adjust it to EU practices). Results of the Questionnaire were presented during the Digital Skills Network Workshop in December, 2019, where some countries indicated need for further discussions on recently added indicators and indicators they are planning to add during 2020.



All countries have indicated interest in adapting their methodologies to EU MS approach. EaP-wide recommendations will consider two model options:

- Adoption of Human Capital dimension of DESI only.
- Adoption of 3 dimensions of DESI:
  - Human Capital;
  - Use of internet services;
  - Integration of digital technology.

DESI was chosen as it is used on EU level to summarise relevant indicators on digital performance and track EU MS digital competitiveness. The 3 DESI dimensions selected directly (Human capital) and indirectly (Use of internet services and Integration of digital technology) relate to digital skills of citizens, labour force and enterprises. Country-specific recommendations will concern either the adoption of new questions/ adaptation of existing questions in existing surveys or establishment of new data collection mechanisms.

**Key outputs:**

- Preliminary EaP country digital skills indicator measurement baseline analysis and result alignment with EaP country representatives. The baseline analysis will support the creation of the “Methodology for measuring and forecasting digital skills gaps and identifying priority remedial actions”.

**Competence Framework**

The Competence Framework for SMEs and microbusinesses in the EaP region aims to establish common language for digital skills and competencies for its target audience and to support the definition of career and learning paths, job roles and learning needs. The outputs of this activity are:

- The draft and final Methodology for the development of the Competence Framework that will include:
  - The objectives of the Competence Framework;
  - The structure of the Competence Framework;
  - The approach for developing the Competence Framework, job role profiles and guidelines for use.
- The Competence Framework and guidelines for its use that will include:
  - The Competence Framework;
  - 3-4 job role profiles;
  - Guidelines and recommendations for the application of the Competence Framework.

The Competence Framework for SMEs and microbusinesses will be based on the **e-Competence Framework** (e-CF) and the **Digital Competence Framework** (DigComp) and aims to preserve their original dimensions (competence areas, competences and their descriptors, levels of competences, samples of skills and knowledge ).

The Competence Framework will support:

- Cross-referencing of **e-CF** and **DigComp** through identification of synergies between the two frameworks;
- Use in the EaP and SME/ microbusiness context through **cross-referencing of terminology** (e.g. cross-referencing terms used in e-CF with relevant business terminology) and consideration of other needs for adaptation (such as different competence levels when implementing the framework in education, e.g. due to shortage of ICT specialists and need to speed up their entry in the labour market).

**Key outputs:**

- Outline and description of competence framework development for the “Draft methodology for the development of a common competence framework”, the main principles and content of which were validated with EaP country representatives (sections under development cover job role profile development and the development of guidelines for use).

**Country perspective**

Country	Highlights
<b>AM</b>	<ul style="list-style-type: none"> <li>- TheAM Digital Skills and Jobs Coalition could improve coordination for implementing EU level Competence Frameworks in the field of digital competences.</li> <li>- A new advisory institution has been developed under the Ministry of Hi-Tech Industry that helps to determine the demand for SME professionals.</li> </ul>



Country	Highlights
<b>AZ</b>	<ul style="list-style-type: none"> <li>- The Digital Skills and Jobs Coalition should be able to easily improve coordination for implementing EU level Competence Frameworks in the field of digital competences</li> <li>-</li> </ul>
<b>BY</b>	<ul style="list-style-type: none"> <li>- The Digital Skills and Jobs Coalition could improve coordination for implementing EU level Competence Frameworks in the field of digital competences. BY has begun setting and approving standards for enabling training and self-assessment through a national DigComp Platform and discussions have been held on adapting the e-CF for the training and employment of ICT professionals;</li> <li>- Project “Promoting the formation of an agenda and institutional prerequisites for strengthening digital competencies in BY, UA and GE” among other deliverables aims to establish the use of e-CF in BY, UA and GE.</li> </ul>
<b>GE</b>	<ul style="list-style-type: none"> <li>- The Digital Skills and Jobs Coalition could improve coordination for implementing EU level Competence Frameworks in the field of digital competences .</li> <li>- Project “Promoting the formation of an agenda and institutional prerequisites for strengthening digital competencies in BY, UA and GE” among other deliverables aims to establish the use of e-CF in BY, UA and GE.</li> </ul>
<b>MD</b>	<ul style="list-style-type: none"> <li>- The Digital Skills and Jobs Coalition could improve coordination for implementing EU level Competence Frameworks in the field of digital competences .</li> <li>- European Training Foundation plans to launch a project that will establish national coordinators on the ministerial level to promote the integration of SELFIE self-assessment tool (an initiative by the EC – a tool designed to help schools to embed digital technologies into teaching, learning and student assessment and linked with EU competence frameworks) in the existing training and education systems.</li> <li>- Digital competence standards have been developed and approved for primary, secondary and high-school students in MD taking into account the e-CF and other relevant EU practices and documents;</li> <li>- Approximately 30 institutions have already implemented the SELFIE self-assessment tool.</li> </ul>
<b>UA</b>	<ul style="list-style-type: none"> <li>- UA National Digital Coalition “Digital Transformation Coalition” is able to coordinate adopting EU Competence Frameworks of digital competences in UA.</li> <li>- European Competence Frameworks developed by the Joint Research Centre have been utilized to develop a new state education standard, curricula framework and the teacher training programmes.</li> <li>- Focus groups conducted on the implementation of e-CF in SMEs under the Project “Promoting the formation of an agenda and institutional prerequisites for strengthening digital competencies in BY, UA and GE”. Challenges faced with securing local company buy-in and identifying the best approach to make e-CF binding.</li> </ul>

