

# Violations



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# 1 Preface

The regulatory framework consisting of legal requirements and official conditions imposes strict demands on the worldwide-standardised processes of the aviation sector.

In addition, market players, in their battle for customers and market shares, are striving to continually improve quality and safety levels with intelligent processes.

This creates a complex legal framework for the operational process chains, which has to be understood, accepted and applied by all those concerned.

The non-implementation or unsatisfactory implementation of parts of this legal framework can lead to deviations in the form a lack of compliance, safety and quality deficiencies, etc. This deviation from the legal frameworks corresponds to a violation, for whose systematic processing and analysis this eControl module has been developed.

Superficially, the processing sequences used in Violation management are easy to describe. Looked at in detail, however, extensive operational agreements ensure the necessary reconciliation between individual, personal interests and the employer responsible for discipline.

Infrastructure features, suboptimal operating processes and a heavy workload are often conducive to violations against operational regulations.

Appeal periods, limitation periods and reduction measures lead to constant changes in the evaluation of violations. Accordingly, threshold excesses must be thoroughly identified, these being a key factor in the imposition of consequences.

With eControl, violations, reduction measures and consequences are administered in such a way that on the one hand a database is created for the optimal organisation of preventive measures, and on the other hand the documented evidence can, at the touch of a button, ensure that all violations have been evaluated and the consequences agreed at company level have been introduced if thresholds are exceeded.

eControl has been developed in collaboration with various airports, so that individual operational features are given proper consideration and the work of the violation representative is supported as much as possible.

We would be happy to assess your processes and show you how you can map your violation management in eControl.

Please get in touch.



**Frank Espenhain**  
CEO



### Process management rather than punishment

Punishment of violations is only applicable for deviations that are due to avoidable personal misconduct.

However, the effective avoidance of these deviations should not be aimed at individuals, but should rather focus on the process chains that have not been correctly structured or during whose implementation violations against regulations are observed.

### Violation management is compliance management

Compliance management provides documented evidence that the organisation is complying with regulations. Compliance with regulations is subsequently verified at appropriate time intervals by means of process audits.

In addition to compliance and audit management, violation management is a further important component in ensuring regulatory compliance. As a permanent and operationally functional corrective, violation management makes a significant contribution to the ongoing maintenance of the compliance level, as deviations are systematically captured, analysed and, thanks to preventive measures, minimised.

### Violation management and economic principle

Process-oriented violation management proves particularly valuable when conflicting objectives of operating processes – often productivity and safety, quality or other regulations are identified. Violation management can help to resolve these conflicts by optimising the use of process changes with regard to compliance management. In short, due to the violation management database, compliance objectives can be formulated in such a way that the need for process change is minimised as much as possible.

### Penalties are a burden on the work climate

A punitive violation management can only work if employees with regulatory responsibility are directly under the control of the management and are free from operational constraints in their activities. An employee with regulatory responsibility cannot, as violation representative, impose penalties on colleagues with whom he is supposed to be working in other situations as a team in an atmosphere of trust.

There is generally a significantly greater acceptance of violations not subject to penalties – because they are personalised – because the focus is on the process rather than the conduct of the individual. Good violation awareness recognises a documented violation as an important element for the joint improvement of the quality and safety level for the purpose of a continuous improvement process (CIP).

### **Process deviation and business unit rather than identification number**

The classification of violations is a necessary requirement for a systematic analysis of deviations in the form of frequency and trend displays. Instead of personal identification by means of an employee or identification number, which is obligatory in punitive violation management, business units, equipment and local information for the identification of hotspots and complex process structures are much more valuable for process-oriented violation management.

### **Cooperation with works and staff councils**

Mutual cooperation with the operational co-determination bodies is often a key factor in the success of violation management. It is difficult – legitimately – to reconcile violation management that is oriented towards behaviour control with the beliefs of works and staff councils. However, violation management that addresses conflicting objectives and ensures that the employees doing the work are not burdened with inconsistencies arising from optimum performance and compliance with procedures, is guaranteed to have the support of all those involved.

## 3 Core functionality

- Quick on-site capture of violations with eControl mobile – minimised data entry time and optimal documentation
- Fully automatic email notification for the documentation of violations
- System-based process support for limitations, appeal periods, etc.
- Fully automatic accounting of personalised violations
- Simplified evaluation processes through a system-based identification of thresholds reached
- System-based monitoring and entry of appeal periods, limitation periods, etc.
- Generation and email-based dispatch of personalised form letters
- Easy-to-use staff master data, which can be regularly and full automatically imported via a flexibly configurable interface
- Evidence of compliance with the administrative processes of violation management by means of inspection reports
- Various report generators for violation catalogues, violation accounts, driving ban lists, etc.
- Problem-free tracking of process connections due to comprehensive and flexible statistical instruments
- Integration of violation management into the eControl module for operational and company-wide risk management
- eControl provides a common data pool and processing basis for the violation representative and the safety manager

## 4 Groups involved

Deviations and violations can essentially occur in all operational processes. Violation management processes are also comparatively complex, in order to protect the personal interests of individuals.

The different groups of people involved in violation management are listed below:

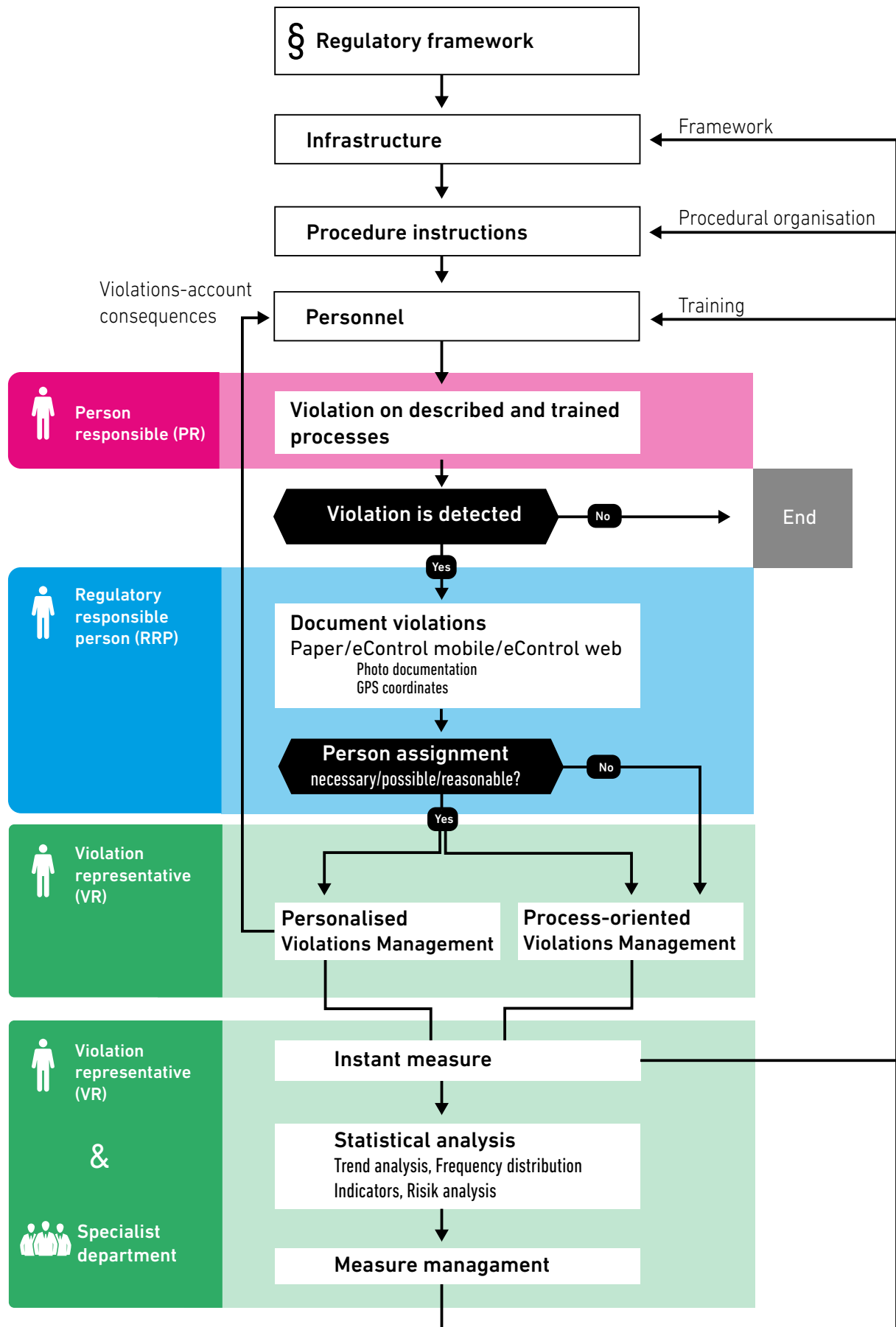
Group of people	Description/Field of activity
<b>Person responsible (PR)</b>	Internal or external employee who commits a violation (third parties such as air passengers are not included, if necessary, this process is documented with another event)
<b>Line managers (LM)</b>	The person responsible's line manager Help employees to avoid deviations, actively (with preventive measures) and passively as a role model
<b>Witnesses</b>	People who document or confirm a violation (third parties can also report a violation)
<b>Persons with regulatory responsibility (PRR)</b>	Persons with regulatory responsibility, for example airport transport managers, safety managers, health and safety representatives <ul style="list-style-type: none"> <li>• identify violations</li> <li>• initiate the processing workflow</li> <li>• implement immediate measures</li> <li>• instruct the person responsible of the violation</li> </ul>
<b>Violation representative (VR)</b>	Persons responsible across the organisation for violation management <ul style="list-style-type: none"> <li>• validate the classification of the violations</li> <li>• evaluate violations according to the violation catalogue</li> <li>• process appeals</li> <li>• communicate with person responsible and line manager (see chapter 16 "Form letter generator")</li> <li>• assign event-specific access permissions to person responsible and line manager</li> <li>• implement site allocations for daily reports</li> <li>• where necessary, escalate the process by consulting decision-making bodies – e.g. driving licence committee decides on the withdrawal of the apron driving permit</li> <li>• document consequences and reduction measures in collaboration with the training department</li> <li>• audit the points accounts</li> <li>• verify compliance with violation management processes</li> </ul>

