



## Speakers



Dr Markus Dathe  
F. Hoffmann-La Roche, Switzerland



Dr Bob McDowall  
Member of the ECA IT Compliance  
Interest Group



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GMP Inspector, Regional Authority,  
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# Audit Trail Review for Computerised Systems in Analytical Laboratories



Live Online Training on 03/04 May 2023



## Highlights

- Regulations and Guidance for Audit Trails and their Review
- Audit Trail Review as part of a Data Integrity Strategy
- Validation of Audit Trail Functionality
- Audit Trail Review in Context of Second Person Review
- Risk-based Approach to Audit Trail Review
- When is an Audit Trail not an Audit Trail?
- Where do Suppliers help us and where do they let us down?
- What are GMP-Relevant Data?
- Review of Audit Trail Entries
- Controls to aid Second Person Review of Audit Trails
- Key Learning Points

All participants get access to the current version of the ECA „Data Governance and Data Integrity for GMP Regulated Facilities“ Guidance.

## Objective

The objectives of this Live Online Training are to provide:

- An understanding of the regulatory requirements for Audit Trail Review of laboratory computerised systems
- Understand how to manage the review by exception
- Who should perform the Second Person Review?
- Discuss Audit Trail examples for attendees to identify potential Data Integrity issues
- Present examples of Audit Trail Entries for attendees to identify potential Data Integrity issues

## Background

EU GMP Annex 11 on computerised systems has required a “regular review” of Audit Trail Entries since its publication in 2011. In addition, the Data Integrity guidance documents issued by MHRA, WHO, FDA, EMA and PIC/S over the past few years reiterate the need for review of Audit Trail Entries as part of a Second Person Review of analytical data. However, like all regulations and guidance these documents emphasise the “what” that must be done but leave the “how” to each laboratory to interpret and then implement. For example:

- Do I need an Audit Trail function for all computerised systems?
- What is meant by a regular review of Audit Trail Entries?
- In some organisations, there is confusion about who should review Audit Trail Entries - is this a laboratory or quality assurance role?
- What does a risk-based or review by exception of Audit Trail Entries really mean and do all laboratory informatics applications offer this approach?

This is also compounded by the fact that most laboratory software applications were initially designed before Data Integrity issues took centre stage in the eyes of the regulators. How can GMP regulated organisations influence software suppliers?

This Live Online Training is designed to help GMP organisations understand what is included in a review of Audit Trail Entries and how to conduct a risk-based review.

## Target Audience

- Managers and staff from Quality Control and Analytical Development Laboratories of pharmaceutical companies
- Contract Research Organisation and Contract Manufacturing Organisation laboratory personnel
- Quality Assurance staff involved in reviewing laboratory data or performing Data Integrity audits
- Auditors (internal and external) responsible for performing self-inspections or external audits

## Programme

### Introduction to the Course

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### Regulations and Guidance for Audit Trails and their Review

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- An overview of the regulatory framework: EU, FDA, MHRA, WHO and PIC/S regulations
- Data life cycle in Analytical Laboratories
- Audit Trails in GMP Inspections: What are the expectations of the inspector?

### Audit Trail Review as Part of a Data Integrity Strategy

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- Define ATR as element of the DI Strategy
- Risk-based Approach – how to apply
- Apply a systematic approach to define ATR
- Audit Trail Review concepts

### Validation of Audit Trail Functionality

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- Specification of Audit Trail requirements in the URS: dos and don'ts
- Documentation of the application configuration for Audit Trail functionality
- Leveraging the supplier's development and testing into your validation effort
- User acceptance testing of Audit Trail functionality



#### Case Study 1: Validation of Audit Trail Functionality

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- The attendees will review user requirements for Audit Trail functions to highlight good and bad practices and from good requirements design tests to verify correct functionality
- Documenting the assumptions, exclusions and limitations of your chosen test approach

### Audit Trail Review in Context of Second Person Review

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- Overview of the analytical process from sample to reportable result
- Highlight the use of computerised systems and Audit Trails
- Use technical controls to focus review effort
- Audit Trail Review issues for manually entered data into a laboratory system and electronic transfer between systems

### When is an Audit Trail not an Audit Trail?

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- What do we look for in an application for auditing?
- Which Audit Trail(s) should I review?
- Event logs vs. audit logs

## Where do Suppliers help us and where do they let us down?

- What do we expect from the suppliers to support data and Audit Trail Review?
- Identify and avoid typical pitfalls
- Data ownership
- Data packaging and storage – supplier vs. business



### Case Study 2: Which Audit Trail to review?

Attendees will be presented with an overview of the Audit Trails within a chromatography data system and the content of each one.  
Which Audit Trails should be reviewed and when?