### National coalitions

EU4Digital has supported countries in the establishment of national coalitions, mainly through sharing **best practices and examples from EU MS** (all countries) and **reviewing national coalition document drafts** (UA, BY, GE).

The support provided by EU4Digital is tailored to each country’s needs, and aims to supplement, instead of duplicate activities conducted as part of other projects.

### Key outputs:

- **UA National Digital Coalition “Digital Transformation Coalition”** established.
- Identification of coalition stakeholders in progress and draft memorandums developed in BY, GE.

### Country perspective

Country	Highlights
<b>AM</b>	<ul style="list-style-type: none"> <li>- Coalition has been established (memorandum signed and stakeholders identified) and action plan has been developed in 2017.</li> <li>- Due to the establishment of the Ministry of Hi-Tech Industry, coalition members need to be updated. Objectives need to be reviewed as they were drafted in 2017. EU4D will support AM in reviewing the memorandum and action plan and provide recommendations for reaching actionable and practical results.</li> </ul>
<b>AZ</b>	<ul style="list-style-type: none"> <li>- AZ has expressed commitment for establishing a national coalition in the first half of 2020. On December 24, 2019 a kick-off and discussion on establishing a national coalition was conducted. Further discussions to be held in January 2020.</li> </ul>



Country	Highlights
	<ul style="list-style-type: none"> <li>- Stakeholder identification currently in progress.</li> <li>- EU4D will support AZ in reviewing prepared memorandum and action plan, by sharing EU MS best practices on managing coalitions and potentially participating in the coalition kick-off meeting.</li> </ul>
BY	<ul style="list-style-type: none"> <li>- Stakeholder identification in progress, draft memorandum has been developed, while the coalition has not yet been established and the action plan not yet developed. Currently stakeholders have agreed to pursue informal cooperation and coordination without signing the memorandum.</li> <li>- On December 19, 2019 a roundtable to discuss the coalition was held: EU4Digital team presented EU MS best practices on identifying coalition members and objectives; designing an action plan for the coalition; managing, promoting and administrating the coalition.</li> </ul>
GE	<ul style="list-style-type: none"> <li>- Draft memorandum and stakeholder list has been developed, but before signing the memorandum, the draft needs to be adjusted according to the new Broadband Development Strategy and its action plan (approved on 09.01.2020., to be published during January 2020). The Georgian government has identified that the implementation of broadband requires the development of digital skills and plans to implement activities defined in the Broadband strategy with the help of the coalition.</li> <li>- Coalition establishment is planned in early 2020.</li> </ul>
MD	<ul style="list-style-type: none"> <li>- MD has expressed commitment for establishing a national coalition during 2020, identification of stakeholders and discussions on coalition establishment are in progress among the Ministry of Economy, Ministry of Education and Moldovan Association of Information and Communications Technology Companies.</li> <li>- EU4D will support MD in reviewing prepared memorandum and action plan and by sharing EU MS best practices on establishing and managing coalitions.</li> </ul>
UA	<ul style="list-style-type: none"> <li>- Stakeholders have been identified, draft memorandum has been developed and the coalition established, the action plan and coalition operating model is currently under development.</li> <li>- Next steps include the development of an action plan and operating model for the coalition: EU4Digital has shared EU MS examples of coalition action plans and examples of operating models for large coalitions.</li> </ul>

## Planning for the upcoming six months

### Digital skills measurement - key objectives:

- Methodology for measuring and forecasting digital skills gaps and identifying priority remedial actions.

