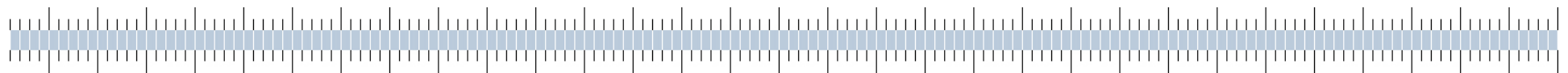


# Examination scheme

**Dr. Jens Bruderhausen**



2011/10/11

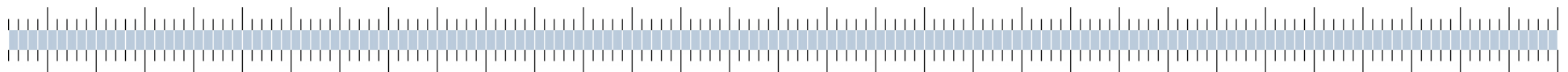
Assessment

1

# Examination Report



- **Audit assignment**
- **Portfolio analysis**
- **Implementation plan**
- **Organisation and course of credit business**
  - Documentation
  - Organisation
  - Granting of credit
  - Processing of credit
  - Assignment of ratings
- (...)



# Examination report

| (...)

## | Rating systems

- | Rating concept
- | Definition of default
- | Definition of loss
- | Database
- | Derivation of risk factors
- | Stress tests
- | Validation

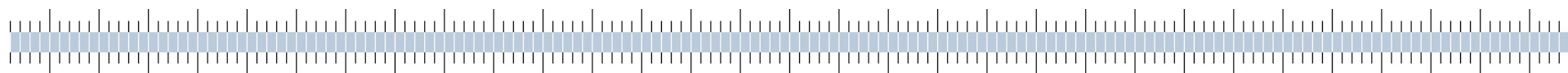
## | Credit risk mitigation techniques

## | Credit derivatives

## | Regulatory capital

## | Revision

## | Disclosure



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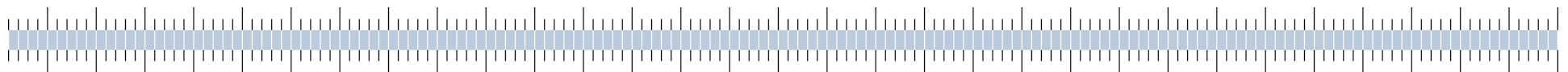
Assessment

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# Portfolio Analysis

## Importance of Sub-Portfolios

- | Description of portfolios
- | Application range of Rating system
- | Assignment of debt claims to Basel II exposure classes
- | Credit derivatives
- | Contents
  - | Volume
  - | Risk contents
  - | Share in earnings
  - | Refers to all portfolios, not just those relevant to the IRBA-model



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Assessment

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# Portfolio description

## Development of credit portfolio in the recent past

- Emphasis on new business and internal business
- Also includes description of business to be laid off

## Bank's assignment criteria

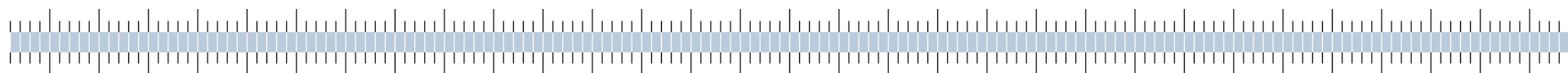
- State whether assignment criteria are adequate
- Stability of assignment criteria over time
- Consistency of assignment criteria

## Special lending positions

- Adequacy of assignment criteria

## Entry-Level criteria

- Implementation plan
- Share of IRBA-Portfolios to entry level criteria



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Assessment

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# Implementation plan

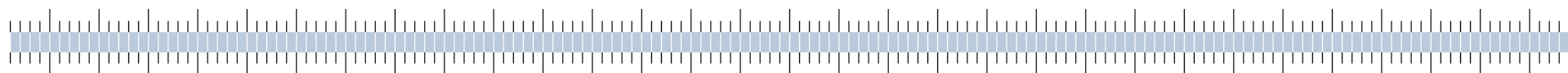
## Current state

- Risk-weighted asset per rating system
- Exposure at default per rating system
- Partial use
- All data on RWA and credit positions in % of RWA of total portfolio

