



The « Institut national de l'audiovisuel » (Ina)

In collaboration with

The International Federation of Television Archives (IFTA)
The European Broadcasting Union Training (EBU Training)

and MEDIA, a programme of the European Union

F.R.A.M.E

Future for Restoration of Audiovisual Memory in Europe

1st session: June 20 – June 24 2011

Preservation and digitisation of audiovisual media





TABLE OF CONTENTS

PRESENTATION OF THE SEMINAR	3
LIST OF PARTICIPANTS.....	4
FRAME PROGRAMME: 1 st session	5
SPEAKERS.....	9
DRAFT PROGRAMME 2 nd SESSION.....	14
GLOSSARY AND ABBREVIATIONS.....	16
PRACTICAL INFORMATION	20
CONTACTS	25



EBU TRAINING
A KNOWLEDGE MARKETPLACE



PRESENTATION OF THE SEMINAR

FRAME, Future for Restoration of Audiovisual Memory in Europe, is a seminar organised by the “Institut national de l’audiovisuel” (Ina) with the collaboration of the International Federation of Television Archives and the European Broadcasting Union Training. The training is organised with the support of MEDIA, a programme of the European Union.

Aim of the seminar

The aim of this training session is to implement and address the issue of new technologies applied to the restoration, digitisation, preservation and use of television and film archives. This first session “Preservation and digitisation of audiovisual media” will focus on issues and tools available for film and TV archive management, so as to enable participants to choose the technologies best fitted to their needs and to the strategy defined for their archives. The second session “Organisation, marketing and use of archival digital content» will be in Bry-sur-Marne from October 17th to October 21st 2011.

Who is it targeted for?

The FRAME training session addresses all European professionals¹ of the media industry who are involved in the management and use of archives whatever their knowledge and the state of progress of their company in the field of archive management.

¹ The seminar is open to participants from all EU members (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, UK) and Croatia, Iceland, Liechtenstein, Norway, Switzerland.

LIST OF PARTICIPANTS

Name	Firstname	Country	Company	Profil	Email
CSILLAG	Mano	Hungary	MTVA Broadcast Support and Asset Management Fund	Deputy Director	mano.csillag@mtv.hu
FORDE	Colm	Republic of Ireland (Dublin)	RTE Film and Television Archive	Film preservationnist and colourist	colm.forde@rte.ie
IVANAUSKAITE	Daiva	Lithuania	Holocaust Independent Research Archive	Head of project	daiva0102@gmail.com
LOPEZ	Iris	Spain	RTVE	Media-librarian	irislds@hotmail.com
LUCIANO	Alessandra	Luxembourg	European Commission – DG Information Society & Media	Trainee	alessandra.luciano@ext.ec.europa.eu
MERLETTI	Francesco	Italy	Freelance	Librarian	input@francescomerletti@.com
MURGU	Mihaï-Alexandru	Romania	ROTVR	Head or archives	mihai.murgu@tvr.ro
NOVAK	Miloslav	Czech Republic	Cinema Studies Department, Faculty of Arts of Charles University in Prague	Postgraduate student and researcher	milnovak@email.cz
PAGLIARANI	Cecilia	Italy	SURICATA SRL	President – Department : Documentaries and archives	ceciliapagliarani@hotmail.com
PLONER	Cunigunda	Germany	EYZ Media	Employee (Department Film archive, organisation of film series, VOD platform)	cuniploner@web.de
SEGAL	Billy	Israel	IBA	Head of IBA TV Archive	billys@iba.org.il
VAN PEER	Heidi	Belgium	VRT	Media Manager	heidi.vanpeer@vrt.be
VANREGEMORTER	Jan	Belgium	VRT	Head of documentation and archive	jan.vangeremorter@vrt.be



EBU TRAINING
A KNOWLEDGE MARKETPLACE



FRAME PROGRAMME: 1st session

The training will be delivered by trainers from the Ina (France), B&G (Netherlands), DR (Denmark) and EBU Training (Switzerland). Theory and practical trainings will be provided on the bases of presentations, case studies, workshops, visits.

