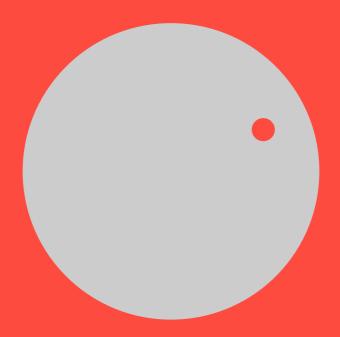
# FRAME



## **FRAME TECH 2021**

**PROGRAMME** 

17 → 19 / 11 + 22 → 24 / 11



# FRAME TECH 2021

INA
ONLINE TRAINING
SESSION

## FRAME

Since 2010, INA organised the annual training programme FRAME in partnership with FIAT/IFTA (International Federation of Television Archives) and EBU Academy (European Broadcasting Union). FRAME is co-funded by the Creative Europe – MEDIA programme of the European Union.

#### THE PUBLIC

FRAME is dedicated to the international community of professionals working in the field of audiovisual archives. The training sessions are designed for professionals involved in the management and use of archives whatever their level of knowledge and competencies, whether for media organizations, broadcasters, cinematheques, patrimonial institutions, production companies, etc.

#### TRAINING PROGRAMME

FRAME consists in 3 sessions per year, which cover each step of the audiovisual archival content management process:

- FRAME Tech is a one-week training session, dealing with the preservation of digital

- archives, digitization of old analog archives, media and storage management.
- FRAME Expert, is 1/2 day thematic workshop organized during the FIAT/IFTA international Conference, and aiming in priority the top managers.
- FRAME Access is a one-week training session, dealing with rights management, documentation, cataloguing and promotion of archive contents toward various audiences.

The courses and workshops are delivered in English by recognized European and international audiovisual archives and digital media experts.

Each year, the training programme is updated to match with current technical and technological evolutions in the sector and to correspond to professionals' expectations and needs. To do so, it is defined by a pedagogical committee, with members of INA, FRAME's partners FIAT/IFTA and EBU Academy, and associated partners, meemoo (Belgium) and the Nederlands Instituut voor Beeld en Geluid (Netherlands).

PROGRAMME PARTNERS





PROJECT PARTNERS







## **SUMMARY**

**Editorial** 

07

Programme summary

08

**Participants** 

10

Training programme

13

**Speakers** 

23

Practical information

30

**Credits** 

(31



## **EDITORIAL**

After a single FRAME 2020 session dedicated to the management of audiovisual archives under exceptional circumstances and a first FRAME Access session in June 2021, the FRAME Tech 2021 training course is now also adapting to the sanitary context. For the first time, it will be held online as a 6 half-days training, from 17 to 24 November.

Every year, new techniques and technologies emerge in the field of audiovisual archiving, and new issues and challenges arise. For the 12<sup>th</sup> consecutive year, FRAME Tech will enable participants to improve their essential technical knowledge of audiovisual archives while addressing the most recent challenges:

- How to technically take into account the new uses and the increasing number of audiovisual file formats?
- What are the challenges for quality control in a context of massive digitisation and native digital production?
- How to store and manage an ever-growing volume of data?
- How Open Source tools can contribute to the sustainability of audiovisual collections?
- What's new in image and sound digitisation and restoration?

Renowned professionals from various international institutions will answer these and many other questions through a variety of pedagogical methods: case studies, lectures, experience feedbacks, interactive workshops, etc.

Beyond the programme, exchanges and professional networking, essential components of FRAME, will also be at the core of this session, with many opportunities for exchange and sharing of experience: question and answer sessions, sharing of resources, presentations of participants' institutions and infrastructures, dedicated time for interactions between participants to strengthen their links and their network, etc.

This will make this first FRAME Tech online session a real moment of exchange between professionals and an accelerator for the development of your skills and your projects.

We wish you a rich and nice FRAME Tech online session!