<b>Violation committee (VC)</b>	<ul style="list-style-type: none"> <li>• Assessment of appeals</li> <li>• Specification of disciplinary measures</li> <li>• Reconciliation of interests of all meeting participants involved</li> </ul>
<b>Specialised Department (SD)</b> <ul style="list-style-type: none"> <li>• Work safety</li> <li>• Safety</li> <li>• Operational organisation</li> <li>• Operative units</li> </ul>	<ul style="list-style-type: none"> <li>• Management of preventive measures</li> <li>• Root cause analysis</li> <li>• Initiation of investigations</li> <li>• Identification of the need to amend processing instructions and course content</li> </ul>
<b>Specialised administrators</b>	<ul style="list-style-type: none"> <li>• Administration of access permissions</li> <li>• Safeguarding of system operation including background services and training courses</li> </ul>
<b>Training department</b>	<ul style="list-style-type: none"> <li>• Implementation of reduction measures</li> <li>• Documentation of reduction measures in cooperation with the "VR"</li> </ul>

## 5 Violation management with eControl

The circulation model for violation management is described below in summary form. It focuses on the software support of the management process with eControl. Optimum support of all management processes by eControl is possible if, and only if a continuous improvement process can be initiated.

- **Starting point: regulatory framework conditions (laws and decrees)**
  - Violation management is an element of compliance management
  - Unidentified / undocumented violations cannot be used to improve the process level
- **The documentation of deviations is the bottleneck of violation management**
  - Initial paper form capture
  - eControl mobile
    - Image documentation
    - GPS-location coordinates
  - Traceable documentation with eControl
- **Deviations assigned to individuals give rise to both a personalised and process-oriented violation management**
- **Violations not allocated to individuals can be used for process-oriented deviation management**
- **Immediate measures taken by the persons with regulatory responsibility (PRR)**
  - Documentation and verification with eControl
  - Corrective measures
- **Statistical analysis with eControl**
  - Trend analyses
  - Frequency distributions (companies, equipment, operation areas)
  - Indicators
  - Operational risk management (IERC, risk mitigation process)
- **Measure management of violation representative and safety management**
  - Documentation and verification with eControl
  - Preventive measures

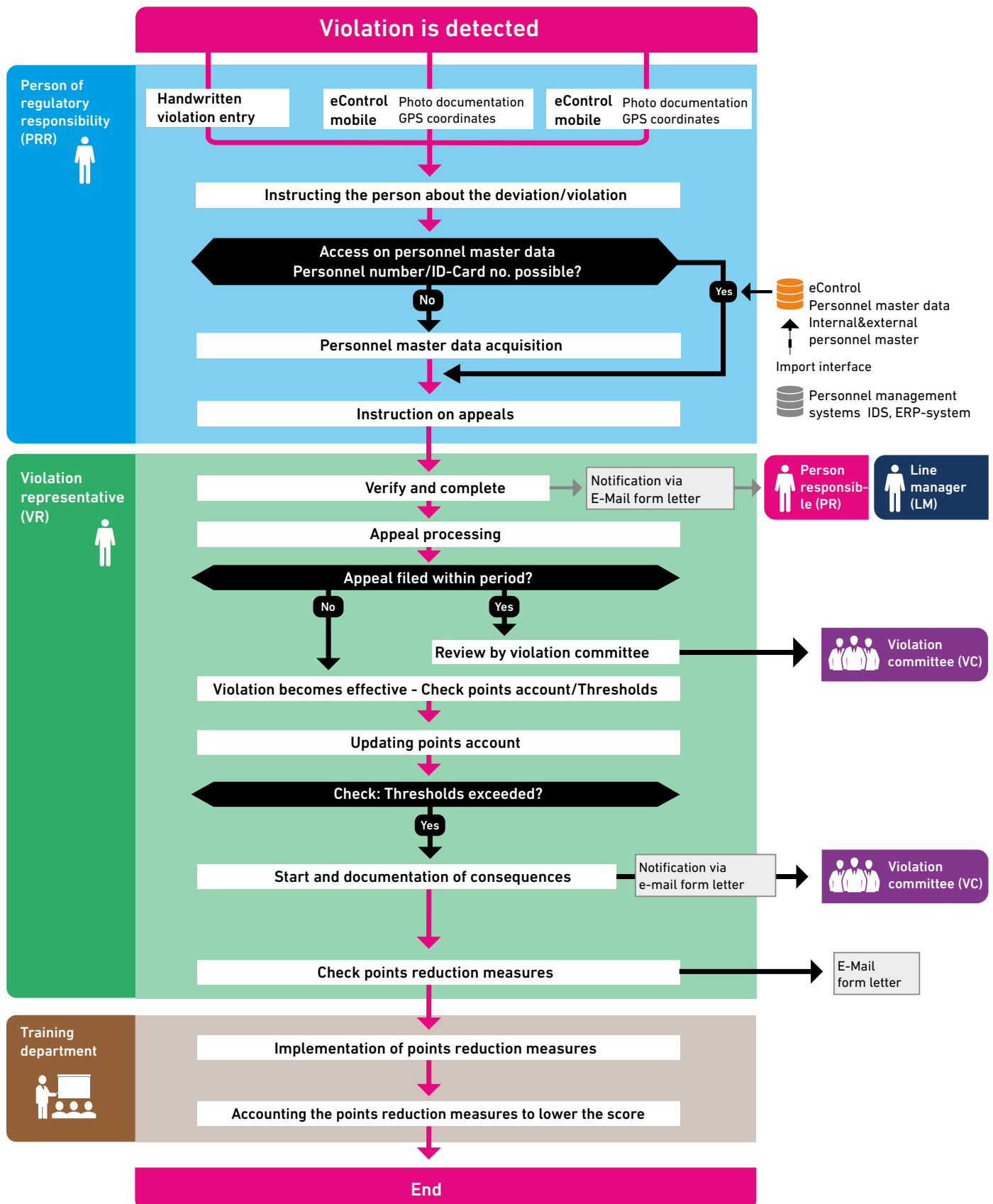


## 6 Personalised process management

**Personalised violation management comprises all violations for which a person responsible is identified. eControl provides a number of functions for the standardisation of processes for communication between the groups of people involved and for the system-based monitoring of deadlines.**

- Requirement: The allocation of a person is necessary/possible/useful
- Violation capture
  - Violation form
  - eControl web (after previous use of violation form or other handwritten notice)
    - HR master data for reliable individual allocation
    - or
  - eControl mobile
    - Useable online and offline
    - Simple and easy-to-understand documentation
    - Image documentation
    - GPS coordinates of the violation location
    - For reliable individual allocation
- Appeal instruction by the person with regulatory responsibility (PRR)
- Assessment and completion by the violation representative (VR)
  - Allocation of paper forms to the violation representative (VR)
  - Digital capture by the person with regulatory responsibility (PRR) and further processing by the violation representative (VR)
- Dispatch of personalised email form letters in eControl
  - Inform the person responsible (PR) of deadlines, points, etc.
  - Inform the line manager (LM) or the designated contact person of the violation situation
- Inspection of points accounts in the course of the violation evaluation by the violation representative (VR)
- Initiation of reduction measures and documentation of consequences if account-specific threshold values are exceeded
- Integration of violation committee in violation management process sequences
  - Assessment of appeals
  - Initiation of consequences



