



SMS

**Safety
Management
System**

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- 3 (Anonymous) Safety notifications
- 4 SPI – Safety Performance Indicators
- 5 Risk Management
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- Risk Management
 - Operational Risk Assessment
 - Risk Database
 - iERC – Initial Event Risk Classification

- Investigation Management

- Committee Management

- Safety Indicators and Safety Cockpits

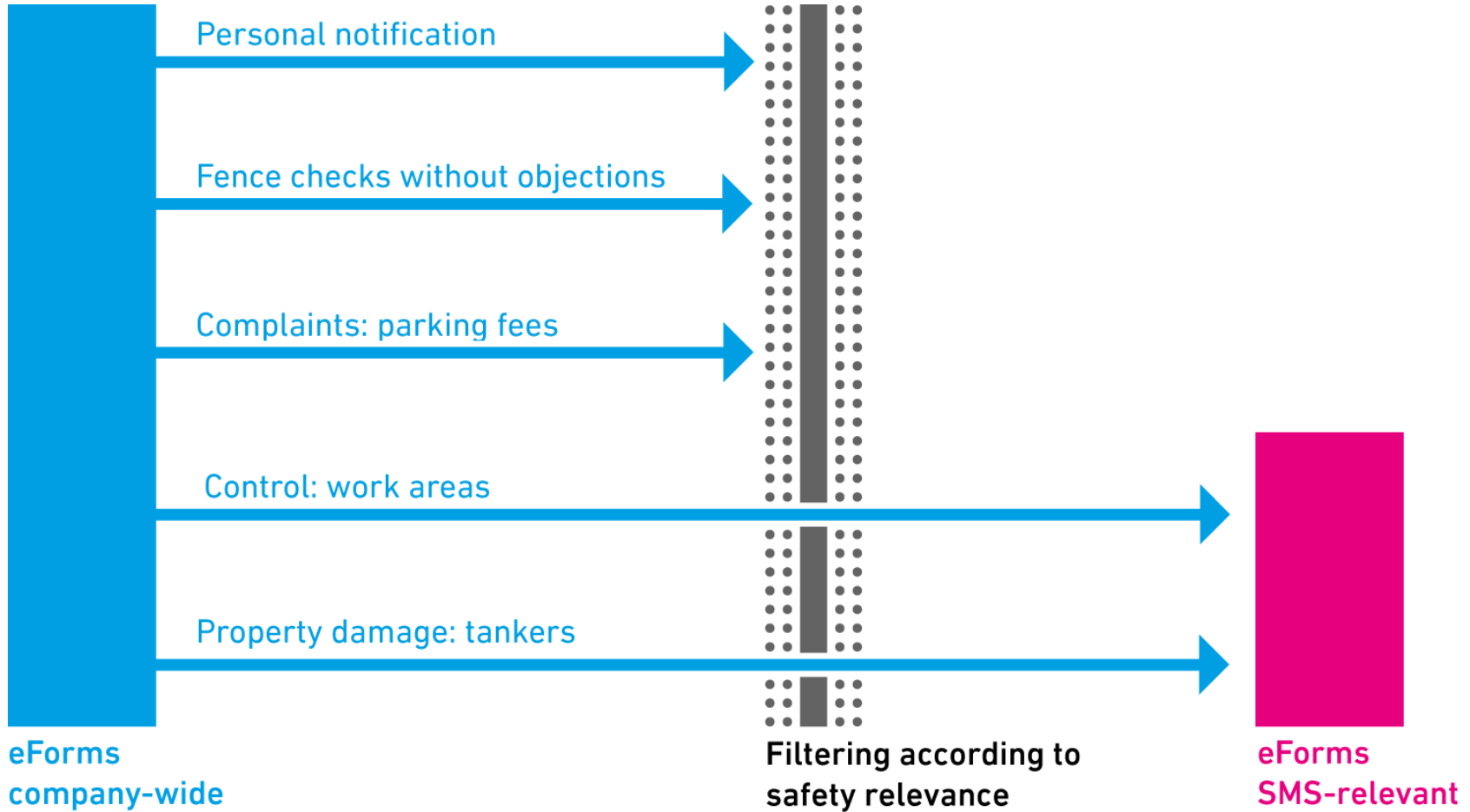
- (Anonymous) Safety notifications

- eControl as database for causal investigation
 - Occurrences, accidents, near misses and other incidents are of particular significance and provide a unique company-specific database
 - Various statistical analysis tools in order to identify trends, correlations and distributions
 - Verify assumed connections with historical data