**DAY 1 - NOV. 17 DAY 2 - NOV. 18 DAY 3 - NOV. 19** "CARTE BLANCHE" **ARCHIVING DIGITISATION WORKFLOW** TO THE RTS Welcoming (20') Participant Track 1 (20') Participant Track 3 (20') C. Braemer, B. Lerena, T. Monteil 1 Ţ **Participants** Presentation of the presentation (35') 2 institution (15') pm L. Bouchet Presentation of INA and FRAME 2021 (20') Setting up C. Braemer, B. Lerena, T. Monteil an audiovisual digitisation project RTS: Film and audio - part 1 (100') restoration (85') 2 Workshop: B. Declercq 1 L. Bouchet, D. Barcella. **Archiving workflow** 3 N. Podwika, F. Margot part 1 (45') pm B. Amouroux **Break & Connection time** Setting up Workshop: 4 an audiovisual **Archiving workflow** digitisation project 5 part 2 (60') - part 2 (60') **Quality control** pm B. Amouroux B. Declercq process at RTS (110') D. Barcella **Understanding &** The Media selecting a file format 5 **Digitisation &** (40') P. Bubestinger Preservation 6 Initiative (60') Closing of the first part pm C. Curtis, M. Casey of the training session (10') Participant Track 2 (20') C. Braemer

**DAY 4 - NOV. 22** 

**DAY 5 - NOV. 23** 

DAY 6 - NOV. 24

**DIGITAL STORAGE** 

**DIGITAL ARCHIVES MANAGEMENT** 

**OPEN SOURCE TOOLS FOR ARCHIVING** 

Back on tracks (10')

Participant Track 5 (20')

Participant Track 7 (20')

Ţ 2 pm

Time 4U (50') Free discussion time

> Selecting and implementing a digital/media asset management system (100')

> > K. Van Malssen

**Open Source Quality Control and Quality** Management (60')

J. Martinez

Managing and storing digital AV assets: Dos. **Donts and Dunnos** - part 1 (60')

P. Bubestinger

Matroska Container & FFV1 Video Codec (40')

R. Kromer

**Break & Connection time** 

4 5 pm

Managing and storing digital AV assets: Dos, **Donts and Dunnos** 

- part 2 (60')

P. Bubestinger

FFmpeg presentation & archive applications (40')

F. Marchand

From Jpeg 2000 to ffv1 mkv - A meemoo

retex (30') M. Priem

Participant Track 4 (20')

Introduction to BFI **National Archive open** source workflows (60')

J. White

**Round table** Open source for AV Archives (60')

R. Kromer, M. Priem, J. White Moderator: M. Steeman

Case study (40')

Participant Track 6 (20')

Final review (30') C. Braemer, B. Lerena, T. Monteil

## **PARTICIPANTS**

### **George Aquilina**

Archives Operator,
Public Broadcasting Services (PBS)

Malta

### **Ruby Bondin**

Archives Operator,
Public Broadcasting Services (PBS)

Malta

#### **Daniel Carrero Garcés**

Production Archive Coordinator, Caracol Television S.A.

#### **Danica Luana Ellul**

Archives Operator,
Public Broadcasting Services (PBS)

Malta

#### **Antoine Faure**

Archives Operator,
Public Broadcasting Services (PBS)
Malta

#### **Mark Macey**

Senior Projects and Partnerships Manager, BBC Great Britain

#### **Florent Malet**

Servicing Materials Coordination, Mediawan
France

#### Joanna Małkowska

Head of the Collection Accession and Inventory team, Filmoteka Narodowa – Instytut Audiowizualny Poland

#### Katia Rossini

Head of collection,
ARGOS, Centre for audiovisual arts,
Belgium

### **Vangelis Velles**

Film scanning and restoration expert, ERT S.A. Hellenic Radio & Television Greece

#### Céline Vermeire

Project manager for film digitisation, Meemoo, The Flemish Institute for Archiving Belgium

#### **Andrea Walker**

Archivist, University of Cape Town South Africa





# GRAMME



## ARCHIVING WORKFLOW

1.00 WELCOMING PARTICIPANT

**PARTICIPANT PRESENTATION - 55'** 

PRESENTATION OF INA AND FRAME 2021 - 20'

- Christine Braemer, Benjamin Lerena,

**Thomas Monteil / INA, France** 



**WORKSHOP: ARCHIVING WORKFLOW (PART 1)** - 45'

— Brice Amouroux, co-manager of the Technologies division, Data and technologies department / INA, France

Overview of the key points and bottlenecks one has to face when building a digital archiving process. Case studies to highlight the main steps and skills that are necessary to bring archive-based project to life.