From June 20th to June 24th

The training sessions will take place in the room 1405 – Bry 1 building, 1st floor / Bry-sur-Marne.

Monday, June 20th

9 – 9:30 am

Welcoming of the participants

Presentation of the seminar

Delphine Wibaux, Ina

Michel Dauzats, Ina

9:30 – 10:45 am

Introduction to strategic and economic issues of media archives management:

Why should we preserve and digitise archives? For which purposes? In what different ways can archive holdings be used?
The Ina preservation and digitisation plan (PDP): historical approach and issues

Max Benoit, Ina

11 – 12:30 am

Presentation of each participant's company

Overview of the company: missions, archive holding, users
Preservation and digitisation projects

2 – 2:30 pm

Presentation of the “layer” model of a Digital Media Asset Management system, adapted to Digital Archives

Jean-Noël Gouyet, EBU Training

2:30 – 5 pm

Implementing a preservation and digitisation plan: the first actions

Setting priorities: planning urgent action, organising selection (criteria, methods)

Establishing a preventive preservation policy

Organizing the inventory of holdings

Jean Varra, Ina

Tuesday, June 21st

9:30 am – 12:30 am

The prerequisite of any migration project is the appraisal of archive material and existing resources

Quantitative assessment of archive material

State of archive material

Storage conditions

Assessment of content

Level of description of materials, contents, associated rights

Existing technical equipment

Available staff

Jean Varra, Ina

2 – 5 pm

What are the basic techniques to be applied?

Definitions: preservation, digitisation, preventive conservation, restoration, etc

Film and video formats: technical characteristics; ageing; deterioration; life expectancy

Technical operations before transfer, enabling the playback of old formats: mechanical restoration; vinegar tests; restoration of film and sound media affected by vinegar syndrome; cleaning; baking; etc

Jean Varra, Ina

Wednesday, June 22nd

9:30 am – 12:30 am

Choosing the appropriate digital media formats: the use is the main driver

Workflow and DMAM

Digital media formats (refresher session): Media essence native formats and compression formats. Container-formats

Managing media formats: Selecting a preservation master format and delivery formats. Converting formats

Metadata: models

Jean-Noël Gouyet, EBU Training

2 – 5 pm

Organising the preservation and digitisation processes: relevant issues

Technical issues: key functions of a transfer line; processes; equipment



EBU TRAINING
A KNOWLEDGE MARKETPLACE



Organisational issues: in-house processing or outsourcing; staff management

Logistics issues: workflow organisation; setup a workflow tool for monitoring the tasks

Examples of transfer lines

Further issues: quality control; optimization of costs; what to do with the original material once it has been transferred?

Jean Varra, Ina

8 pm

Diner in Paris with participants and trainers

Thursday, June 23rd

9:30 am – 3:45 pm

How to design the technical platform for digital archive

Specifying functions

Storage and servers. Architecture. Physical storage media and performances. Hierarchical Storage Management (HSM). From back-up to Disaster Recovery Plan (DRP). Migration strategies.

Specifying a storage system

Metadata management and Databases

Rights management and media protection

Calculating the Total Cost of Ownership (TCO): Ina-SNC case study

Case study: Ina Archives Web platform and workflow

Jean-Noël Gouyet, EBU Training

4 – 5:30 pm

Visit if the SNC unit (Preservation, Digitisation, Communication)

Migration strategies

Philippe Gerrier, Ina

Friday, June 24th

9:30 – 12:30 am

European case studies

A national archive

A broadcast archive

Jan Müller, B&G (Netherlands)

Tobias Golodnoff, DR (Denmark)

12:30 am – 2 pm

Cocktail with participants and trainers



EBU TRAINING
A KNOWLEDGE MARKETPLACE



2 – 3 pm

European co-operation : Presto Prime

Jean-Hugues Chenot (Ina)

3 – 5 pm

“Pitching” session

Ongoing projects presented by individual participants to all participants and speakers for comments and advice