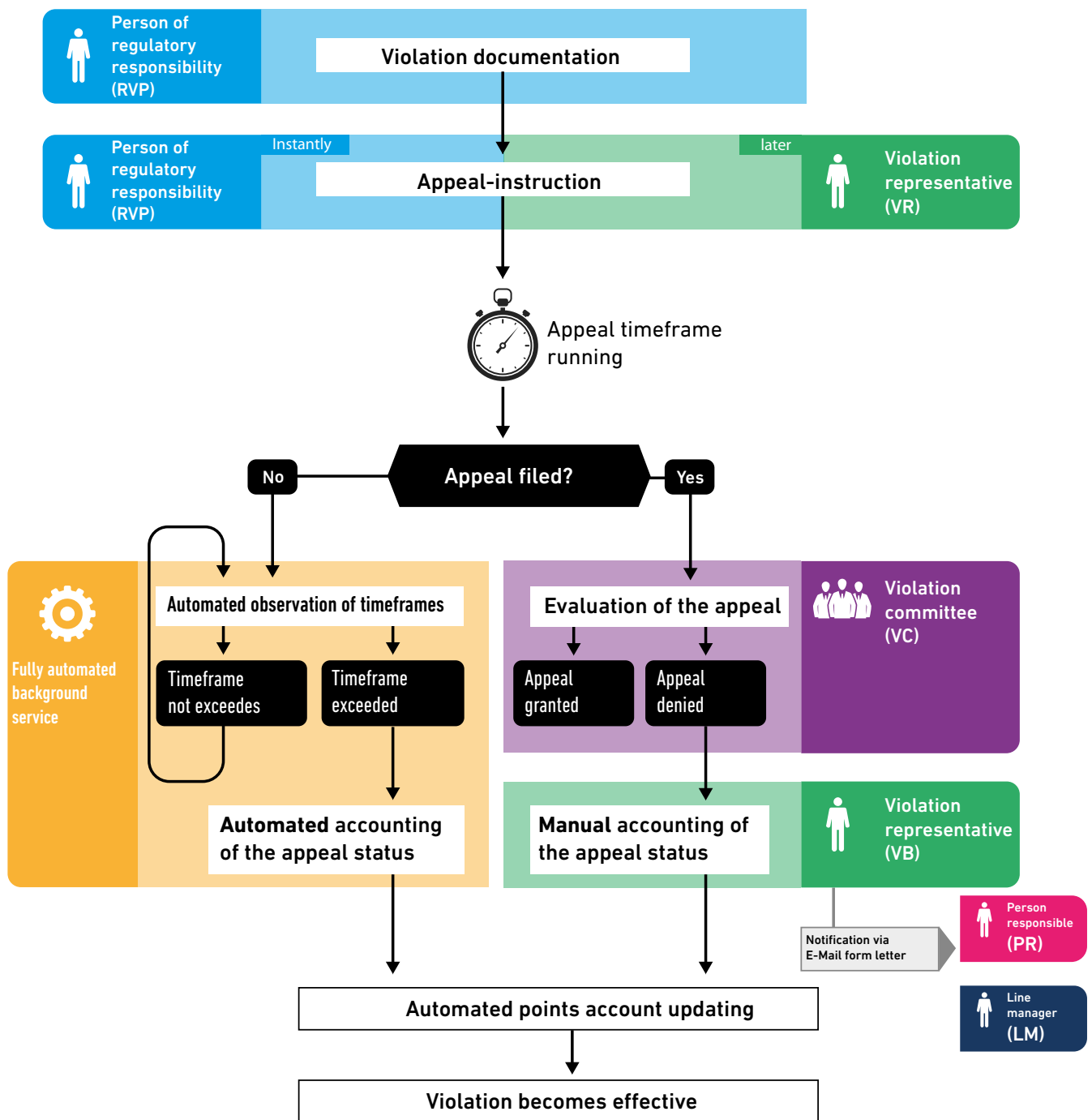


## 7 Appeals in personalised violation management

Appeals are an important component of operational violation management. The use of appeals is freely configurable and can be easily adjusted to complex operational agreements. Appeal periods guarantee that the person responsible (PR) can dismiss wrongly assigned violations.

When the appeal options have been exhausted or rejected, violations become effective. Violations must be effective in order that personalised points accounts can be automatically adjusted and consequences imposed where necessary.

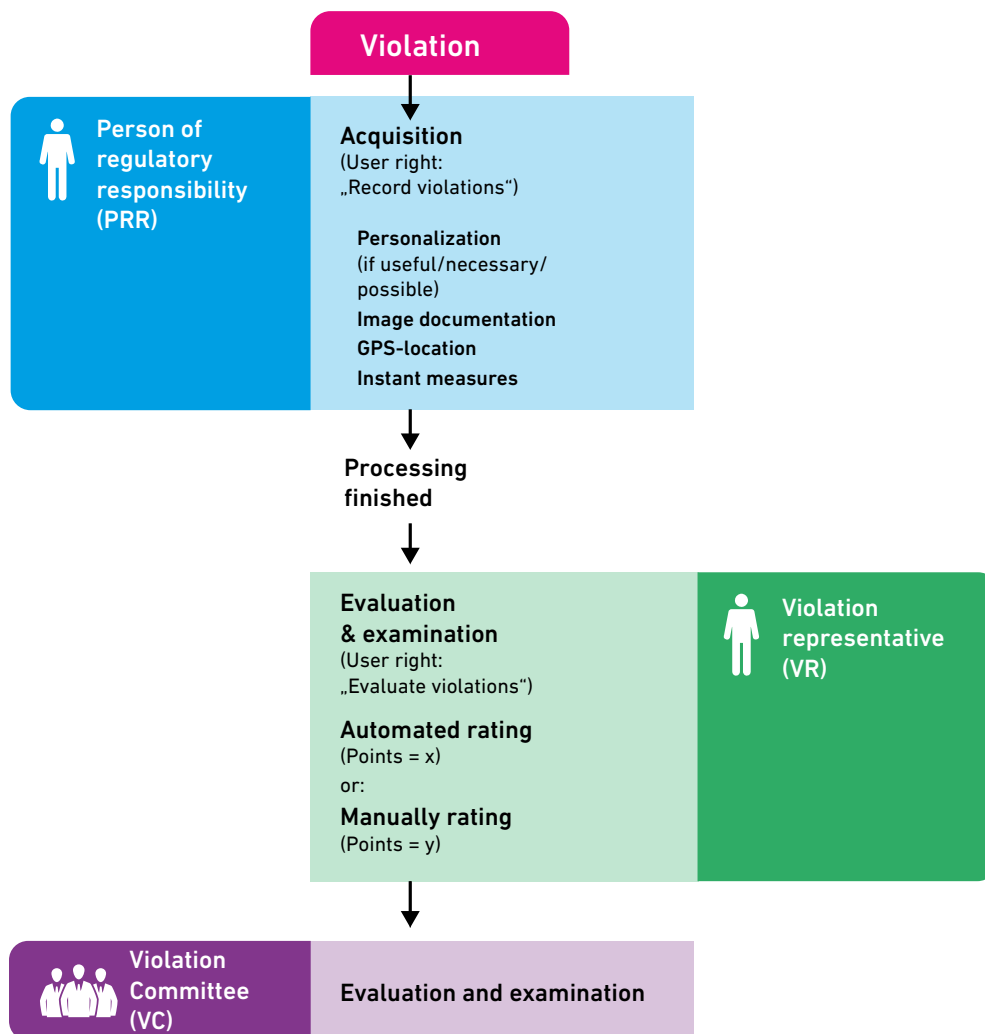
- Violation status
  - Pending violations
    - Appeal period has begun or
    - Violation committee has not yet decided on the appeal
    - No addition to points account
  - Ineffective violations
    - Appeal has been upheld
    - No addition to points account
  - Effective violations
    - Appeal period has run out or
    - Appeal has been rejected
    - Addition to points account
- Specialist background
  - Avoidance of incorrect allocations to individuals
  - Avoidance of wrongly assigned violations (misrepresentations)
  - Opportunity for the person responsible of the violation to comment
  - Compliance with operational agreements
- Configurable appeal period
- Monitoring of appeal timeframe
  - Fully automatic background process
  - Pending violations are registered as effective violations after expiry of the appeal period
- Display of appeal status in all relevant dialogues
- Transparent involvement of the violation committee
  - In the event of appeal, no addition to the points account without rejection of the appeal by the violation committee
  - Documentation of the decision of the violation committee in the violation process
  - Easy dispatch of the decision of the violation committee with a personalised email form letter to the person responsible (PR) and the responsible line manager (LM)