#### 3.00 pm BREAK



**WORKSHOP: ARCHIVING WORKFLOW (PART 2) - 60'** 

Brice Amouroux, co-manager of the Technologies division,
 Data and technologies department / INA, France



THE MEDIA DIGITISATION & PRESERVATION INITIATIVE - 60'

- Carmel Curtis, archivist in the Moving Image Archive / Indiana University, USA
- Mike Casey, Head of Audio-Video Preservation Services / Indiana University, USA

From 2015 - 2021, Indiana University (IU) engaged in an ambitious project, the Media Digitization and Preservation Initiative (MDPI), to digitally preserve large numbers of audio, video, and film recordings with high research and instructional value across IU's diverse campuses.

In this session, Mike Casey, Head of Audio-Video Preservation Services and Carmel Curtis, Film Digitization Specialist, will discuss the creation, implantation, and challenges of establishing workflows to successfully digitize over 333,000 audio/video records and over 23,000 reels of film.



## **DIGITISATION**

1.00 pm

**PARTICIPANT TRACK 1 - 20'** 



SETTING UP AN AUDIOVISUAL DIGITISATION PROJECT (PART 1) - 100'
— Brecht Declercq, Digitization and Acquisition Manager /meemoo,
Belgium & President - FIAT/IFTA

Unfortunately, when preparing a project for the digitization of audiovisual heritage, there are no one-fits-all solutions. Still, it's a bad idea for audiovisual archive managers to improvise everything.

This course provides a step-by-step framework to make an audiovisual digitization project a success. Aspects such as project management, collection assessment, process structuring and an estimate of the required resources are applied specifically to audiovisual collections.

#### 3.00 pm BREAK



SETTING UP AN AUDIOVISUAL DIGITISATION PROJECT (PART 2) - 60'
— Brecht Declercq, Digitization and Acquisition Manager /meemoo,
Belgium & President - FIAT/IFTA

In this second part, the students get to work themselves: they analyze cases for their strengths and weaknesses and then they try to build a solid digitisation project themselves on the basis of specified elements.



UNDERSTANDING AND SELECTING A FILE FORMAT - 40'
— Peter Bubestinger, founder of AV-RD /
AV-RD, Austria

Why isn't there a single file format (codec/container) that serves all use cases of AV lifecycles? What is a "container", what is a "codec"? And which one(s) to choose when? This session will give insights that help answering these questions, in a way that allows you to make these decisions in a way that fit your use-cases/scenarios. Not only now, but future-proof and vendor-neutral so if the future brings new formats, you will still know what to do!

5.40 pm

**PARTICIPANT TRACK 2 - 20'** 



## "CARTE BLANCHE" TO THE RTS

1.00 pm

**PARTICIPANT TRACK 3 - 20'** 



#### **PRESENTATION OF THE INSTITUTION - 15'**

 Léonard Bouchet, Head of Digital Data and Archives department / RTS, Switzerland



#### RTS: FILM AND AUDIO RESTORATION - 85'

— Denise Barcella, Heritage Manager, Data & Archives department / RTS, Switzerland

RTS is a good example of the problems of restoration and quality control in the context of a small television and radio broadcasting network. Restoration teams are still available in-house, and thanks to their skills, they are able to highlight the RTS archives collections (2 filmed presentations). Digitisation projects have also been undertaken with outsourced restoration for volume and infrastructure reasons (shellac discs).

RTS has also learned to carry out quality control projects the hard way, i.e. long after the digitisation projects and with limited financial resources. Solutions were found by developing in-house algorithms for an easier check of the digitized files (Betacam SP). Preserving or disposing of the original carriers is also a problem that had to be solved with limited means.