5 – 5:30 pm

Evaluation and close of the seminar



EBU TRAINING
A KNOWLEDGE MARKETPLACE



SPEAKERS

Max Benoit	Head of Audit, Ina
Philippe Gerrier	Head of SNC (Preservation, digitisation, communication), Archives, Ina
Tobias Golodnoff	Head of Cultural Heritage Project, DR
Jean-Noël Gouyet	Freelance trainer, EBU Training
Jan Müller	Director, B&G
Jean-Hugues Chenot	Head of Research Project, Ina
Jean Varra	Deputy Director, Archives, Ina



Name: Tobias Golodnoff

Position: Head of the Cultural Heritage Project

Company: Danish Broadcasting Corporation (DR)

Professional profile:

Tobias has been heading up the digitisation, and contextualisation/dissemination of DRs archive (570.000 hours of AV materials) since the project start in 2007. Today more than 350.000 hours of radio and 15.000 hours of TV have been digitized. DR is currently digitizing around 360 hours a week of BetaSP and DigiBeta, and is developing an innovative workflow and technologies which should lower the prize dramatically on 16 mm film digitization. The assigned budget of 10 millions € is planned to secure more than 75-80 % of the archive before the end of 2014.

The project has a strong focus on USE=VALUE! A focus that led to DRs development of a series of public-service products:

- Bonanza, an online archive concept where the users voted where to start the digitization from a user perspective. A website which has streamed more than 24 mio. programs or snippets from the archive (read more on <http://www.dr.dk/Kulturarv/bonanza>).
- Dansk Kulturarv. A collaboration with the major national cultural and archival institutions (<http://www.danskkulturarv.dk>)
- LARM, a project where more than 1 mio. hours of radio are being made accessible for research use at the Danish universities (<http://www.larm-archive.org/>).

Tobias Golodnoff participates in a number of national and international organisations where he shares his expertise within the field of digitisation and digital cultural heritage. He is currently a member of:

- FIAT/IFTAs Executive Committee, with focus on online use of archives and creating value through sharing and participation: www.fiatifta.org
- HERA JRP Knowledge Exchange Advisory Committee (KTAC): www.heranet.info
- Committee member, and member of the technical workgroup, for the Danish ministry of Culture. On the analysis and Rapport on digitizing the national cultural heritage, 2009: www.kum.dk/sw84616.asp

Contact details:

Address:

DR Medier
Emil Holms Kanal 20, opg. 2,5
0999 Copenhagen City
Denmark

Phone:

+45 2854 8288

Name: Jean-Noel GOUYET



Position: Freelance Trainer & Technical Writer

Company: Ina SUP & EBU Training

Professional profile

Digital Techniques and Systems engineer, Jean-Noel has worked for 27 years at the Institut National de l'Audiovisuel. At first, in the Training Department he developed and managed further training courses on 'Digital TV equipment'. He spent then a couple of years producing training material, especially in collaboration with BBC Television Training and the Australian Film, Television and Radio School. During the next and last 10 years, at the INA Research Department, he wrote several technical reports on 'Video servers', 'Digital Mass Storage', 'Compression', Media Distribution on Networks', 'Media Protection' and 'Digital Media Asset Management (DMAM)'.

Although officially retired, Jean-Noel goes on giving lectures at Ina SUP, on Digital Techniques and DMAM, and collaborates on some occasions with EBU Training. He has published a book 'Gestion des médias numériques – *Digital Media Asset Management*' (Dunod, Paris, 2006).

Contact details:

Address:

35 rue des Nations
94500 CHAMPIGNY-sur-Marne
FRANCE

Phone : +33 (0)1 4880 5265 / +33 (0)9 5448 5265 VoIP / +33 (0)6 7216 8389 mobile

E-mail : jeannoel.gouyet@free.fr



Name: Jan MÜLLER

Position: CEO

Company: Netherlands Institute for Sound and Vision

Department or Service: Archive/Museum

Professional profile:

Jan Müller (1967) is the CEO at the Netherlands Institute for Sound and Vision. He started there in April 2009, after 20 years of working in the advertising industry. He previously worked in senior positions at a number of network agencies and was a partner at JWT Amsterdam and member of the board at TBWA Amsterdam. The last 7 years before he moved to Sound and Vision, he was the CEO of Saatchi & Saatchi in the Netherlands and member of the board of Saatchi & Saatchi Europe.