## Realisability of Implementation plan

- Dependence on third parties

## Use test fulfilled?



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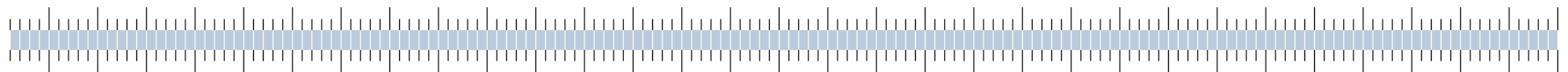
Assessment

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# Organisation (written documentation)



- **Basic regulation and responsibilities**
- **Written documentation**
- **Responsibility of top management level**



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Assessment

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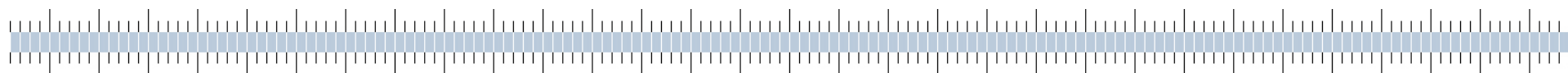
# Organisation



## ■ Function within credit business

## ■ Dissemination of functions that are not compatible

- Independent assignment of rating class
- Risk controlling
- Development of the rating system
- Control over the model
- 3rd parties



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Assessment

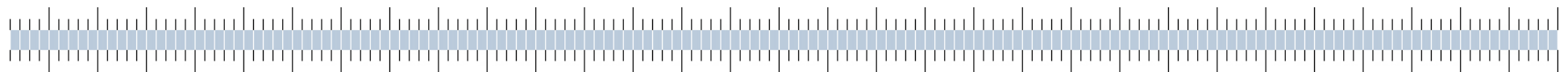
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# Process of granting credit

## Process steps

- Analogue to ICAAP
- Influence of ratings on granting of credit and on credit conditions
- Importance of ratings for competence for granting credit
- Incorporation of the IRBA into the process of granting credit



# Processing of credit

## ▮ Instruments for surveillance of credit

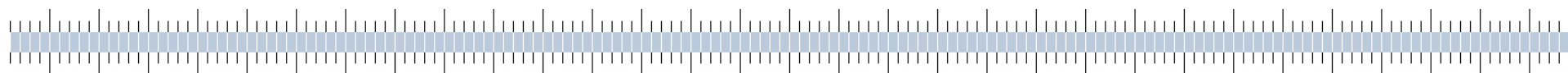
- ▮ Description of all processes
- ▮ Early warning criteria
- ▮ Minimum criteria for acquired debt

## ▮ Cycle of re-rating

## ▮ Event-driven re-rating

## ▮ Inclusion of rating into decision making

## ▮ Inclusion of rating into whole bank



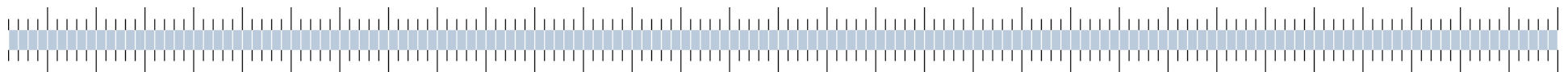
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Assessment

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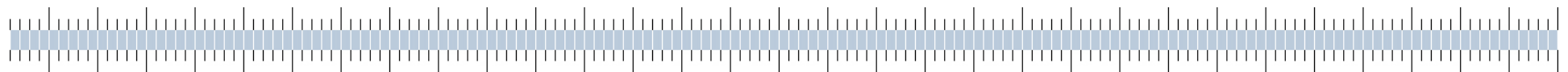
# Assingment of Rating