#### 3.00 pm BREAK



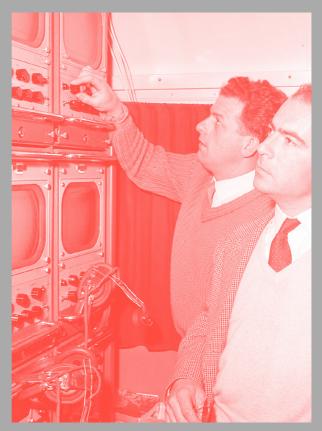
#### **QUALITY CONTROL PROCESS AT RTS - 110'**

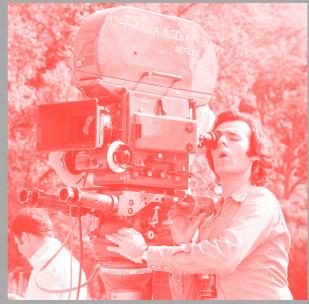
— Denise Barcella, Heritage Manager, Data & Archives department / RTS, Switzerland

There is now general agreement that quality control steps are essential during a migration or digitalisation process. The case of the digitisations carried out by RTS over the last 20 years is an example of the difficulties met by an institution that has tried to preserve its audiovisual heritage with limited resources. Indeed, the QC process raises many questions, particularly in terms of the goals to be achieved, and obviously regarding technical, human and financial resources.



CLOSING OF THE FIRST PART OF THE TRAINING SESSION - 10'







## **DIGITAL STORAGE**

1.00 pm

**BACK ON TRACKS - 10'** 

1.10 pm

#### TIME 4U - FREE DISCUSSION TIME - 50'

What was the most significant element for you? What did you think of the carte blanche, is it relevant to your situation?



## MANAGING AND STORING DIGITAL AV ASSETS: DOS. DONTS AND DUNNOS (PART 1) - 60'

- Peter Bubestinger, founder of AV-RD / AV-RD, Austria

Monitoring digital assets is nothing new. Yet, just "storing files on some carrier" doesn't seem to be enough when the requirement is "as long and proper as possible". When it comes to managing vast amount of material with ever-growing data sizes on ever-changing technologies and expectations, it's good to know at least a little bit about which properties to base decisions on.

#### 3.00 pm BREAK



## MANAGING AND STORING DIGITAL AV ASSETS: DOS, DONTS AND DUNNOS (PART 2) - 60'

- Peter Bubestinger, founder of AV-RD / AV-RD, Austria

Harddisk vs LTO vs SSD vs BluRay? Which role does a DAM/MAM play, and what to look out for? What if conditions change, or disaster strikes? How to balance features and budget? This session will be an interesting voyage through the important components of storing and managing digital AV material - even for non IT staff.

5.00 pm

**PARTICIPANT TRACK 4 - 20'** 



CASE STUDY - 40'



## **DIGITAL ARCHIVES MANAGEMENT**

NOV.

1.00 pm

**PARTICIPANT TRACK 5 - 20'** 



### SELECTING AND IMPLEMENTING A DIGITAL/MEDIA ASSET MANAGEMENT SYSTEM - 100'

- Kara Van Malssen, Managing Director of Consulting / AVP, USA

This session will provide an overview of the criteria to consider when selecting a new asset management system. It will also cover suggestions for planning a successful implementation and launch.

#### 3.00 pm BREAK



#### FFMPEG PRESENTATION & ARCHIVE APPLICATIONS - 40'

— Étienne Marchand, multimedia engineer, Data and technologies departement / INA, France

This session will explain what exactly is FFmpeg, what it's used for in the audiovisual archive world, then will demonstrate in a live setting a few concrete applications.



## INTRODUCTION TO BFI NATIONAL ARCHIVE OPEN SOURCE WORKFLOWS - 60'

— Joana White, Collections and Information Developer / BFI National Archive, Great Britain

The BFI National Archive have been developing and using open source automation workflows in several of their national projects. Most recently this includes the Heritage 2022 Video Tape Preservation Project, and 3PB DPX Film Preservation Project. These scripts have all been written by archive professionals not formally trained to write code. Yet learning alongside a generous international open source community of professional Archivist Developers, these scripts have been created to perform critical preservation tasks driving our day to day archiving activities.

This presentation will introduce you to our development practises and some of the open source formats and tools essential to their success.

5.40 pm

**PARTICIPANT TRACK 6 - 20'** 



## OPEN SOURCE TOOLS FOR ARCHIVING

1.00 pm

**PARTICIPANT TRACK 7 - 20'** 



OPEN SOURCE QUALITY CONTROL AND QUALITY MANAGEMENT - 60'
— Jérôme Martinez, Digital Media Analysis Specialist / MediaArea,
France

Handling digital data is not only the process of capturing or scanning a content, but also checking that the content is in good shape, at the technical level (checking that the file will be playable in the future) as well as at the content level (checking that the content correspond to what is expected).

