

# Supporting culture in the Eastern Partnership



# Creating cultural collections online

A digital library to capture and preserve 300 years of Armenian cultural history has already created more than 80,000 digital objects, thanks to support from the NREN ASNET-AM and the EUfunded EaPConnect project. In Ukraine and Belarus similar efforts are under way.

Key to this work is a close relationship with the Polish NREN, PSNC, which has been a partner in the EaPConnect project since its early days. Specialists at PSNC created dLibra software to support e-publication from start to finish. dLibra is now widely used in Poland by academic institutions, public libraries, museums and archives to create digital libraries. In 2019, the PSNC experts provided training to project partners and winners of the 2017 EaPConnect Enlighten Your Research (EYR) programme whose projects aimed to create digital libraries for research (Armenia) and cultural heritage (Ukraine).

EaPConnect has provided hightech digitising equipment such as a new specialist scanner for use in Ukraine by URAN Association. URAN has created a centre for the digitisation of cultural heritage based on the Igor Sikorsky Kyiv Polytechnic Institute library (dlibra.uran. ua). Their digitised materials are being stored in a virtual digital library provided by PSNC. In this way, the historical and



academic archives of Ukraine are online and becoming available to people even in the furthest corners of the country.

In Belarus, the NREN BASNET is now finishing work on localisation of its digital library (dlibra.basnet.by), providing a hosting service for the dLibra library developed in PSNC. Its work to fill the library has started with the digitisation of a few items from the 15th Century. The goal is to create around 30,000 digital objects from rare books of cultural significance.

In Armenia, work on a pan-Armenian digital library (arar.sci.am) is more advanced. The 80,000 digital objects created so far include books, newspapers, articles etc. On a technical level, this means that ASNET-AM is providing a virtual server with disc space of 256GB, to be enlarged with another 512GB. ASNET-AM staff are responsible for maintaining arar.sci.am, providing user registration, system back-ups, website maintenance, importation of materials and liaison with PSNC experts, as well as consultation to the library editors.

This Armenian digitisation effort has been achieved in around just one year. ASNET-AM plans to ultimately create an open access repository of Armenian research outputs, and a database about the victims and survivors of the Armenian Genocide that will include audio and video testimonies. With effort from the 2017 EYR winning project, there will also be digitised collections from the country's regional museums as well as material from all the major Armenian museums and libraries.

Digital libraries and the number of objects they contain are certainly set to grow!

#### Pictures Top left: Armenian cultural materials (courtesy of ASNET-AM).

Bottom left: Belarusian cultural materials (courtesy of BASNET).

Right: Kristi Mühling and Ibrahim Babayev perform the world premiere of 'Mystic' on the traditional Estonian kannel and the Azerbaijani tar.

Far right: Paolo Girol at 'Connecting Traditions'

Bottom right: Videos about the 2017 and 2019 concerts are available at https://bit.ly/EaPvideos



## Cultural and technical 'firsts' with LoLa

A world premiere, a record-breaking distance, a high-level audience, and 'firsts' in three Eastern Partnership (EaP) countries – 'LoLa' concerts organised by the EU-funded EaPConnect project and its partners have achieved these cultural, creative and technical goals.

LoLa (low latency) technology, developed by the Italian NREN GARR in collaboration with Conservatorio di Musica Giuseppe Tartini, Trieste, was introduced to the EaP NRENs early in the EaPConnect project. Coupled with advanced R&E networks, LoLa allows geographically-distributed performing artists to work together in real time without significant distortion or delay.

This was really put to the test in September 2019, when top choirs in Yerevan, Armenia and Venice, Italy, sang together via a record-breaking 5000 km of networks that crossed 7 countries. This 'Connecting with Culture' concert used musical techniques invented by C17th Venetian composers for choirs singing across the large space within St. Mark's Basilica, where sound is delayed by around 40 milliseconds - nearly identical to the network delay between Venice and Yerevan. The event forged a collaborative relationship between the Italian and Armenian NRENs, GARR and ASNET-AM, the choirs and the music academy, and strengthened the connection between Armenia and the Armenian diaspora in Italy.

A world premiere of new music for traditional instruments was the heart of 'Connecting Traditions', the LoLa concert held in Baku, Azerbaijan and Tallinn, Estonia in December. The event

and new composition were organised by AzScienceNet in connection with the 2018 EaPConnect Enlighten Your Research (EYR) programme winner the MIRCO project. MIRCO intends to create an EaP LoLa user community and renew the heritage of national instruments. MIRCO project leader Paolo Girol (Estonian Academy of Music and Theatre) says that, by allowing musicians to give online masterclasses about their national instruments and to meet and practice together over the networks, MIRCO will help "meet important EU policies such as digitisation, preservation of heritage and digital mobility".

The first EaPConnect LoLa concert, back in 2017, showed Ministers and Ambassadors from around Europe what LoLa and networks can do. For that 'Music without Borders' event, Estonian and Armenian musicians in Tallinn performed with Belarusian and Georgian artists located in Minsk, Belarus, with the support of the Belarusian, Georgian and Estonian NRENs, BASNET, GRENA and EENet of HITSA.

All these events were the first concerts of their kind in these countries, helping the NRENs and music academies involved to develop their international partnerships. There have also been musical masterclasses and LoLa workshops to develop the experience of technicians and performers, and EaPConnect partners' participation in international events such as the Network Performing Arts Production Workshops and the 2018 Sound & Music Computing Conference.

With the Moldovan NREN RENAM set to acquire LoLa in the very near future, we can expect further musical adventures among the EaPConnect partners.









## More information

www.eapconnect.eu/

https://bit.ly/EaP-videos