## 8 Four-eye principle and violation committee

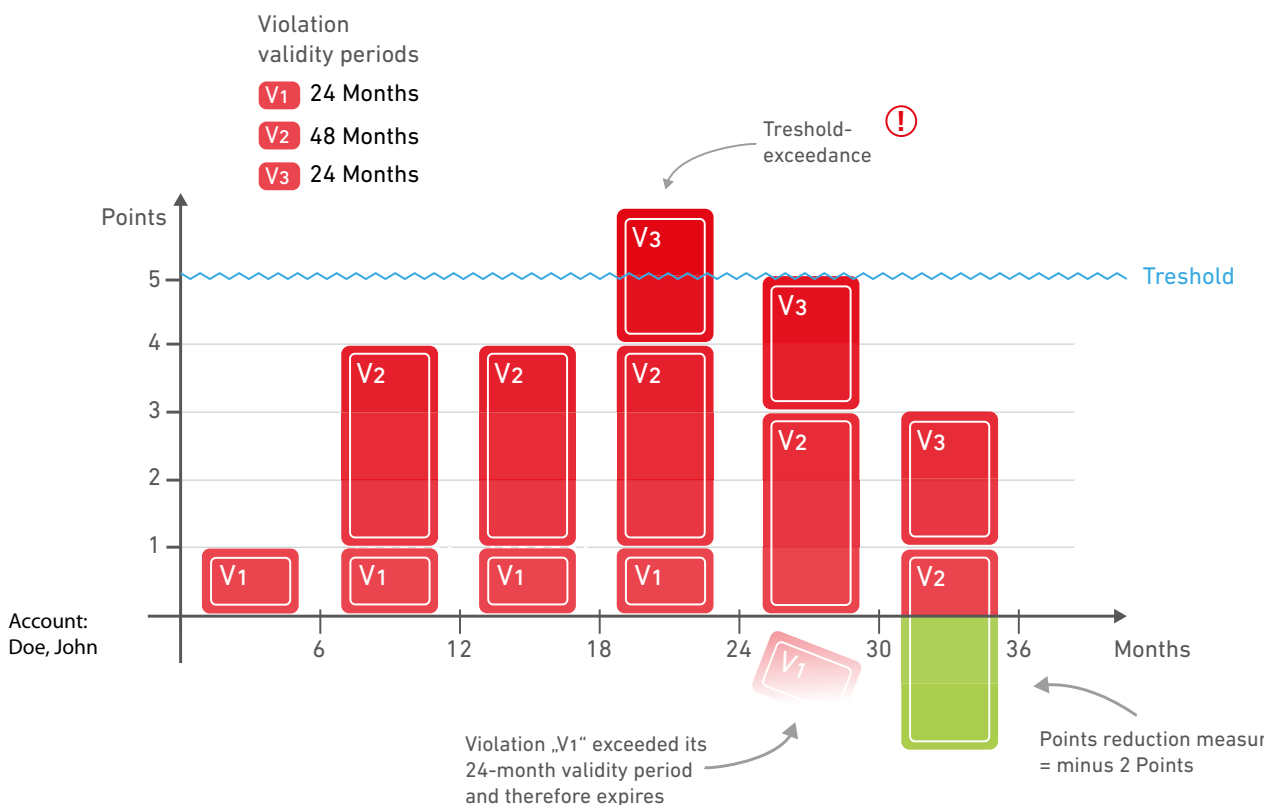
eControl guarantees that in addition to the person with regulatory responsibility, the violation representative is actively involved in the violation management process sequences. Wrongly assigned violations can therefore never be based on the misjudgement of individuals. Critical violations, where the person responsible has lodged an appeal and/or where the consequences are significant (e.g. loss of driving licence) are verified objectively by the “violation committee” (VC) body.

- No erroneous or unverified scores
- *Separation of power* – capture and evaluation by separate entities
- Complete documentation of processing progress in the audit trail (see section 15.12 “History”)
- Data protection
  - PRR can view the violations that he himself has captured
  - VR can view all violations



## 9 Account system for internal and external employees

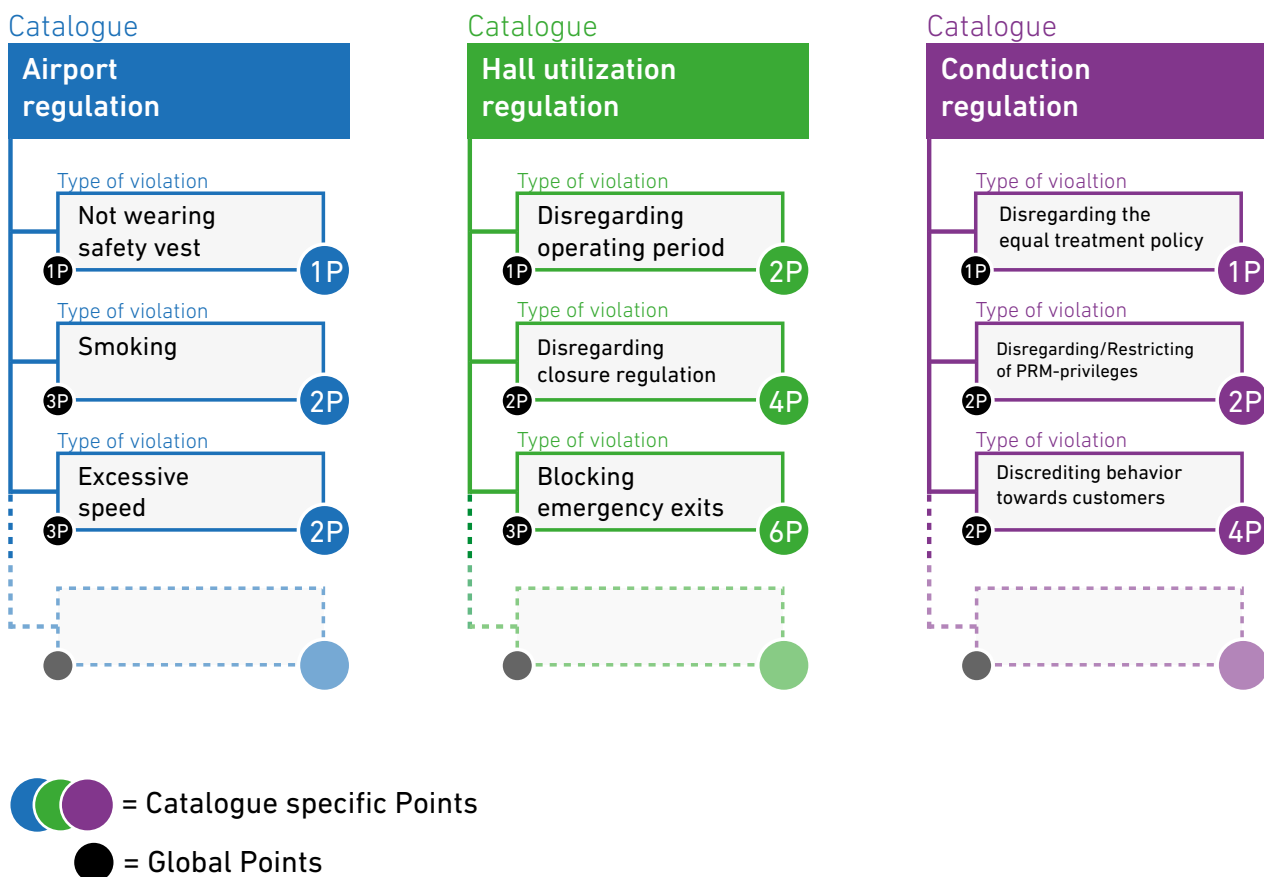
- Accounting of violations and reduction measures for each violation catalogue and person
  - Violation points and points reduction measures expire automatically if the validity period is exceeded.
  - Violation points can partially or wholly expire after a configurable timeframe, if the person has remained violation-free for configurable periods of time.
- Cross-catalogue points account available with separately parameterisable points
- HR master data of internal and external employees are retained
- Differentiated accounting for each person and violation catalogue
- Fully automatic accounting by eControl
- Clear account information in all violation management processing dialogues
- Individually adjustable validity periods for each violation (type)
- Automatic reduction in score after violation-free period
- Participation in reduction measures to improve personal score
- An account system for all persons
  - Internal employees
  - Employees of third-party companies
  - Others (agency staff, individuals, etc.)



## 10 Violation catalogue and violation type

With eControl, separate violation catalogues can be defined for different regulations. Accordingly, traffic violations can lead to the withdrawal of the driving licence, whereas failure to comply with the smoking ban is an element of another violation catalogue, which provides for renewed participation in a safety course if, for example a threshold value has been exceeded.

- Classification of personalised and process-specific violations
- Separate violation catalogues for different regulations
- Fully automatic account adjustment for each violation account and person
- Cross-catalogue statistical evaluation through global points classifications
- Simplified specialised differentiation of violations across separate catalogues (traffic regulation, hall use regulation, environmental regulations)
- Differentiated violations enable a targeted statistical evaluation in accordance with safety perspectives, whereby specific preventive measures can be taken
- The use of different violation catalogues enables threshold values to be defined for each catalogue, which can only be triggered by violations against this catalogue. Accordingly, consequences can reflect the different violations, thus enabling targeted prevention and encouraging the improvement of violation behaviour in future



# 11 Administration of violation catalogues

Violation catalogues are administered via the standardised value range maintenance dialogue.

Value ranges data

Settings> Master data> General> Value ranges data

Value range data

Search criteria

Value range data

ID: 1715 External ☐ Active ☒

Designation: Airport Regulations

Order: 0001

Value range: VIO Violation catalogue

Threshold 1: 15; 12; Retraining

Threshold 2: 20; 12; Revocation of Apron Driver Licence

Threshold 3: 30; 24; Revocation of Apron Driver Licence

Threshold 4:

Threshold 5:

Note:

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Changed on/by: 02/02/2016 15:01; FRANK

- For each violation catalogue, a maximum of five thresholds can be assigned
- A separate dialogue is available for the definition of thresholds (see chapter 12 "Administration of threshold values")
- The number of points that has been defined with the relevant threshold value is also stipulated in the "Value range data" dialogue
- Violation catalogues including any associated violation types can be viewed in the "Violation catalogue view" report. (see section 21.2 "Report violation catalogue")

# 12 Administration of threshold values

Threshold values are administered via the standardised value range dialogue.