## What are GMP-Relevant Data?

- Annex 11 requires that audit trails monitor GMP-relevant data – what are GMP relevant data?
- What are critical data and how can they be determined?
- Direct/indirect, static/dynamic data
- Data, Audit Trail and criticality?



### Case Study 3: Identifying GMP Relevant Data

Developing a matrix for risk-based Audit Trail Reviews. The participants will apply the principles to a list of laboratory records to identify, if they are GMP records to help focus the Second Person review of Audit Trail data.

## Review of Audit Trail Entries

- Guidance for “regular review” of Audit Trails
- Process versus system: avoiding missing Data Integrity issues when only focussing on a per system review
- What are we looking for in an Audit Trail Review?
- Suspected Data Integrity violation - What do we need to do?



### Case Study 4: Reviewing Audit Trail Entries Part 1

Attendees will be provided with a series of Audit Trail Entries at the system level to review. Are there any potential Data Integrity issues to be followed-up?



### Case Study 5: Reviewing Audit Trail Entries Part 2

Attendees will be provided with a series of Audit Trail Entries at the data capture and interpretation level to review. Are there any potential Data Integrity issues to be followed-up?

## Controls to aid Second Person Review of Audit Trails

- Technical considerations for Audit Trail Review e.g. identifying data that has been changed or modified – how the system can help documenting the audit trail review has occurred
- Review by exception – how technical controls can help
- Have you specified and validated these functions?

## Key Learning Points and Q&A Session

## Speakers



Dr Markus Dathe, F. Hoffmann-La Roche AG, Basel, Switzerland

Analytical and Process Chemist with more than 20 years of practical experience in laboratory, quality and informatics functions. Markus held several positions in life sciences and pharma operations of Novartis since 1997, joined Siegfried in 2006 and is GMP Coordinator in the Small Molecules Technical Development of Roche since 2011. He had been successfully leading global projects in the area of CDS, LIMS and QMS.



Dr Bob McDowall, R D McDowall Ltd., Bromley, Kent, UK

Analytical chemist with over 40 years' experience including 15 years working in the pharmaceutical industry. Bob has been a consultant for over 20 years. He has been involved with the validation of computerised systems for over 30 years and has recently published the second edition of Validation of Chromatography Data Systems. Bob is the writer of the Questions of Quality (LC-GC Europe) and Focus on Quality (Spectroscopy) columns and is a member of the Editorial Advisory Boards of several Journals. He was a contributor to the GAMP Good Practice Guide for Validation of Laboratory Systems, second edition and is a core industry member of the GAMP Data Integrity SIG. He is an SME for input and review of the new GAMP Guide on Records and Data Integrity.



Dr Frank Sielaff, GMP Inspector, Regional Authority, Darmstadt, Germany

GMP Inspector at the Regierungspräsidium Darmstadt with the focus on Inspection of drug manufacturers and laboratories in Germany and countries outside of the EU. Before joining the GMP inspectorate Frank was several years employed in the pharmaceutical industry as Head of Quality Control and as Qualified Person.

Reservation Form (Please complete in full)



## Audit Trail Review for Computerised Systems in Analytical Laboratories, Live Online Training on 03/04 May 2023

If the bill-to-address deviates from the specifications on the right, please fill out here:

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I note that I can ask for the modification, correction or deletion of my data at any time via the contact form on this website.



Date of the Live Online Training  
Wednesday, 03 May 2023, 09.00 – 16.45 h CEST  
Thursday, 04 May 2023, 09.00 – 17.00 h CEST

## Technical Requirements

We use WebEx Events for our live online training courses and webinars.

At <https://www.gmp-compliance.org/training/online-training-technical-information> you will find all the information you need to participate in our trainings and you can check if your system meets the necessary requirements to participate. If the installation of browser extensions is not possible due to your rights in the IT system, please contact your IT department. WebEx is a standard nowadays and the necessary installation is fast and easy.

## Fees (per delegate, plus VAT)

ECA Members € 1,590

APIC Members € 1,690

Non-ECA Members € 1,790

EU GMP Inspectorates € 895

The fee is payable in advance after receipt of invoice.

## Presentations/Certificate

The presentations will be made available to you prior to the Live Online Training as PDF files. After the event, you will automatically receive your certificate of participation.

## Registration

Via the attached reservation form, by e-mail or by fax message. Or you register online at [www.gmp-compliance.org](http://www.gmp-compliance.org).

## Conference language

The official conference language will be English.

## Ordering Recordings

Independent from the Live Online Training Courses, you can also order recordings of selected Live Online Training Courses at the same conditions at [www.gmp-compliance.org/recordings](http://www.gmp-compliance.org/recordings). These recordings will be provided on our media server. All you need to watch it is an Internet browser – no additional software.

## Organisation and Contact

ECA has entrusted Concept Heidelberg with the organisation of this event.

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