- A database for departments and Safety Management
 - Avoidance of double counting acquisition efforts
 - Authentic information from the respective departments

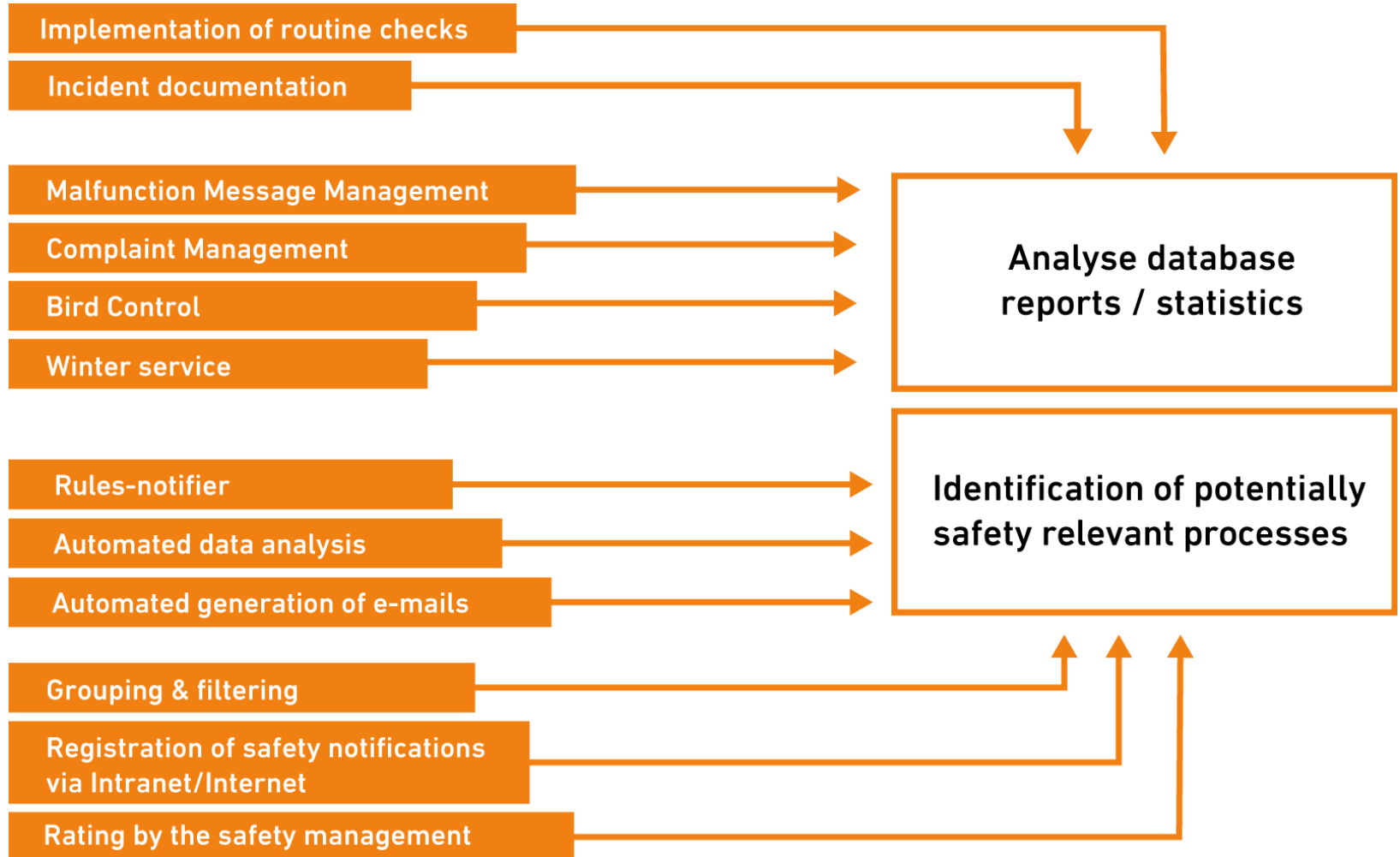
- Identification of safety-relevant processes
 - Automatic email notifications by the eControl Notifier
 - Rule-based content analysis of events, incidents and routine inspections by a background process
 - Regular, manual database search

2. Incident Management



2. Incident Management

- Identification of safety-relevant processes



3. (Anonymous) Safe notifications



- Implementation of an anonymous reporting system for safety notifications in accordance with legal requirements (e.g. ICAO Annex 14, EU (VO) 139/2014)
- Anonymous recording by a freely defined form provided by the customer on the internet or intranet
- eControl interface service offers a safe and automatic further processing and provides eForms
- Specific functions for the processing and classification of safety notifications
- Verification of the procedure by appropriate statistics