He is a member of FIAT/IFTA's executive council and chairman of the Dutch Media Literacy programme. He is also vice president of the Dutch National Coalition for Digital Preservation and Sustainability. He has published a book and several articles in the trade press about advertising, creativity and media.

Contact details:

Address:

Sumatralaan 45
1200 BB Hilversum, Netherlands

Phone :

+ 31 6 415 61 299

E-mail :

jmuller@beeldengeluid.nl



Name: Jean VARRA

Position: Deputy Manager of the Archive Department

Company: Ina – Institut National de l’Audiovisuel

Department or Service: Archive

Professional profile:

Jean VARRA is Chief Engineer and Deputy Manager of the Ina Archive Department. He is in charge of the technical evolution of the archives and particularly, he manages the preservation and digitisation plan of Ina audio-visual archives since 2003.

He also participates in the international activities of Ina. He has led several missions whose objectives are to assess audio-visual holdings, advise and evaluate the solutions for various televisions in various countries e.g. : TSR in Switzerland, RTS in Serbia, EPTV in Algeria, MOCI in Saudi Arabia. He has participated in European projects like Presto, PrestoSpace and now Presto Prime.

He also performs training on technology and archive management for « Ina sup » and is associate professor at the University Senghor in Alexandria.

Contact details

Address :

**4 avenue de l’Europe
F – 94366 Bry-sur-Marne**

Phone :

+ 33 1 49 83 24 59

E-mail :

jvarra@ina.fr



EBU TRAINING
A KNOWLEDGE MARKETPLACE



DRAFT PROGRAMME 2nd SESSION

From October 17th to October 21st, 2011 in Bry-sur-Marne:
Organisation, marketing and use of archival digital content

Monday, October 17th

Morning session **Welcoming of participants and presentation of the seminar**
What do we mean at Ina by “valorisation” of archival digital content?
Anne Couteux, Ina
Dominique Saintville, Ina

Presentation of each participant’s company

Afternoon session **Professional and commercial uses**
Jean-Luc Vernhet, Ina

Tuesday, October 18th

Morning session **Non commercial uses**
Claude Mussou, Ina
Roei Amit, Ina

Afternoon session Optional:
 - **Visit of an exhibition** (using archives)
 - **Visit of an archive center** (implementing a “valorisation” project)
 - **Basic definitions** : film and video formats, technical operations before transfer
Richard Wright, BBC

Wednesday, October 19th

Morning session **The legal framework for the use of archival material**
Hubert Best, FOCAL

Afternoon session **Organisation of digital content: documentation practices**
Sandrine Depoix Lambert, Ina