We'll introduce some open source tools developed by users for users useful for theses checks.



## MATROSKA CONTAINER & FFV1 VIDEO CODEC - 40' — Reto Kromer, CEO of AV Preservation by reto / Switzerland

Presentation of the Matroska container (the ".mpv" files) and FFV1 video codec, including the discussion of their advantages and disadvantages for archiving.

#### 3.00 pm BREAK



#### FROM JPEG 2000 TO FFV1 MKV A MEEMOO RETEX - 30'

- Matthias Priem, Archiving manager / meemoo, Belgium

This talk will be a use case of digital archive management. We will provide a high-level overview of the archive infrastructure, talking about why certain choices have been made in terms of hardware, software or processes.

After this, we will discuss a storage migration use case which is currently being executed and which will also be used to perform a transcoding of archive masters from jpeg2000 to ffv1/mkv.



#### **ROUND TABLE: OPEN SOURCE FOR AV ARCHIVE - 60'**

— Reto Kromer, Matthias Priem, Joana White

Moderator: Marjolein Steeman, Preservation Officer - NISV, Netherlands

It will be a lively discussion on open source: tools and formats that are developed and maintained by a dedicated community of developers and (end)users.



#### **FINAL REVIEW**





## **SPEAKERS**

**BRICE AMOUROUX DENISE BARCELLA LÉONARD BOUCHET** PETER BUBESTINGER MIKE CASEY CARMEL CURTIS **BRECHT DECLERCQ RETO KROMER** 

**ÉTIENNE MARCHAND** FRANCINE MARGOT JÉRÔME MARTINEZ **NADINE PODWIKA** MATTHIAS PRIEM MARJOLEIN STEEMAN KARA VAN MALSSEN **JOANA WHITE** 



## **BRICE AMOUROUX**

Co-manager of the Technologies division, Data & technologies dpt – INA, France

Agronomic engineer, Brice joined Ina after running the audiovisual archive of the French agriculture Department. He's in charge of optimizing technical processes and workflows. He also makes sure both technical and human resources are available to satisfy a large variety of clients' demands (documentary productions, preservation and digitization plans...). He specifically works on digitization and digital restoration innovations regarding new image and sound standards.



## **DENISE BARCELLA**

Heritage Manager, Data and Archives department – RTS, Switzerland

Denise Barcella works as an expert on audiovisual heritage at the Data and Archives department of the Swiss Radio Television (RTS), which is the French speaking swiss public radio and TV network. Since 2017, she leads and coordinates the preservation of RTS's audiovisual heritage, which dates back to 1935 for radio and 1954 for TV.



## **LÉONARD BOUCHET**

Head of Digital Data and Archives department – RTS, Switzerland

Léonard Bouchet, 42, is an expert in digital transformation and development and co-chair of the EBU Artificial Intelligence and Data Initiative. Since January 2016, he has been heading the Swiss-french Public Media Data and Archives Department, where teams are exploring the amazing possibilities of new modes of collaboration (agility and holacracy) and innovative technologies (artificial intelligence). From 2013 to 2016, he was head of RTS' multimedia production department. Developer and project manager in the public service since 2009, he also has 10 years of previous experience in the private sector.



## PETER BUBESTINGER

Founder of AV-RD – AV-RD, Austria

Peter studied Media Computer Science at the Technical University in Vienna. He has worked as a project leader and developer in the field of digital archives since 2002, set up and developed solutions for television - and radio-archives and service-providers. From 2010 to 2015, he managed the video digitization development at the Österreichische Mediathek (Austria's national A/V archive) and was instrumental in discovering and improving the lossless video codec FFV1 for long-term preservation.

In recent years he has specialized in coordinating and deploying paid Open Source solutions for high-quality, demanding use cases and has been invited as a consultant, trainer, speaker and lecturer by memory institutions, universities and companies around the globe.



Head of Audio-Video Preservation Services - Indiana University, USA

Mike Casey is currently the head of Audio-Video Preservation Services in the IU Libraries. Until mid-2021, he was the Director of Technical Operations for audio and video for Indiana University's now completed Media Digitization and Preservation Initiative, which digitally preserved more than 333,000 audio and video recordings.