Value ranges data

Settings> Master data> General> Value ranges data

Value range data

Search criteria: Value range data

ID: 1716 External ☐ Active ☒

Designation: 20; 12: Revocation of Apron Driver Licence

Order: 0001

Value range: VIO Violation threshold

Points: 20

Timeframe in months: 12

Consequence: Revocation of Apron Driver Licence

Parameter 4:

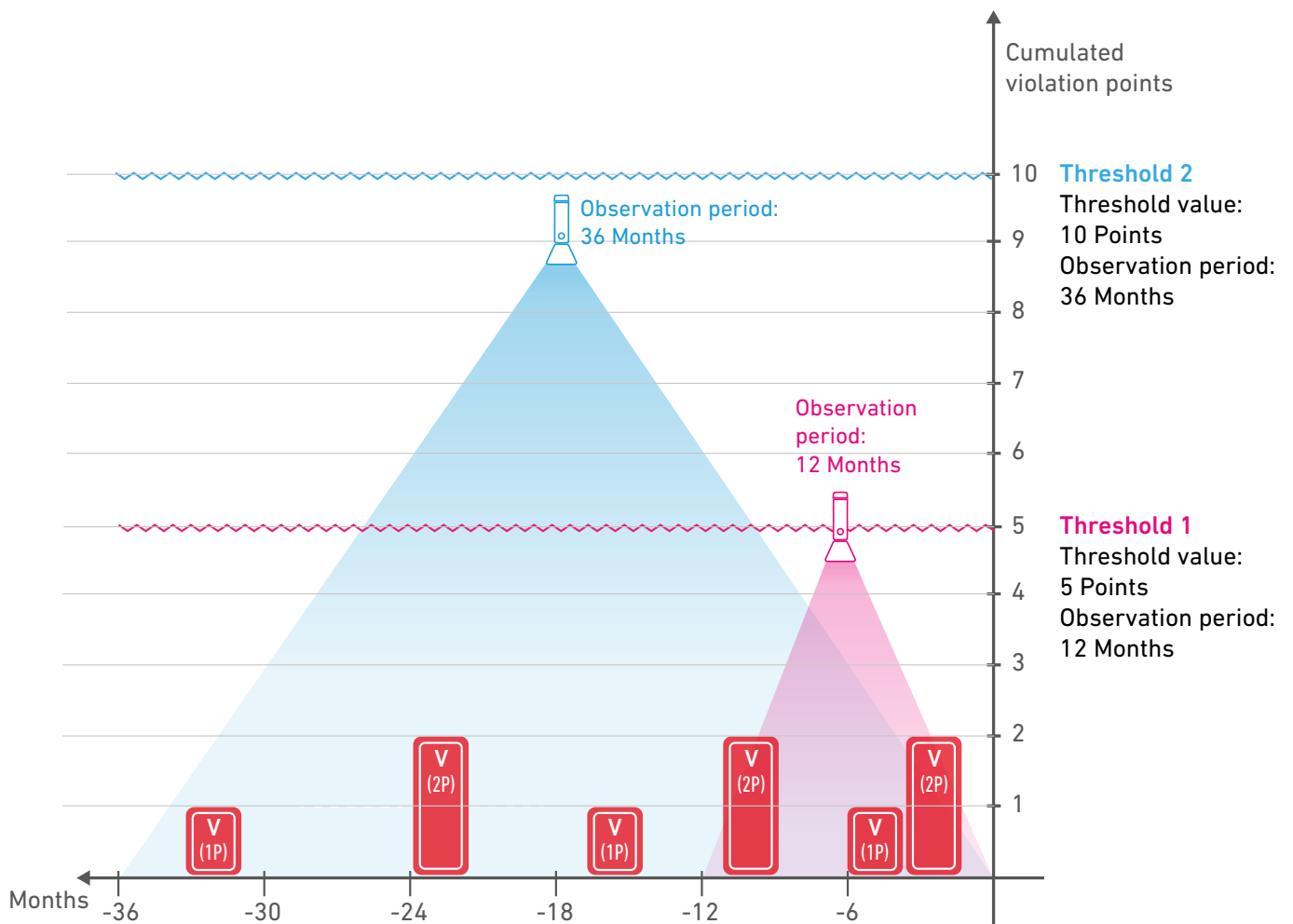
Parameter 5:

Note:

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- Threshold values refer to points balances for each person and violation account. The points balances are determined fully automatically and continuously by the system, taking into account appeal and validity periods. Points reduction measures can reduce these points balances to the extent specified.
- When a new violation is documented with the eForm “Violation” (see page 29), eControl automatically assesses whether threshold values are reached by this violation, and proposes the above-mentioned consequence to the violation representative.
- Threshold values can be combined with a calculation period. Any violations and reduction measures that exist prior to the beginning of the calculation period are not included in the assessment of the threshold-related points balance.
- If no calculation period is specified, all violations and reduction measures that have not lapsed are used to determine the threshold-related points balance.
- Threshold values with different calculation periods make it easy to detect any deterioration in violation behaviour.





**Threshold 1** applies, because five or more points have been credited to the points account within 12 months.

**Threshold 2** does not apply, because fewer than 10 points have been credited to the points account in the last 36 months.

The table above shows which violations were relevant in the assessment period in terms of basing the calculation on threshold 1, because they occurred no more than 12 months previously. The threshold values are checked whenever additional violations are documented with the eForm "Violation". Because no new violations have been documented in months 24 to 30, no check is necessary. eControl assesses the accumulated points balances individually for each of the maximum five threshold definitions for each violation catalogue.

## 12.1 Consequence master data

Consequence master data are administered via the value range data dialogue. Consequence master data are captured and maintained for the standardised entry of consequences that are triggered when points thresholds are reached.

Examples of consequences are the obligatory participation in a refresher course or the loss of driver and access permissions.

The screenshot shows the 'Value ranges data' dialog box. On the left is a tree view with categories like 'SMS Priority', 'SMS Workflow', 'SMS Risk Acceptability', etc. The 'VIO Consequence' category is expanded, showing '0001. Loss of Apron Driver Licence' and '0002. Retraining'. The main panel shows the details for '0001. Loss of Apron Driver Licence'. Fields include: ID: 1721, Designation: Loss of Apron Driver Licence, Order: 0001, Value range: VIO Consequence, Relevant for [months]: 12, Reporting right: List disqualification from driving. There are also fields for Parameter 3, 4, and 5, and a Note field. At the bottom, it shows 'Created on/by: 02/02/2016 15:04, FRANK' and 'Changed on/by: 03/02/2016 08:43, FRANK'.

- The entry of a consequence with the eForm “Consequences” requires the clear assignment of a “consequence type” from the consequence master data.
- Consequence master data guarantee a standardised application of consequences irrespective of the persons involved.
- Consequence master data are proposed fully automatically by eControl by the system, as soon as a threshold value is reached when a violation is entered.
- Consequence master data are not linked to violation catalogues. In this way the same consequence “Loss of Apron Driver Licence” can be triggered both by traffic violations against the airport use regulation and by violations against the wearing of personal protective equipment from the violation catalogue relating to occupational health and safety.
- The consequence master data make it possible to record a validity period. When a consequence is entered with the eForm “Consequences”, a validity period can be proposed, during which the time-based consequences such as driving or access bans can be organised.
- For each consequence arising from the consequence master data an individual user right can be stipulated. If a user has this user right, he can generate current lists of people, for whom the consequences of the given type are imposed. If, for example, an individual user right is defined in the dialogue “Rights” and allocated to the consequence “Revocation of Apron Driver Licence”, all users, to whom this individual user right has been assigned, can generate “Revocation of Apron Driver Licence”-lists, without it being necessary for this user to have access to the processes themselves.

## 12.2 Administration of points reduction master data

eControl provides for the reduction of points balances through participation in reduction measures. So that these reduction measures are taken not arbitrarily but irrespective of the persons involved and in a standardised manner, the points reductions and validity periods are specified in the points reduction master data.

Value ranges data

Settings> Master data> General> Value ranges data

Value range data

Search criteria Value range data

ID: 1722 External ☐ Active ☒

Designation: Retraining Airport Regulations

Order: 0001

Value range: VIO Point reduction

Violation catalogue: Airport Regulations

Point reduction: 10

Point reduction Global: 8

FollowUp:

Relevant for [months]: 24

Note:

Created on/by: 02/02/2016 15:10, FRANK  
Changed on/by: 02/02/2016 15:10, FRANK

### 1 FollowUP

System-based recommendation that is displayed in the event or in the eForm to the employee entering the data.

### 2 Relevant for (months)

Relevance in months for the catalogue-specific and global points reduction. If points have to be permanently removed, the field must be left blank.

- The entry of a points reduction measure with the eForm "Points reduction" is subject to the clear assignment of a points reduction option from these points reduction master data.
- Points reduction options guarantee a fair use of points reduction options irrespective of the persons involved, as reduction measures result in the same reduction in the points account irrespective of the person involved.
- The data field "Point reduction" specifies the number of violation points by which the points account is reduced when a reduction measure is entered with the eForm "Points reduction".
- The data field "Relevant for [months]" enables a validity period to be specified for the given points reduction option. If the data field "Relevant for [months]" is not specified, a points reduction remains valid for an indefinite period of time.
- The use of validity periods for reduction measures must be considered as soon as temporary validity periods for violations are applied. Temporary validity periods for violations give rise to an automatic reduction of the points accounts through the "limitation" of these violations. If reduction measures give rise to a temporary reduction of the points account, this leads to distortions, as several consecutive violations might be offset. From an organisational perspective, the one-off offsetting effect should be guaranteed by the fact that the selected validity period of the reduction measure is not shorter than the validity period of the violations. If this rule of thumb is disregarded, the effect of reduction

measures might prematurely expire and capitulate the points account of the person concerned to or over a threshold, and consequently the person concerned – without committing a new violation – is faced with a consequence.