### Competence Framework - key objectives:

- Draft methodology for the development of a common competence framework for SMEs and microbusinesses in the EaP region.

### National coalitions - key objectives:

- Establishment of National Digital Skills and Jobs Coalitions in AZ and GE<sup>6</sup>.

### Conferences, training and study visits - key objectives:

- 1 conference on sharing EU best practices on European Competence framework implementation, digital skills measurement, management of national coalitions with EaP network representatives (aligned with the first biannual Digital Skills Network Workshop according to the priorities identified by Network participants).

## 1.7. Communication

### State of play

#### Website for EU4Digital

Following its pre-launch at the Steering Committee meeting on 17 September, and an additional round of consultations with EU4Digital networks, EU Delegations and other key stakeholders, the official EU4Digital website [eufordigital.eu](http://eufordigital.eu) was launched to the public on 31 September 2019. To date, the website has a total of **31 designed pages** in English and **217 developed pages** in additional 7 national languages.

To track the efficiency of the website operation, website analytics was gathered and thoroughly analysed. Since the moment of its launch, the website has seen a total of **1,767 visitors**, and **14,070 pages** were viewed in the first 3 months of operation.

<sup>6</sup> Assuming agreement can be reached among involved stakeholders on coalition operating model, governance and priorities.



In order to stimulate the content flow from the side of EU4Digital stakeholders and partners, the **editorial guide** for website management was developed. In the process of alignment with the key partners and implementers (including the World Bank's Broadband project and EaP Connect project), the developed content templates proved to be an efficient tool to align on the editorial expectations and ensure the comprehensive presentation of the relevant content.

**Key outputs:**

- Official **EU4Digital website** designed and launched in September 2019.
- Ongoing development of **website content** and website analytics process supported.
- **Editorial guide** for website management developed.
- Key materials selected and published on capacity4dev on the created [EU4Digital page](#).

**EU4Digital social media presence**

In the reporting period, a targeted and elaborated social media outreach plan has been developed to ensure EU4Digital social media presence, to make the brand more recognisable, to raise awareness of the target audience and engage with them on social media.

Since the EU4Digital Facility has no owned social media channels, it relies fully on partner channels. For the launch of its first campaign, the EU4Digital team aligned with the EU Neighbours East team and local EU Delegations. All preparation activities have been performed, including the development of the campaign plan and campaign materials, and the campaign is planned to be launched in January 2020.

**Key outputs:**

- EU4Digital **Social media outreach plan**.
- **Cooperation** with partners established to ensure EU4Digital social media presence.

**Communication activities and visibility of EU4Digital**

The EU4Digital newsletter is an important tool to keep core stakeholders informed about the developments of the Initiative. Two EU4Digital newsletters have been prepared and distributed to the list of subscribers in [July](#) and [November](#) respectively. The first newsletter was received by **532** subscribers, while the second one was distributed to **602** subscribers. The increased website traffic will generate more subscriptions; this number has grown organically to reach **729** subscribers by the end of December.

To further support the EU4Digital visibility, the team prepared visibility & communication materials for the two remaining country kick-off events in BY and MD. Dedicated conference packages were prepared and aligned with the EU Delegations, taking into account local visibility requirements. In addition, the support was provided in the organisation of these events as well as in preparation of country press monitoring reports for the two events mentioned.

As a next step, the partnerships with the six local media companies have been initiated. The respective partnerships will support the visibility of EU4Digital actions and achievements on a local level. The local media partners have been selected following the consultation process with EU Neighbours and local partners. The contracting process will be finalised early in 2020.

**Key outputs:**

- Two EU4Digital **newsletters** developed and distributed to a list of subscribers.
- Two remaining **country kick-off events** (in Belarus and Moldova) supported.
- **Partnerships with the six local media** companies initiated.

**Impact and result monitoring**

During the second half of 2019, the monitoring framework was further reviewed and finalised through iterative stakeholder consultations with DG NEAR, the EU4Digital thematic streams (and networks) and the additional Broadband project under the EU4Digital umbrella. These consultations included an intensive three-day monitoring workshop with the six streams of the EU4Digital Facility (in September 2019, Vilnius). In this regard, both the list of performance indicators and the intervention logic have been finalised.