Mike is the co-author of Sound Directions: Best Practices for Audio Preservation, a contributing author to the second edition of the best practices publication Guidelines on the Production and Preservation of Digital Audio Objects (known as IASA-TC 04 and the co-creator of the media prioritization software applications MediaSCORE and MediaRIVERS. He also authored the Indiana University Media Preservation Survey report and is principal author for the follow-up publication Meeting

the Challenge of Media Preservation: Strategies and Solutions. His article entitled Why Media Preservation Can't Wait: The Gathering Storm that explores media degradation and obsolescence was published in the IASA Journal in January 2015. In 2019, he published the article Quality Control for Media Digitization, also in the IASA Journal.



Archivist in the Moving Image Archive – Indiana University, USA

Carmel Curtis (she/her/hers) currently works as an archivist in the Moving Image Archive of Indiana University; is a board member of the non-profit Screen Slate, a daily resource for independent, repertory, and gallery screenings in New York City (and beyond); and is a is a proud but distant member of XFR Collective, a volunteer run group that works to increase community access to at-risk audiovisual media.

Carmel's previous projects include work with the Brooklyn Academy of Music, Deluxe, Dirty Looks, Leslie-Lohman Museum of Gay and Lesbian Art, New York University, and the United Nations.





## **BRECHT DECLERCQ**

President - FIAT/IFTA & Digitization and Acquisition Manager meemoo, Belgium

Brecht Declercq, MA, MSc (°1981) is the Digitization and Acquisition Manager at meemoo, the national audiovisual archive of Flanders, Belgium, since 2013. As such he is responsible for the full digitisation programme and preservation strategy of the Flemish audiovisual heritage. Previously he worked for the Belgian public broadcaster VRT for almost 10 years as a radio archivist and a project lead in several digitisation, media asset management and access projects.

He's an active voice in the international audiovisual archives world, President of FIAT/IFTA, the International Federation of Television Archives and outgoing Chair of the FIAT/IFTA Preservation and Migration Commission. He's a frequent speaker on conferences and a critical writer and reviewer.

He advises to the Flemish minister of Culture and to several audiovisual archives and broadcasters around the world.



## **RETO KROMER**

CEO of AV Preservation by eto - Switzerland

Having graduated in both mathematics and computer science. Reto Kromer became involved in audio-visual conservation and restoration back in 1986. He has been running his own preservation company, AV Preservation by reto.ch, and lecturing at the Bern University of Applied Sciences, the Academy of Fine Arts Vienna and the Elías Quereieta Zine Eskola in Donostia (San Sebastián). His current research includes colour spaces, look-up tables and codec programming and emulation. Previously he was head of preservation at the Cinémathèque suisse (the Swiss National Film Archive) as well as a lecturer at the University of Lausanne. He served as an AMIA board member during two terms. His work has seen him honoured with an inaugural JTS Award.



Multimedia engineer, Data and technologies department – INA, France



Graduated from EICAR in 2008 after a sound engineer training, Etienne Marchand has since been working on a great variety of archive documents - audio, video and film - and on every aspect of the technical workflows: assessment, cleaning and physical restoration of audiovisual carriers; digitisation using manual and automatic processes; digital restoration and color grading; quality control; conversions and transcoding; media delivery; digital archiving.

Etienne joined INA in 2015 as operations executive within the Preservation, Delivery and Digital Archiving service. He's currently working as a multimedia engineer on the design of new workflows, on monitoring the digital media intake and on new methods for handling legacy formats. He's also involved in the International Federation of Television Archive (FIAT/IFTA) as co-chair of the Preservation and Migration Commission.



Digital Media Analysis Specialist – MediaArea, France

Jérôme Martinez is the Founder and President of MediaArea.net, the lead developer of MediaInfo and a technical consultant to a variety of projects within the fields of broadcast video, audiovisual archiving, and web video. Jérôme's work specializes in the analysis and categorization of audiovisual data as well as quality control, audiovisual metadata, and the development of open source solutions for media communities.





Archiving Manager - meemoo, Belgium

Matthias manages the digital archive unit at meemoo. This team is responsible for managing and maintaining the infrastructure, software, processes and metadata for the digital archive. The archive currently consists of 19PB of data and holds over 6 million audio, video and digital image files. We provide services for ingest, management and re-use of the data and metadata.