- If a short validity period is selected for a reduction measure, participation in several reduction measures can be enforced. If a serious violation is charged to the account for a period of five years, and the person responsible (PR) with a 12-month reduction measure is below the given threshold, another reduction measure must be implemented one year later, because the reductive effect of the previous reduction measure has become invalid.
- If short validity periods are used, it should be guaranteed by means of the eControl notifier that the violation representative is informed if, and only if the validity period of a violation expires.

# 13 Administration of violation master data

Each violation must be specifically allocated to a violation type. In the dialogue below about the administration of violation master data, points, global points, validity periods and explanatory texts are specified, which the system assigns to each violation, as soon as this violation type has been allocated.

The screenshot displays the 'Value ranges data' dialog box. On the left, a tree view lists various violation types, including 'Stipulation deviations extent', 'Stipulation effect 221/2022', 'Stipulation header data compliance status', 'Stipulation header data workflow status', 'Stipulation monitoring cycle', 'Time regarding working hours', 'VIO Appeal status', 'VIO Consequence', 'VIO Personnel type', 'VIO Point reduction', 'VIO Violation catalogue', 'VIO Violation threshold', 'VIO Violation type', '0100. Not-wearing the visibility clothing', '0200. Vehicle/Equipment unsecured', '0210. Park or hold in roll areas', '0300. Ignore the sign "Stop during taxiing traffic"', '0400. Ignore the smoking ban', '1100. Ignore the business hours', '1300. Blocking of emergency exits', 'Violations evaluation', 'VS Consequence Appeal', and 'Working on the Flight operations area'. The right pane shows the configuration for the selected violation type '0100. Not-wearing the visibility clothing'. The configuration includes: ID: 1731, Designation: Not-wearing the high visibility clothing, Order: 0100, Value range: VIO Violation type, Violation catalogue: Airport Regulations, Points index catalogue: 1, Points index global: 1, FollowUp: (empty), Relevant for [months]: 12, Note: (empty), Created on/by: 03/02/2016 09:58, FRANK, and Changed on/by: 03/02/2016 11:17, FRANK.

- Each entry of a violation with the eForm "Violation" requires the clear assignment of a violation type.
- For all violations that are differentiated according to operational agreements, separate master data records are created in the violation types. Differentiation into different violation types is also recommended in order to enable statistical evaluation.
- Through the allocation of points to violation types an evaluation of violations irrespective of the persons concerned is implemented and the principle of equal treatment is complied with. If important reasons necessitate deviation from these standards, the violation representative (VR) can use deviating values when entering a violation.
- The associated violation catalogue can be selected from the drop-down field "Violation catalogue" – for each violation catalogue as many violation types as desired can be defined.
- The "Points index catalogue" stores a score, which the system proposes, as soon as the violation of the relevant violation type is entered. The violation representative can – for example on the instructions of the violation committee – deviate from this proposed value.
- The "Points index global" is also assigned by the system to the relevant violation type when a violation is entered. As mentioned already in the sub-item, global points classifications provide for the cross-category evaluation of violations.
- When structuring violation management, the setting "Points index catalogue" and "Points index global" can be altered, but violations documented in the past remain unchanged. The new points allocations only impact on future violations. If the description of a violation changes, it is necessary to assess whether its content needs to be adjusted. If this is the case, a new, additional violation type should be created and the old violation type (whose content has been rejected) should be shut down.
- The data field "Relevant for [months]" enables a period to be specified. Once this period has been exceeded, the points are no longer added to the violation account. If the validity

period is long, serious violations may be weighted more heavily, as they remain on the points account for longer.

- The data field "FollowUp" enables the recording of a standardised recommendation, which is displayed in the eForm "Violation" when a violation of this violation type is captured, e.g. a personal conversation between the violation representative and the person responsible, the handing out of safety manuals, etc.
- The violation type master data are key, both for personalised and process-oriented violations.

# 14 Violations workflow

## 14.1 Simplification of violation management processing sequences with eControl

- 1. Decentralised capture of violations by the person with regulatory responsibility (PRR)
  - Three different capture variants:
    - Paper form
    - eControl mobile
    - eControl Web
  - Documentation of violation by a person with regulatory responsibility (PRR)
  - Authorisation of the person with regulatory responsibility with the user right “Record violations”
  - The data fields that are provided for the processing of violations by the violation representative cannot be edited by the “person with regulatory responsibility”
  - The “person with regulatory responsibility” can view in full the violations that he himself has captured or documented and continue to follow the processing sequence. However, the violations that other RVPs have captured cannot normally be viewed by the RVPs.
- 2. Centralised processing of violations by the violation representative (VR)
  - Central processing and documentation via the eForm “Violation”
  - Push notifications: the processor is informed on request of each new violation by eControl notifier
  - Violations can be exclusively processed by the specifically authorised violation representative (VR)
  - The violation representative is responsible for communication with the person responsible (PR), his line manager (LM), the violation committee and any participating organisational units involved. Personalised form letters make communication easier and can be fully automatically archived.
  - The violation representative is responsible for the processing of appeals and the required involvement of the violation committee
  - For each effective violation, eControl assesses whether specified threshold values have been reached and consequences should be taken. The system puts forward proposals and it is the responsibility of the violation representative (VR) to implement them according to the relevant operational agreement
  - The user right “Evaluate violations” authorises the violation representative to process and evaluate

- 3. Targeted notification by the person responsible (PR) and the designated line manager (LM)
  - different notification options:
    - E-Mail
    - eControl Web (explicit granting of read access to the violation concerned by the violation representative (VR) necessary)
    - Letter
  - Event-specific access permissions for all involved users can be created via the register tab “Rights”
  - If required, a violation can be targeted in such a way that it is incorporated into the daily report of the operational area of the person responsible



## Functional areas of the eForm "Violation", using the example of a personalised violation:

Incidents

Incidents

PRR

Incident

Map List of violations Documents IERC Measures Rights METAR ObjectExplorer

ID: New

Violation

Title: Airport Regulations Ignore the smoking ban

Location: Arconda Airport

Start Date / time: 25/02/2016 / 15:52

End Date / time: / /

Report: Ground

Responsible: Espenhain, Frank

Priority: undefined

Status: In Progress

Release: ☐

Seen: ☐

No In / No Out: / /

Location: /

Aircraft / Reg: / /

Violation type

Violation catalogue: Airport Regulations

Type of violation: Ignore the smoking ban

Note:

FollowUp:

Points index violation catalogue: 4 Points index global: 4

Involved resource

Resource class: Resource:

Expand ☐

Resource note:

Violation description

Witness:

Description:

Person responsible

Employee affiliation: External company Company: Arconda Airport

Search New Remove

Personnel ID: 17 Name: Drive First name: Daniel

Personnel number: AA-121 ID number: Affiliation: External, no eControl User

Expand ☐ Gender: male Language/Country: English Great Britain

Appeal information

Appeal status: Instruction of rights of appeal has not yet happened

Instruction of rights of appeal on: End of appeal period:

Processing information

Workflow: Evaluation:

Points: 4 Points global: 4 Expires on:

Account information

Violation catalogue	Account		Points index global	
	Count	Points	Count	Points
<b>Airport Regulations</b>				
Violations	1	2	1	1
Point reductions or violation free time frame	1	0	1	
Consequences	0		0	
<b>Catalogue balance</b>		<b>2</b>		
<b>Analysis of consequences Airport Regulations</b>				
Retraining, if 15 points in 12 months months	Currently: 2			
Loss of Apron Driver Licence, if 20 points in 12 months months	Currently: 2			
Loss of Apron Driver Licence, if 30 points in 24 months months	Currently: 2			
<b>Apron Regulation</b>				
Violations	2	16	2	16
Point reductions or violation free time frame	0	0	0	
Consequences	0		0	
<b>Catalogue balance</b>		<b>16</b>		
<b>Analysis of consequences Apron Regulation</b>				
Retraining, if 15 points in 12 months months	Currently: 16 <b>Threshold reached</b>			
Loss of Apron Driver Licence, if 20 points in 12 months months	Currently: 16			
<b>Global</b>				
Violations			3	17
Point reduction			1	
Consequences			0	