Thursday, October 20th

Morning session **Enhancing the quality of images and sounds**



EBU TRAINING
A KNOWLEDGE MARKETPLACE



Jean Varra, Ina

Afternoon session

Restoration of movie film archive material

Nicolas Ricordel, CNC

The digital restoration of images and sounds at Ina

Visits

Benjamin Lerena, Ina

Emmanuel Laroche, Ina

Friday, October 21st

Morning + Afternoon

European case studies

Françoise Clément, RTS

Roly Keating or Helen Wallenda, BBC

Project management

Sophie Philippet, Cabinet Ourouk

GLOSSARY AND ABBREVIATIONS

Asset	A word that refers to an active multimedia asset – video, audio, or text; the combination of content and related metadata.
Asset Management	Asset Management refers to the management of content or the software system used for tracking and supervising content and associated metadata from production to digital archiving, and including pre-production, data acquisition, post-production, broadcasting and archiving.
Cataloguing	A description of cataloguing with a limited number of fields, titles, subtitles, dates and channels, etc. ...
Indexing	A content description: summaries, time code markers, keywords, etc.
Back up	A storage back-up of IT data.
BETACAM SP	SONY's last analogue format, which is no longer made, although it can still be read in digital SX and IMX BETACAM video cassette decks (VCR).
Compression	Compressing data eliminates the redundant parts of images, which means that the speed and weight of the data will be reduced to limit storage and transmission costs. Compressions are destructive. A low compression rate hardly affects the quality of the images, whereas a high rate will seriously deteriorate the images. Compression adapts the quality of the sounds and images and costs to the various usages (viewing, distribution, production, etc.).
Electromagnetic induction	A magnetic layer on the tape's surface that stores the recorded information.
ENPS	Electronic News Production System, a system that produces, edits, organises and runs news broadcasts. The system is flexible enough to handle anything from the local news at a small-market station to large organizations spanning remote bureaus in multiple countries.
	An event transmitted remotely by network, satellite or specialised

EVN	lines, and recorded.
Extranet	External network of IT data distribution.
Archiving master format or “Master”	An archive master format protects the original quality of archives over the long term and enables them to be migrated without losing quality.
“Mezzanine” format	The “Mezzanine” format is an archiving format that can be made available in various formats for different uses. The archiving master can be chosen as the mezzanine format.
Audiovisual genre	Categories into which programmes can be classified: fiction, drama, magazine, variety show, etc.
GO/GB	Giga Octet, French for a Giga Byte, a digital storage unit: 1Go = 1000 000 000 octets = 1000 Mo
H264	A compression standard belonging to the MPEG4 family, also known as MPEG4 AVC or Part 10. Enables compressions at higher rates than MPEG1 or MPEG2 but with comparable quality.
HDTV	High Definition Television
Head clogging	VCR heads become clogged when reading magnetic tapes that are either dirty or damaged, or where the magnetic oxide has deteriorated. This provokes scratches on the image and sound interference.
IMX	A SONY format using an MPEG2 4.2.2 Pro 50Mb/s C' is a format based on the most recent BETACAM. In quality, it is almost equal to DIGITAL BETACAM. It is intended for upmarket, high-end production.
Intranet	An in-house IT distribution network
JPEG 2000	An archiving format used for SD and HD, whose profiles range from “lossy” to “lossless”. This is the format adopted for Digital Cinema (DCI). It is an open standard, adopted by national libraries, such as the Library of Congress in Washington and the Canadian Library and Archives, and by American majors, including Fox and Warner Brothers, for their archive applications.

Kinescope	Kinescope refers to the recording on to film of a television broadcast shot directly in video by filming the picture from a video monitor. It was the only way to keep a trace of live television programmes before the advent of the video cassette deck or recorder.
Meta data	Literally, metadata refers to data that accompany data.
Mb/s	Megabits per second = 1,000,000 bits per second. A unit of speed.
Migration	The transfer of digital files from an obsolete format to another digital format.
MPEG	Motion Picture Expert Group. MPEG1 is a compression format developed for multimedia and viewing. With speeds from 500Kb/s to 2 Mb/s, MPEG2 covers a broad range of quality and various uses. MPEG4 can cover applications from the Internet to high-quality viewing on an Intranet.
Near On Line	An English expression used to qualify a document stored in a robot containing magnetic tapes and enabling relatively fast access. The robot provides an access time of around 2 minutes, hence slower than the “On Line” hard disk, but much faster than “On The Shelf” storage.
NAS	Network Attached Storage refers to a hard disk storage system that can be linked to a high-speed network that can form a distributed server system.
Digitisation	The transformation of content carried by analogue formats in data that are either in digital video on a video carrier or files in IT formats.
PAD	Ready for diffusion
One inch (1 in.)	An analogue magnetic tape format with one-inch tape, used in the 1970s and 1980s.
Mechanical restoration	The stage of film preparation before telecine, which consists in mending the sellotape, reglueing, cleaning, repairing gelatine, cleaning perforations...
RH / HR	Relative humidity of the atmosphere.