- | **Completeness**
- | **Gathering of information**
- | **Compilation of credit**
- | **Overruling**
- | **Filing**
- | **Re-evaluation of rating**
- | **Decision on event of default**
- | **Degree of coverage of the ratings**
  - | Per credit entity / per transaction
  - | Treatment of previous stock balance
- | **Competences and responsibilities**



# Rating concept

- Detailed description of the concept
- Adequacy for the bank
- Process of development of the rating system
- Systematics of the rating system
  - Completeness
  - Borrower component: assignment of rating grades, definition of default
  - business specific characteristics
- Documentation



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Assessment

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# Data

## Quality

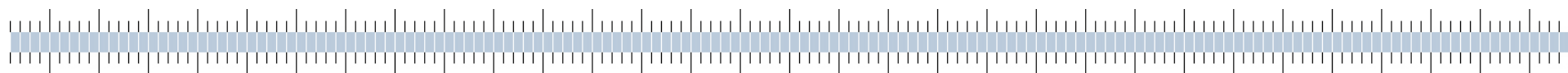
- Source, Quality, 3rd party, post-recording
- Representativity of the sample used for development
- Length of time series
- Allowance for lesser quality data

## History

- Breaches in time series
- Adequacy of adjusted data

## Definition of default

## Definition of loss



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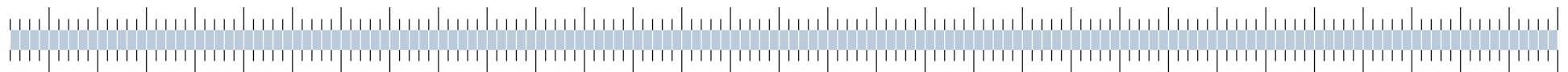
Assessment

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# Definition of default



- Definition
- Treatment of recovery
- Deviation from Basel II definition



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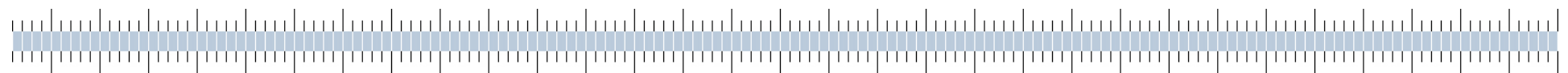
Assessment

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# Definition of loss



- Definition of loss
- Deviation from definition of loss
  - Definition of default used



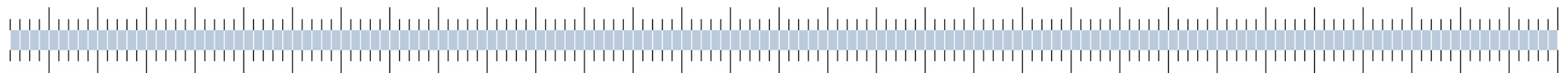
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# Probability of default

- Estimation of PD
- Scarcity of data: Conservative estimates, allowances
- Improvement of database



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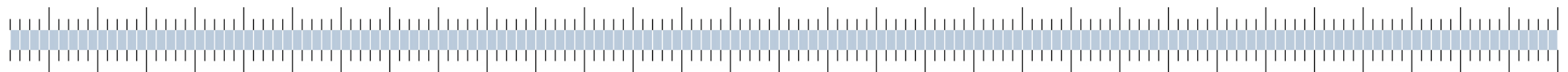
Assessment

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# Loss given default

- Estimation of LGD (alive and defaulted)
- Consistency of loss segments
- Scarcity of data
- Improvements on data



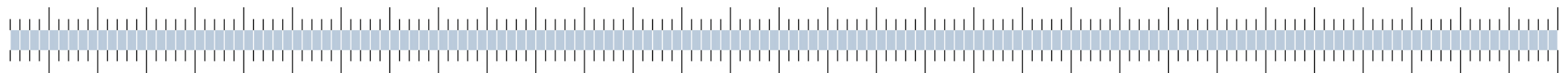
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Assessment