1 Framework conditions

2 Violation type

3 Involved resource

4 Personal data

5 Appeal information

6 Processing information

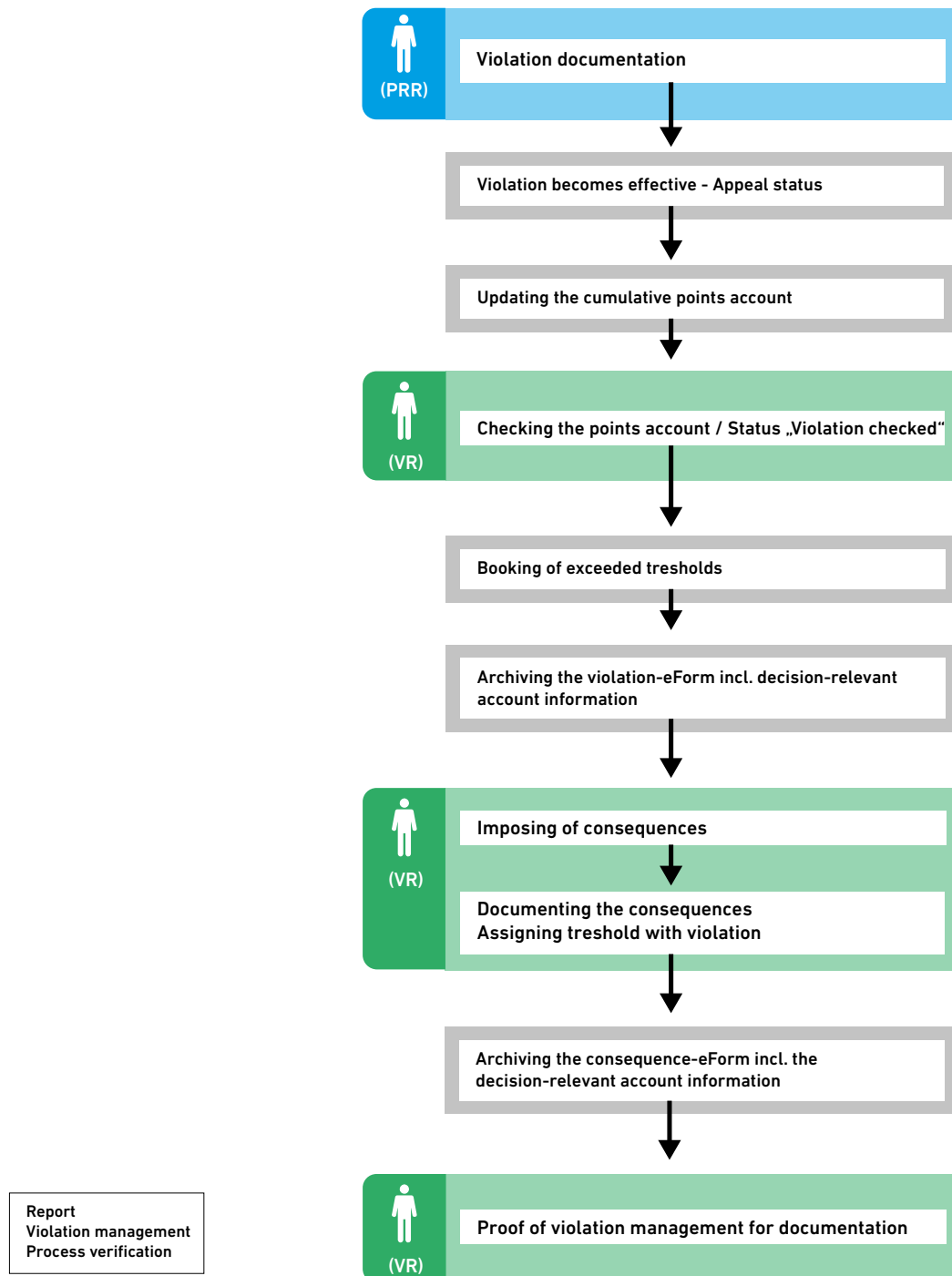
7 Information: actual violation catalogue

## 14.2 Violation management process verification

Evidence verifying that the impacts of effective violations have given rise to the consequences agreed at company level

- Evidence verifying that all violations have been evaluated by the violation representative
- Evidence verifying that the agreed consequences have been initiated if threshold values are exceeded

### Processing sequence and control options











### 14.3 Violation cockpit






The violation cockpit is a special view of the past archive for the violation representative.

In the standard view of the violation cockpit all violations are mentioned that need to be actively processed by the violation representative. These are the violations that are not yet effective or for which an appeal has been lodged.

The indicator "Appeal status" displays the following status:

Symbol	Appeal status	Verified?	Consequence
	Appeal instruction still pending		
	Appeal instruction has taken place & Appeal timeframe communicated		
	Appeal in evaluation		
	Appeal approved	No	
	Appeal timeframe exceeded	No	
	Appeal timeframe exceeded	Yes	Threshold status not edited yet
	Appeal denied	No	
	Appeal denied	Yes	Threshold status not edited yet

Violations that have the following assessment status are not displayed in the standard view, because they do not require further processing:

Symbol	Appeal status	Verified?	Consequence
	Appeal approved	Yes	
	Appeal timeframe exceeded	Yes	Threshold not triggered
	Appeal timeframe exceeded	Yes	Threshold triggered with consequence
	Appeal denied	Yes	Threshold not triggered
	Appeal denied	Yes	Threshold triggered with consequence

The following pictograms show what further information about the individual violations is available



Documents



Measures



Initial Event Risk Classification



Object links

Incidents

Search

Incident specific search

Incidents

Location:

- All -

Full text:

Priority:

=

- All -

Responsible:

- All -

Title:

ID:

Incident:

- Violation -

Status:

- All -

Date from/to:

FNo In:

~

Aircraft:

~

Location:

~

FNo Out:

~

Reg:

~

Breach processing:

- All -

</

Page 1 of 2 (38 items)

## 14.4 Different options for the documentation of violations by the person with regulatory responsibility on-site

### Traditional:

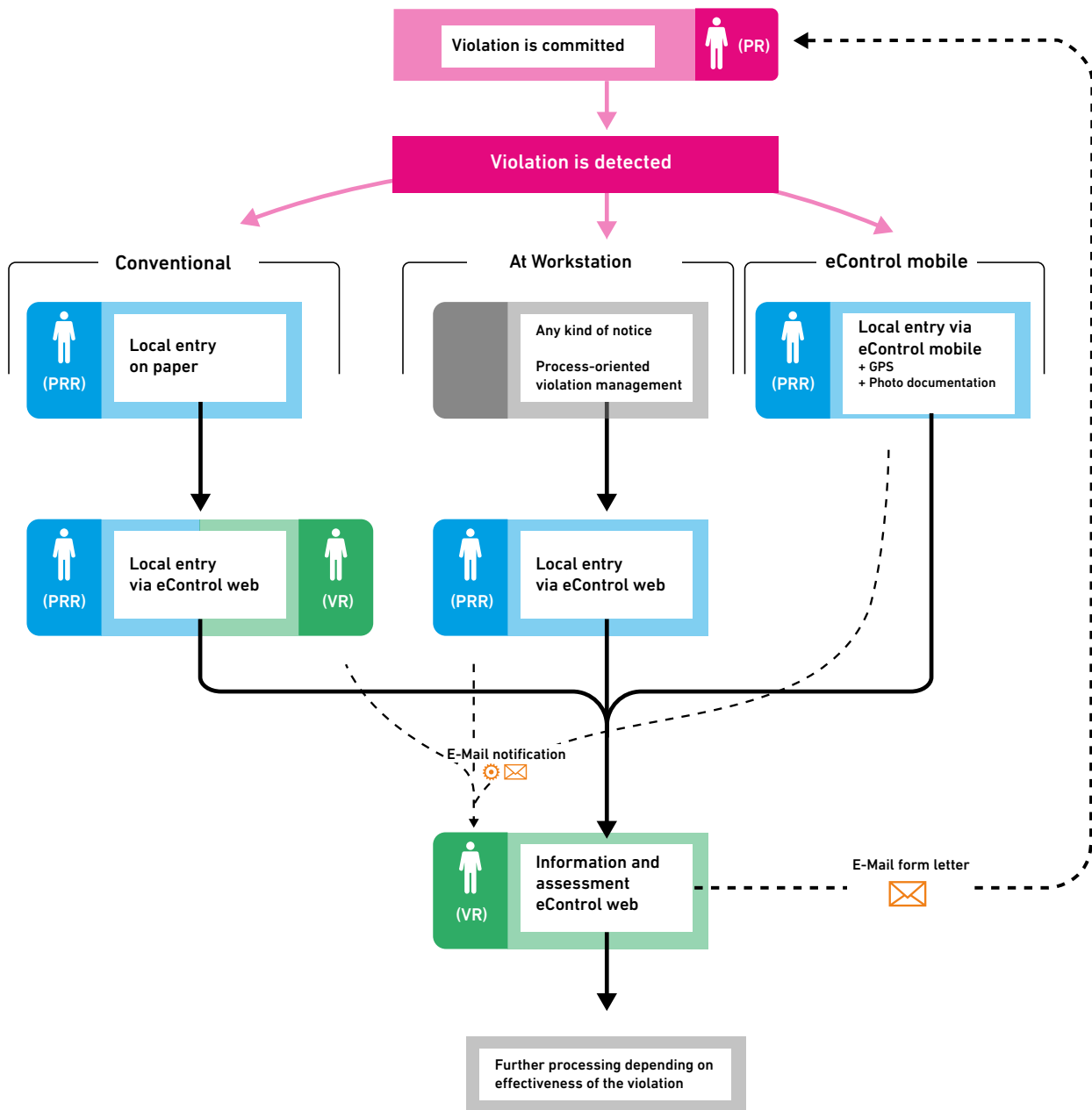
- Decentralised capture via paper form
  - Disadvantages:
    - Duplication
    - Necessary archiving or scanning of the main paper documents
    - Expensive image documentation
    - Expensive and imprecise documentation of location coordinates
    - Time delays between documentation and notification by the violation representative (VR)
  - Advantages:
    - Possible without mobile capture devices

### At work station:

- Decentralised capture with the eForm "Violation"
  - Disadvantages:
    - Possible duplication because of the transfer of handwritten notices and the like into the eForm
    - Expensive image documentation, data transfer and manual upload necessary
    - Expensive and imprecise documentation of location coordinates
    - Time delays between documentation and notification by the violation representative (VR)
  - Advantages:
    - Possible without mobile capture devices

### Mobile:

- Violation documentation with tablet and eControl mobile
  - Disadvantages:
    - Mobile capture devices required (any Windows 8.1 terminal, unlimited portable online and offline use)
  - Advantages:
    - No need for duplication (transfer of handwritten notices is not necessary)
    - Image documentation very easy due to built-in camera
    - Very easy and precise documentation of local coordinates (GPS-based tracking in WGS84 standard)
    - Virtually no time delays – as soon as the mobile capture device has access to the Internet, the violation, including image documentation, immediate measures, etc. is uploaded into the data-base. The violation representative (VR) is informed by e-mail and the processing sequence can continue.