Preservation	The copying of endangered content from a carrier that has become obsolete is being used less and less or is damaged, to a new longer-lasting carrier.
SDTV	Standard Definition Television
Sticky shed syndrome	When the tape is loaded into the video cassette deck, it sticks to the transport mechanism and can be irretrievably damaged.
SEP MAG	The film's sound track is recorded on to a magnetic reel that is separate from the image.
The “vinegar syndrome”	An expression used to describe the deterioration that provokes the acidification of cellulose acetate film, which gives off a characteristic vinegary smell of acetic acid. Initially, the degradation is slow and there are few marked physical changes to the film, but it gets faster once it has reached the point known as “autocatalysis”. This provokes buckling, channelling and shrinkage, leading the gelatine emulsion to separate from the base and increasingly discolouring the pigments until the film has completely decomposed.
Telecine	The process and the equipment that transforms motion pictures on film to a video signal that can be recorded on to a video tape.
Workflow	A transversal software tool, independent from specific applications, that enables users and the various players in a given production chain to have a dynamic and concise view of the progress made in a procedure that brings several professions together, including the customer, the sales department, researchers, the rights department, preservation technology operators and technicians, before the product is finally delivered to the customer.



FRAME 2011 1st session

Preservation and digitization of audiovisual media

June 20 to 24, 2011

PRACTICAL INFORMATION



- **Schedule**

From the Monday June 20th to the Friday June 24th, the seminar will take place in Ina headquarter in Bry-sur-Marne – Building BRY 1.

For lunches, a company restaurant and a cafeteria are at your disposal (lunches are included in the registration fee). The first day, you will be given lunch tickets. The restaurant is in Building BRY 5. (Map 2 / page 8)

- **Hotel**

You will stay at the **Mercure Hotel**, 2 boulevard du Levant in Noisy le Grand. Breakfasts are included. The Mercure Hotel is very close to a mall “Les Arcades”, where you can find many shops and restaurants.

- **From Paris airports to the Mercure Hotel**

Please note that transfer from airport to the Mercure Hotel will be at you own expenses.

From Orly airport:

Take the Orly Val shuttle until “Denfert-Rocheraud”. Then, take the RER B until “Chatelet-les-Halles” and, in “Chatelet-les-Halles” the RER A direction “Torcy” or “Marne-la-Vallée” and stop at “Noisy-le-Grand-Mont d’Est”. (Around 15 EUR – 1 hour and a half)

From Charles de Gaulle airport:

Take RER B to Paris city center and stop at “Chatelet-les-Halles” and, in “Chatelet-les-Halles” the RER A direction “Torcy” or “Marne-la-Vallée” and stop at “Noisy-le-Grand-Mont d’Est”. (Around 15 EUR – 1 hour and a half)

You can also take a cab from both airports (around 50 EUR – 35 minutes)

- **Access to the training**

Please remember that FRAME training starts on **Monday June 20th at 9 am** at Ina.

What you need to do to go to Ina:



The first morning, you must buy a bus ticket (1,80 EUR). You need to prepare some change and buy it to the bus driver. Then we provide tickets for the following days.

Take the **bus 120** (pink) at “Mont d’Est RER – bus RATP” towards “Nogent-sur-Marne RER”.

Descend at “Moliere” stop. (about 7 minutes by bus)

Ina is just across the street.