## **MARJOLEIN STEEMAN**

Preservation Officer - NISV. Netherlands

Marjolein Steeman is Preservation Officer at the Netherlands Institute for Sound and Vision. In this function she guards sustainable access to the content of the national audiovisual archive. She is also responsible for certification as trusted repository and on information security management. For new content - especially new formats and technologies - she is responsible for developing preservation guidelines as well as helping to implement these in the organisation. Besides file formats she has particular interest in all

metadata that comes along with the files and that is necessary for endurable access and reuse. Mariolein is a member of the Premis Editorial Committee.



Managing Director of Consulting -**AVP. United States** 

Kara Van Malssen is Managing Director of Consulting at AVP, an information management consulting and software development firm. She helps organizations protect, manage, and maximize the value of their data and information assets. Kara uses human-centered design principles to help organizations select. implement, and launch successful digital asset management programs and technologies.

She has served on numerous professional committees, and frequently speaks at conferences and workshops, nationally and internationally. Kara holds an M.A. in Moving Image Archiving and Preservation from New York University.



Collections and Information Developer -BFI National Archive, Great Britain

As the Collections & Information Developer Joanna creates and maintains automated preservation workflows for the BFI National Archives. Joanna is passionate about open source software and is keen to participate in the testing and development of the latest digital preservation tools, with the potential for enhancing current workflows.

Before joining the BFI in December 2019, Joanna worked for six years as a Developer Archivist at the Media Archive for Central England in Lincoln. Here she implemented open source workflows to manage video tape capture and DPX film scan preservation.

Joanna has twenty five years of experience as an independent video producer, and camera woman for UK regional Television News programming. She graduated with an MA in Digital Media from the University of Lincoln in 2015, and recently enjoyed exhibiting digital video art projects at science and technology festivals. She works remotely from her home in Lincolnshire.





# PRACTICAL INFORMATIONS

## **ONLINE COURSES**

The FRAME courses will take place on the conference room solution **Zoom**. We will send you the invitation link few days before the start of the training. To take full advantage of the tool's functionality, install the free application "**Zoom Client for Meetings**" on your computers. Make sure that the audio and video settings are well configured. In case you have restricted uses, **you can also use Zoom on your web browser** (preferably Google Chrome or Mozilla Firefox). To join the training, you just need to go on https://zoom. us/join and enter your meeting ID that we will provide you.

Some guidelines to note for the live training session:

- Internet connection: Please ensure that you have a stable internet connection.
- Audio quality: Please find a quiet area during the session to avoid any background noise and turn on your mic only when necessary.
   We recommend the use of headphones with a microphone.
- Apps and Programs: Please close all applications and programs running on your computer.
- Camera Position: Put your camera at face level (use a stand or stack of books if you are using a laptop camera).
- Lighting: Ensure that you are in a well-lit room with no windows behind you.

## THE WEBSITE

We also have created a dedicated website for the training: FRAME Tech 2021 website. Each participant and each speaker will have a personalized access. Your credentials will be sent to you by email the day before the training. On this website, you will have access to all the teaching material of FRAME's training (programme, presentations of the speakers, videos, additional resources).

## **CONTACTS INA**



Christine BRAEMER cbraemer@ina.fr



Benjamin LÉRÉNA blerena@ina.fr



Thomas MONTEIL tmonteil@ina.fr



Marie TANCHÉ mtanche@ina.fr

## **CREDITS**

Page 02 — "Centre des Essarts le Roi", audiovisual archive storage of INA.

1977, Laszlo Ruszka © Ina via AFP

Page 12 — Technician watching magnetic tapes in the control room over the news "Paris vous parle". 1957, Louis Joyeux © Ina via AFP

Page 17 — In the foreground, the journalist Jean Jacques Rebuffat, in front of instructors of a mobile control room. In the background Christian Hourriez.

1954, Daniel Fallot © Ina via AFP

Page 17, 32 — The director Bruno Gantillon on the shooting of the

movie "Handmaid and Mistress". 1976, Robert Picard @ Ina via AFP

**Graphic Design** © Perrine Serre

PROGRAMME PARTNERS





**PROJECT PARTNERS** 











## FRAME TECH 2021