4. SPI – Safety Performance Indicators

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- Help to control the compliance of safety objectives using quantitative SPIs
- Definition of reactive, proactive and predictive or forward-looking Safety Indicators, e.g. according to ICAO DOC 9857
- Simple and flexible definition
 - Rule generator helps to select any incidents and routine inspections
 - Free allocation of statistical reference values with weighting factors
 - Calculation interval: daily, monthly, annually
 - Storage, documentation and publication in one indicator pool

4. SPI – Safety Performance Indicators

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- ALoS and Targets
 - Provision for every calculation interval is possible
 - Traffic light chart
 - Red – Initiation of countermeasures necessary
 - Yellow – Further efforts for fulfilling the safety objectives
 - Green – No need for improvement

- Indicator sets
 - Bundling of indicators according to content-based criteria

- Statistical reference values/populations
 - User interface for manual maintenance of statistical reference values

- Instruments for the identification, analysis and valuation of risks
- Planning, implementation and monitoring of measures for risk mitigation
- Operational Risk Management – iERC
 - Formal documentation and valuation of operational risks
 - Concept is based on Operational Risk Assessment according to ARMS Working Group of EASA
- Risk database and inventory
- Linking of operational risk and risk database
 - Completion of the risk database
 - Risk classification validation of the risk database by allocating risk classifications of the Operational Risk Management

- Identification of the relevant system components
 - Structure according to the process or system tree of the eControl Process Management
 - Bottom-Up, Top-Down and mixed forms, structured documentation of a Hazard Identification and Assessment

- Individual risks
 - 1 risk = 1 issue
 - **n** individual risks per system component
 - Allocation of hazards and consequences, indexing and numeration of the particular risk
 - Allocation of initial Event Risk Classifications (iERC), documents and measures per individual risk

- Risk assessment
 - Potential extent of damage and likelihood of occurrence (e.g. according to ICAO 9859)
 - Traffic light chart and risk index
 - Re-evaluation according to risk reduction measures
 - Risk database may be viewed and analyzed any time
 - All classifications are freely configurable

- Prioritisation, statistics and monitoring
 - Determining of cumulated risks for the process and system tree
 - Structure analysis of the risk database

5. Risk Management



- initial Event Risk Classification

- Measurement of the operational risk
- Individual valuation of single safety-relevant incidents and routine inspections by the Safety Management
- Systematic documentation of the analysis and if necessary, Follow-Ups as well (inspections, safety committee meetings, corrective actions etc.)
- Classification of hazards, causes, consequences, processes and defence mechanisms as database for a statistical analysis
- Risk matrix for the incident-related risk assessment
- Special trend and structure analyses, as well as frequency scales in order to analyze the operational risk

- Day-to-day business of the Safety Management
- Faster, easier and more productive execution of investigations
- Disposition of investigations
 - Resources, times, investigation status
 - Detection of overdue investigation steps
- Structuring of investigations
 - As standardised as possible, as individual as necessary
 - Standardised investigation steps from the compilation of an investigation team through to the recommendation-derivation
 - Investigation steps may be individually predefined and per investigation editable

- Organisation and Teamwork
 - Individual determination of the investigation team for every investigation
 - Access to the respective investigation for the investigation team

- Electronical investigation file including documents, measures and object connections

- Investigations reports with variable levels of detail, summaries and statistical analyses

- Planning, carrying out and follow-up or recording of committee meetings
- Administration of participants
 - Standard participants per Committee (system user, contacts or third parties), meeting-wise customizable
- Communication
 - Comfortable dispatch of serial emails for the mailing of invitations, protocols etc.
- Electronical meeting archive including documents, measures and object connections
- Organisation and Teamwork
 - Individual determination of the meeting participants for every Committee meeting
 - Access to the respective Committee meeting for the meeting participants

- Internal, external and supplier audits

- Organisation and Teamwork
 - Individual determination of the employees for every audit
 - Different departments can use the Audit Management independently of one another
 - Purchasing department → supplier audits
 - Safety Management → Safety audits

- Audit catalogues
 - Simplifies the work process with regard to recurring content
 - Hierarchically organised audit catalogues of any complexity
 - Documentation as required of the underlying standard

- Comparing standards and test results for every inspection point

- Management summaries and report generators for different target groups

- Needs analysis and project management
- Training
- Update and Upgrade Management
- Operational support
- Customizing