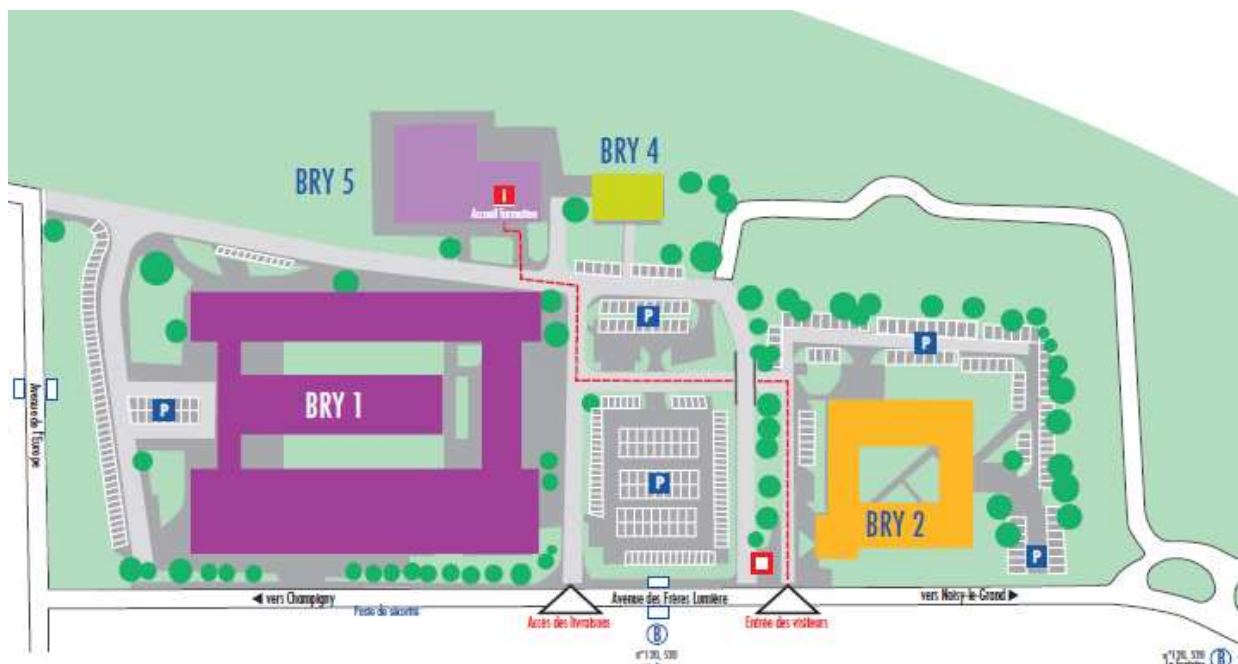
You will be asked to give your name at the security check.

(Map 1 / page 8)

- 1- Coming to Ina from the hotel by bus 120 (the green flag is the hotel and the red flag is Ina):



- 2- Ina in Bry-sur-Marne:



- From Noisy to Paris

If you want to go in Paris by yourself, you will need to take the RER A (Red line) at “Noisy-le-Grand Mont d’Est” towards “Cergy” or “Poissy”. These trains will stop in Paris.

To return from Paris, you will need to take the **RER A towards “Marne-la-Vallée Chessy” or “Torcy”** and stop at “Noisy-le-Grand Mont d’Est”. (Map 3)

To take the RER A, you will need to buy specific tickets at the station. (Around 3 EUR – 15 minutes)

For more information about public transportation in Paris, you can see the interactive map:

<http://www.ratp.fr/plan-interactif/> or <http://www.ratp.fr/en/>

3- The A-line between “Noisy-le-Grand Mont d’Est” and Paris:





EBU TRAINING
A KNOWLEDGE MARKETPLACE



CONTACTS

For further information, please refer to:

Pedagogical aspects:

Mr Michel Dauzats

mdauzats@ina.fr

Tel : +33 1 49 83 24 89

Mrs Dominique Saintville

dsaintville@ina.fr

Tel: + 33 1 49 83 28 45

Mrs Christine Braemer

cbraemer@ina.fr

Tel : +33 1 49 83 30 39

Practical aspects:

Miss Delphine WIBAUX

Room 410 – Building Bry 1

dwibaux@ina.fr

Tel. + 33 1 49 83 29 79

Gsm. + 33 6 67 28 07 28

Mrs Thérèse ORHON

Room 1428 – Building Bry 1

torhon@ina.fr

Tel. + 33 1 49 83 21 65