**Key outputs:**

- List of **performance indicators and the intervention logic** finalised.

**Ensuring coherence and coordination of activities**



To ensure the synergies and coordination with EU4Digital partners, cooperation has been established with the following stakeholders:

- EU Neighbours team: the close coordination was initiated and is ongoing to ensure the social media presence of EU4Digital via digital campaigns, and regular sharing of the relevant EU4Digital news, events, stories and publications on the EU Neighbours East website.
- EaP Connect: the coordination to ensure an efficient content exchange process was established, aligning on the content production templates in place, support was provided with the redesign of EaP Connect's website.
- World Bank: regular coordination calls took place to introduce the EU4Digital visibility and content production requirements.

#### **Key outputs:**

- **Cooperation** with the key EU4Digital stakeholders established.

#### **Planning for the upcoming six months**

##### **Website for EU4Digital – key objectives:**

- Perform content and technical maintenance of the EU4Digital website on a regular basis (publish 20-30 new content items monthly about the core EU4Digital developments).
- Gather and analyse the second set of website analytics and evaluate the website performance.
- Select and publish on capacity4dev relevant EU4Digital materials.

##### **EU4Digital social media presence – key objectives:**

- Run the first social media campaign throughout January 2020.
- Align the next campaign plans with EU Neighbours and EU Delegations.

##### **Communication activities and visibility of EU4Digital – key objectives:**

- Plan, prepare and conduct the thematic communication campaigns.
- Develop and distribute January, March and May editions of EU4Digital newsletter.
- Support major events organised by EU4Digital teams, including production of general promotional materials to support EU4Digital visibility.

##### **Impact and result monitoring – key objectives:**

- Finalise KPI monitoring system (i.e. monitoring database and monitoring manual), including the defined indicators for the newly launched Cybersecurity project.
- Report on the results (format to be agreed upon).

##### **Ensuring coherence and coordination of activities – key objectives:**

- Set up a framework to perform coherence analysis in coordination with thematic teams and country coordinators and based on the mapping of bilateral assistance projects.





## 2. Key events

### Summary of past events

The following section presents multiple digital related events that took place in the EaP and EU countries during the past 6 months period (July 2019 – December 2019) in relation with 6 thematic areas.

Past events
<b>General</b> <ul style="list-style-type: none"> <li>Supporting the digital economy and society: spotlight on EU4Digital in Minsk (<a href="#">Read more</a>).</li> <li>1<sup>st</sup> EU4Digital Facility Steering Committee meeting (<a href="#">Read more</a>).</li> <li>Digital opportunities for business and citizens: EU4Digital launch in Chisinau (<a href="#">Read more</a>).</li> </ul>
<b>Telcom rules</b> <ul style="list-style-type: none"> <li>8<sup>th</sup> Meeting of the Independent Regulators and Broadband Expert Working Group (IRB EWG) (<a href="#">Read more</a>).</li> <li>Chisinau hosts meeting of Expert Group on Radio Frequency Spectrum in the Eastern Partnership (<a href="#">Read more</a>).</li> <li>7<sup>th</sup> Meeting of Roaming Expert Working Group (REWG) (<a href="#">Read more</a>).</li> <li>Eastern Partnership countries agree principles of Regional Roaming Agreement (<a href="#">Read more</a>).</li> </ul>
<b>eTrade</b> <ul style="list-style-type: none"> <li>EU4Digital team visits Montenegro to learn about customs data exchange system in Western Balkans (<a href="#">Read more</a>).</li> <li>eCustoms meeting with customs representatives from Belarus and Ukraine to recap the SEED site visit in Podgorica, Montenegro.</li> <li>Future priorities in focus at eTrade Network workshop (<a href="#">Read more</a>).</li> <li>EU4Digital team conducts site visit to Lithuania-Belarus border crossing point (<a href="#">Read more</a>).</li> <li>Digital Transport Corridor workshops take place in Belarus, Ukraine and Lithuania (<a href="#">Read more</a>).</li> </ul>
<b>ICT innovation</b> <ul style="list-style-type: none"> <li>Azerbaijan holds its second Innovation Week (<a href="#">Read more</a>).</li> <li>ICT Innovation networking event (<a href="#">Read more</a>).</li> </ul>
<b>eHealth</b> <ul style="list-style-type: none"> <li>AAL Forum 2019 (<a href="#">Read more</a>).</li> </ul>
<b>Digital skills</b> <ul style="list-style-type: none"> <li>Competence Framework methodology: activity kick-off event and workshop (<a href="#">Read more</a>).</li> <li>7<sup>th</sup> Workshop of the eSkills Network (<a href="#">Read more</a>).</li> <li>Digital Skills and Jobs roundtable in Minsk (<a href="#">Read more</a>).</li> </ul>