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## Further risk estimates

- Conversion factors
- Scarcity of data
- Improvement of data
- Time to Maturity



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Assessment

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# Stresstest

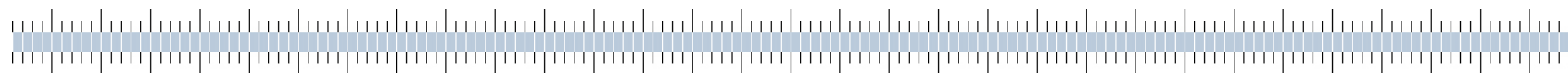
## ■ Description of stresstest

### ■ Adequacy of ratings

- Regularity
- Conservatism
- Explanatory power
- Migration between rating classes
- Mild recession

### ■ Use of stresstest in the whole bank

- Assessment of capital adequacy
- Action plan



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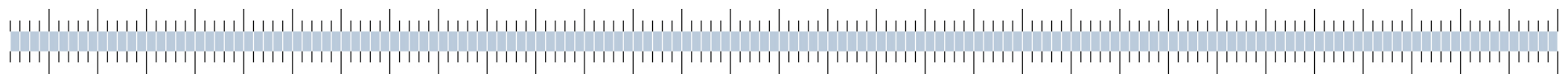
Assessment

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# Validation



- **Methods**
- **Results**
- **Adequacy**
- **Use in the whole bank**



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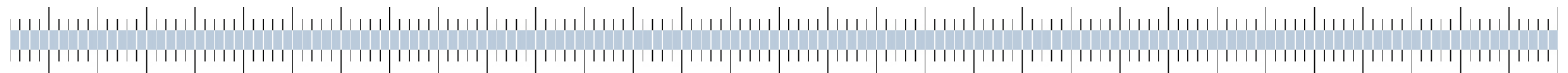
Assessment

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# Credit risk mitigation



- Collateral
- Management of collateral
- Risk monitoring



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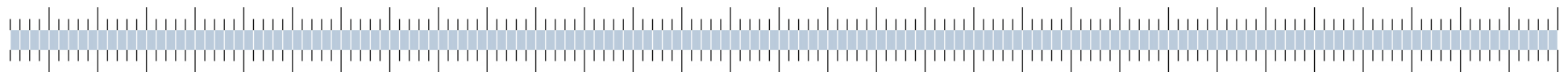
Assessment

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# Incorporation of ratings

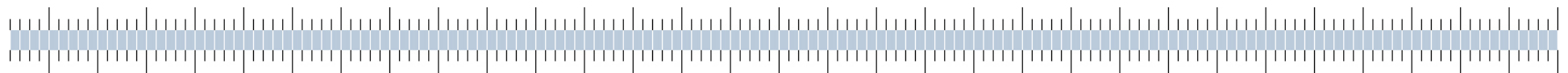


- Importance of ratings in bank's processes and procedures
- Responsibility of top management
- Other methods (than IRBA) used for assesment of credit risk



# Regulatory capital

- Calculation of regulatory capital
- Parallel calculation with standard approach / permanent partial use



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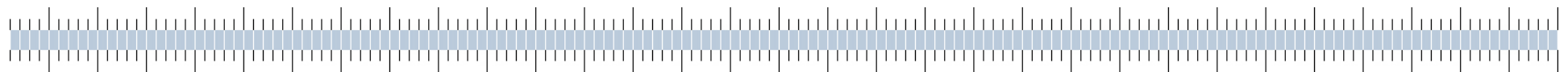
Assessment

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# Disclosure



- Preparations as regards to contents
- Preparations as regards to technical preparation



