New technological territory:

## Ars Electronica Futurelab, NHK Group Companies and NEXCDi Forum and LIWEST Launch World's First Intercontinental 8K Live Stream via a Public Connection

(Linz, August 22, 2019) As part of the European IMMERSIFY research program, Ars Electronica Futurelab and NHK Group Companies and NEXCDi Forum are implementing the world's first intercontinental 8K live stream via a public Internet connection. To mark the 150th anniversary of the establishment of diplomatic relations between Japan and Austria, the traditional Japanese dance performance Sanbasō will be broadcast from the Tokyo National Theater for Traditional Arts LIVE to Linz, in the Deep Space 8K of the Ars Electronica Center on August 28, 2019, 9 a.m. (CET). LIWEST will support the team in their ambitious project. Before the stream starts, Niklas Salm-Reifferscheidt talks about 150 years of Japanese-Austrian friendship, Roland Haring (Ars Electronica Futurelab) explains the goals and activities of the IMMERSIFY research program, Hideaki Ogawa (Ars Electronica Futurelab) talks about Ars Electronica Japan and Kyoko Kunoh (Ars Electronica Futurelab) explains what the tradition of Sanbasō is all about. The first intercontinental livestream will then start at 9:30 (CET) in 8K. Anyone who wants to can experience the world's first transatlantic 8K live stream for themselves - participation is open to everyone and free of charge!

August 28, 2019, 9 am: First transatlantic 8K live stream between Tokyo and Linz

8K stands for a horizontal image resolution with 8,000 columns. With an aspect ratio of 16:9, this corresponds to around 33 megapixels per image and thus an image resolution sixteen times higher than the current HD standard. "Rendering high-quality 8K content in large VR installations such as the Deep Space 8 K remains a challenge," says Roland Haring, Technical Director at the Ars Electronica Futurelab. "It becomes even more difficult when the content is sent around half the world as an 8K Video Live Stream. For this very reason, however, this project is also a huge opportunity for us to prove the capabilities of the Deep Space 8K infrastructure internationally and further expand it.

## Unique research platform: the Deep Space 8K

With $16 \times 9$ meter projection screens on walls and floors, laser tracking and 3D animations, the Deep Space 8K, developed by the Ars Electronica Futurelab in 2015, takes media experiences to a whole new level. At the same time, Deep Space 8 K is a sophisticated infrastructure for artists and developers from Ars Electronica's worldwide network and test environment for joint research with media research partners including NHK.

## Research Partners: Ars Electronica Futurelab and NHK Group Companies

As part of the preparations for the broadcast of the Tokyo 2020 Olympic Games, NHK Group Companies became aware of the Deep Space 8 K and the Ars Electronica Futurelab. The most recent joint project is the world's first transatlantic 8 K live stream, scheduled for August 28, 2019.

## LIWEST contributes technical infrastructure

LIWEST provides a fiber optic Internet connection with a bandwidth of 1 Gigabit/s for the planned transmission. "We are very pleased to be a partner of Ars Electronica in this ambitious project and to be able to contribute the technical infrastructure," says LIWEST Managing Director Dr. Stefan Gintenreiter. "With the 8K live stream LIWEST shows once again that LIWEST as a digital technology company is prepared for the applications of the future", emphasizes LIWEST Managing Director Günther Singer.

## IMMERSIFY Research Program

IMMERSIFY is an international research programme around a new generation of immersive media technologies funded by the European Union through the Horizon 2020 programme. The project includes the PSNC - Poznan Supercomputing and Networking Center from Poland, Spin Digital Video Technologies GmbH from Germany, the Ars Electronica Futurelab from Austria, the Marché du Film - Festival de Cannes from France and the Visualization Center C from Sweden. IMMERSIFY will run until the end of 2020.

## Sanbasō

Sanbasō is one of the oldest traditional dances in Japan. Its roots go back to Japanese mythology: for 1300 years it has been used to honour the five grains that symbolize wealth and understanding. Over the centuries, dance has been developed and refined along with the culture of Nohgaku. At the harvest festival, the opening of a Kabuki season or the opening of a new theatre, Sanbasō stands specifically for purification and genesis. In the Tokyo National Theater performance, masters of Nohgaku and Kabuki will perform Sanbasō - a rare event.

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[^0]:    Immersify: https://immersify.eu/
    Livestream: https://immersify.eu/news/sanbaso-live-stream/
    NHK Group Companies: https://www.nhk.or.jp/corporateinfo/
    NEXCDi-Forum: https://nexcdi-f.jp
    Ars Electronica Futurelab: https://ars.electronica.art/futurelab/en/
    LIWEST: https://www.liwest.at/