### Events planned for the upcoming six months

The following section presents multiple events planned in the upcoming reporting period (January 2020 – December 2020) in the 6 thematic areas. The calendar is indicative (both dates and countries); confirmed plan of events will be provided on monthly basis together with monthly progress reports.

Upcoming events
<b>Telcom rules</b> <ul style="list-style-type: none"> <li>EU4Digital country workshops on reassignment of 700 MHz frequency band in UA and AM (January).</li> <li>EU4Digital country workshops to present combined roaming report and its background as well as draft RRA clauses and next steps to relevant stakeholders in all EaP countries (February-May).</li> <li>EU4Digital country workshops to present the methodology for assessing the state-of-play, criteria covered and next steps on regulatory independence to relevant stakeholders in all EaP countries (February-May).</li> <li>Meeting of the EaPeReg Independent Regulators and Broadband Expert Working Group (IRB EWG) in Serbia (March).</li> <li>Meeting of the EaPeReg Spectrum Expert Working Group (SEWG) (Mid-April). Location to be decided.</li> </ul>



Upcoming events
<ul style="list-style-type: none"><li>Meeting of the EaPeReg Roaming Expert Working Group (REWG). Location and date to be decided.</li></ul>
<b>Trust and security</b>
<ul style="list-style-type: none"><li>2<sup>nd</sup> Trust and Security Network event to present the progress of Trust and Security stream activities and validate results (March). Location to be decided Belgium / BY.</li><li>Country visits and meeting with stakeholders to evaluate eID and eSignature service maturity and to clarify and / or gather additional information in MD, UA, AZ, BY and GE (January-February).</li></ul>
<b>eTrade</b>
<ul style="list-style-type: none"><li>Site visit for EaP country representatives to observe practically used eDelivery solution (February-March). Location and date to be decided.</li><li>Networking during selected conference sharing and getting information about trends, actions and state of play in the eTrade sector of different regions, as well as exchanging the contact information which will help share knowledge and strengthen the network. Location and date to be decided.</li><li>8<sup>th</sup> eTrade Network event in AM (date to be decided).</li><li>Site visit for EaP country representatives to observe practically used solutions related to Digital Transport Corridors. Location and date to be decided.</li><li>eDelivery site visit for EaP country representatives to observe preliminary pilot solution from a practical perspective in cross-border eTrade area (February-March). Location and date to be decided.</li></ul>
<b>ICT innovation</b>
<ul style="list-style-type: none"><li>2<sup>nd</sup> ICT innovation networking event (May). Location to be decided.</li><li>7<sup>th</sup> EU4Digital ICT innovation Expert Network workshop (March-April). Location to be decided.</li></ul>
<b>eHealth</b>
<ul style="list-style-type: none"><li>eHealth Network event on the common guidelines for eHealth Harmonisation and interoperability standards in EaP region, as well as the next steps regarding the participation in EIP on AHA (February). Location to be decided.</li><li>Workshop with eHealth Network on Detailed assessment results with all EaP countries representatives (January).</li><li>Workshop with eHealth Network on Common eHealth interoperability and harmonisation roadmap and guidelines with all EaP countries representatives (April).</li></ul>
<b>Digital skills</b>
<ul style="list-style-type: none"><li>Digital skills Network event with the main goal to validate EU4Digital results and discuss the progress with regard to national coalition establishment (May). Location to be decided.</li><li>Conference on EU best practices on European Competence framework implementation digital skills measurement and / or national coalition establishment (topics based on priorities identified by Digital Skills Network) (June). Location and date to be decided.</li><li>National Digital Skills and jobs coalition kick-off meetings (June). Potential countries – BY, AZ, MD and GE.</li><li>Study visit of EaP representatives to an EU MS according to priorities defined by the Digital Skills Network covering European Competence framework implementation, digital skills measurement and / or national coalition establishment (June). Location to be decided.</li></ul>