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Assessment

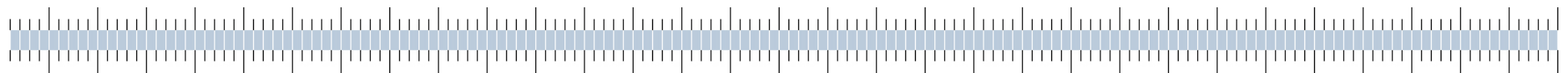
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# Internal Revision



- Inclusion of IRBA-systems in the planing process
- Revision of operative processes

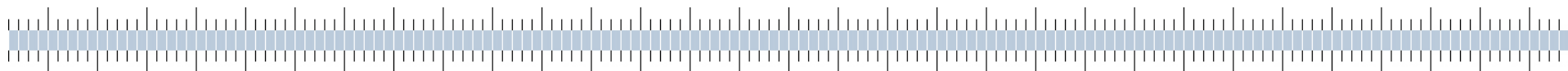
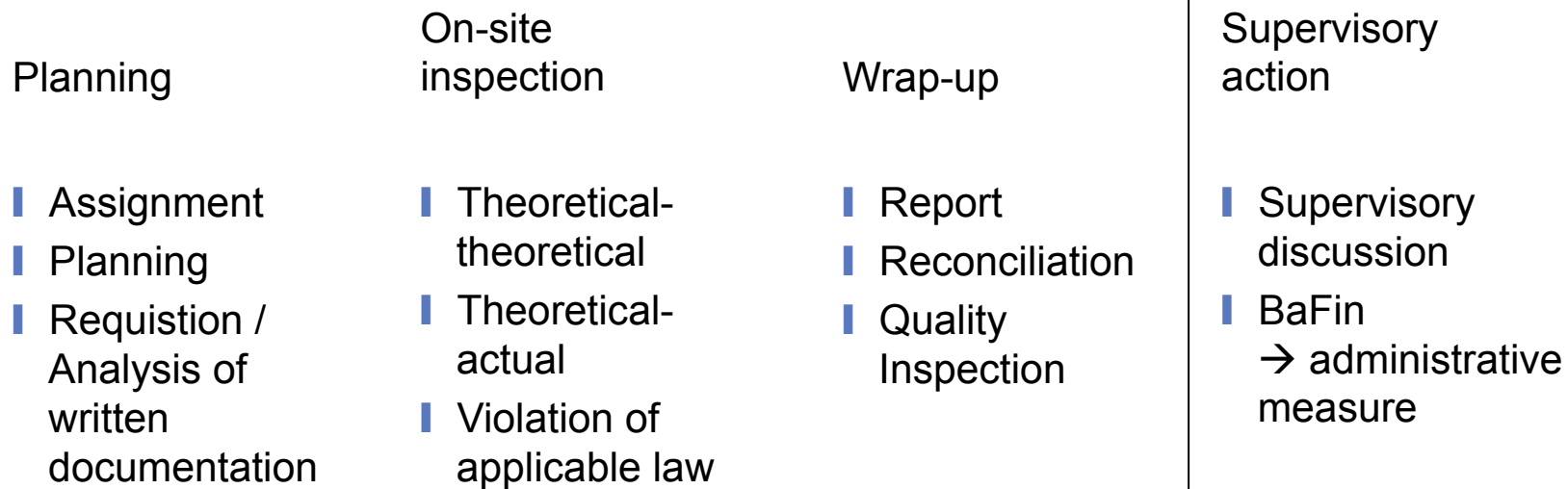


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Assessment

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# Stages of an On-Site-Inspection



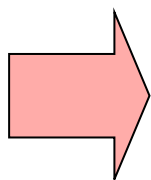
# Preparing an On-Site-Inspection

## ■ Audit assignment

## ■ Off-site information

- Risk analysis on global level
- Strategy and structure
- Revenue
- Capital structure / risk bearing capacity
- Global risk management
- Single risk factors

## ■ Written documentation



### Risk-adjusted planning

- Subject areas
- Staff / Duration