# 15 The violation form / eForm “Violation”

eControl provides a violation form with a number of functions for the processing, evaluation and documentation of violations.

## 15.1 Summary

- Standard functionality
  - **Traceability** – all data changes are documented in a way that is legally watertight
  - **History** – the processing history is provided in a way that is clear and can be easily understood
  - **Measure management** – the initiation, documentation and performance control of preventive and corrective measures is fully documented
  - **Operational risk management IERC** – for each violation the safety manager can, where required, carry out an assessment of the operating risk in the form of an “Initial Event Risk Classification”
  - **Object explorer** – Violations can be linked with other incidents or system objects such as audits and committee meetings, in order to reproducibly record recognised connections in their content
  - **Statistical evaluation options** – Essentially, each form field is available for statistical analyses, beyond the standard reporting of violation management
- Access to human resources database – Access to these databases systematically documents personalised and process-specific violations
- Permission management - eControl guarantees that personalised data are protected and can only be viewed by the person directly concerned, the violation representative and the person who has documented this violation.

## 15.2 General violation data

- When did the violation occur?
  - Start date/place
- Who has documented the violation?
  - The responsible person (the drop-down field lists all eControl users and is usually pre-set with the person who is logged on at the time when the violation is captured)
- Access to violation information
  - The violation appears as standard in the daily report of the person with regulatory responsibility (PRR), who has documented the violation. Other users require specific read permissions in order to be able to access the violation data.
  - The violation representative essentially has access to all violations. The view “Violation” displays all violations irrespective of the area allocation, so that they can be processed properly and fully by the violation representative.

The screenshot shows the 'Incidents' form in the eControl system. The form is titled 'Incidents' and has tabs for 'Incident', 'Map', 'List of breaches', 'Documents', 'IERC', 'Measures', 'Rights', 'METAR', and 'ObjectExplorer'. The 'Incident' tab is active. The form is divided into two main sections: 'ID: New' and 'Violation'. The 'Violation' section contains a 'Title' field with the text 'Apron Regulation Park or hold in roll areas'. To the right of the title are dropdown menus for 'Location' (Aronda Airport) and 'Report' (Ground). Below the title are fields for 'Start Date / time' (04/11/2015 / 14:26), 'End Date / time' (empty), and 'Responsible' (Espenhain, Frank). At the bottom, there are fields for 'Priority' (undefined), 'Status' (In Progress), and 'Release' (checkbox). A 'Show extended parameters...' button is also present.

The general violation data are relevant for both personalised and process-specific violation management.



## 15.3 Violation classification

- Violation catalogue
  - Selection of a violation catalogue,
  - subsequently the violation type can be selected
- Verstoßart
  - Selection of a violation type from the catalogue of the previously selected violation catalogue
  - Master data fields for the violation type are displayed
    - Reference text
    - FollowUp
    - Violation catalogue points index
      - a. Form field “Points index violation catalogue” is pre-set
      - b. Editable for violation representative (VR)
    - Global points index
      - a. Form field “Points index global” is pre-set
      - b. Editable for violation representative (VR)
  - Title of the eForm “Violation” is pre-set with “Violation catalogue + violation type”

The screenshot shows a form titled "Violation type". It contains the following fields:

- Violation catalogue:** A dropdown menu with "Apron Regulation" selected.
- Type of violation:** A dropdown menu with "Park or hold in roll areas" selected.
- Note:** A text area.
- FollowUp:** A text area.
- Points index violation catalogue:** A text input field with the value "2".
- Points index global:** A text input field with the value "2".

Each violation must be allocated to a violation type, which must be taken from a previously selected violation catalogue. After a violation type has been selected, the following information is displayed:

- Reference (reference text for classification)
- Follow-up (recommendation)
- Violation catalogue points index
- Global points index

The data fields “Points index violation catalogue” and “Points index global” can be changed by the violation representative, if operational agreements are changed. After the user has selected a violation type, the title of the eForm is automatically pre-set with violation type and violation catalogue.

The violation classification is a key statistical feature for both personalised and process-specific violation management.

## 15.4 Ressource allocation / process-oriented violation management

- The resource is available irrespective of any person involved and is therefore of particular importance for process-oriented violation management
- Identification of very frequently involved resources
  - Manual selection of resource class
    - Drop-down field “Resource” is pre-set with the resources associated for the selected resource class
  - Manual selection of resource
    - Resource master data displayed in expansion area
  - Full-text resource search
    - Recommended when there is a very large volume of resources
    - Enter keyword and the list box is pre-set with the references
  - Interfaces for the import of resource master data (e.g. SAP)
  - Manual maintenance of representative resource classes and resources possible via user interface

The expandable screen area “Involved resource” provides for the allocation of an involved resource. The allocation of resource class and resources is particularly significant for process-specific violations, because in this way correlations between resource types and violation types can be determined, thus enabling targeted preventive measures.

In order to simplify the search in a large volume of resources, a full-text search can be carried out. The list box displays all resources containing the search term. With one click, the data fields “Resource class” and “Resource” are overwritten. Further resource master data are also created.

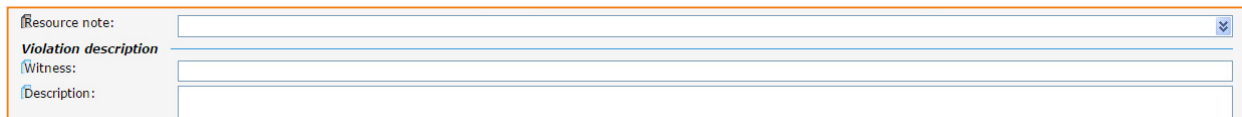
If the involved resource is not contained in the database, the data field “Resource note” can be used to describe the equipment involved.

Resource allocation is relevant for both personalised and process-specific violation management.

## 15.5 Description of violation

The information about the description of the violation is of particular importance for the individual evaluation and a targeted measure management. Apart from a verbal description of the situation and any available image documentation, no further information about the given violation can be obtained later.

The data field "Description" enables the storage of a reference text containing 4000 characters.

The image shows a software interface for entering violation details. It consists of a vertical sidebar on the left with four labels: "Resource note:", "Violation description", "Witness:", and "Description:". The "Violation description" label is highlighted in blue. To the right of the sidebar are four horizontal input fields. The top field is for "Resource note" and has a small blue icon with a downward arrow on its right side. The other three fields are for "Witness:" and "Description:". The entire form is enclosed in a thin orange border.

Third-party statements, comments, etc. can also be attached to the current violation as a document. The data field "Witness" records the personal details of the witness. Any witness statements can be attached as a document. The description is relevant for both personalised and process-specific violation management.

After the selection of a personalised master data record, the personal details recorded are displayed, in order to validate the identification of the person responsible (PR) and to illustrate the potential methods of communication.

In order to avoid the labour-intensive and erroneous capture of HR master data, eControl HR master data administrators can be selected. eControl can store an unlimited volume of HR master data. A parameterisable interface service is available, which enables cyclical data transfer from upstream personnel management, EKP or other systems.

## 15.6 Personalised allocation

### 15.6.1 General

- Person responsible screen area
  - Selection of available HR master data records
  - Capture of new HR master data records
- Classification of employee affiliation
  - Own employees
  - Third-party company
- Company affiliation of employee
  - Statistical evaluation criterion
- Expandable area for the display of communication information
- Appeal instructions
  - Appeals
  - Appeal instruction occurs on -> from this date the configurable appeal period begins

Person responsible			
Employee affiliation:		Internal employee	
Company:			
Search		New Remove	
Personnel ID:	5	Name:	President
Personnel number:	?	ID number	
Gender:	male	First name:	Phil
Affiliation:		Internal, eControl User	
Language/Country:			
Expand			

eControl violation management is provided for the administration of all violations, and whether an internal employee or an employee from a third-party company is involved is therefore of no importance.

If the person who has committed the violation can be identified, they must be recorded as the person responsible (PR).

**One** violation can be allocated specifically to **one** person. If several persons have jointly committed a violation, individual violations must be recorded for the individual persons. The system-based allocation of a person is of particular importance, because only then can the violation account of the person concerned be applied and a potential reaching of thresholds be assessed, which may give rise to corresponding consequences.

Personalised allocation is only relevant for personalised violations. For process-specific violations it is sufficient to record the company affiliation of the violation. Company affiliation is a significant criterion for the organisation of preventive measures – the storage of a violation is not possible unless a company affiliation is stated.

## 15.6.2 Personalised master data records search

**Choose person**

ID:  Name:  First name:  Date of birth from/to:  /

Personnel number:  Company:  Location:  Entry date from/to:  /

ID number:  Status:  Personnel type:  Leaving date from/to:  /

ID	ID number	Name	First name	d.o.b.	Company	Personnel type	S	A
0000008		Airbus	Aribert			Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000016		Apple	Timothy	20/01/1978	Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000020		Bird	Tom			Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000007		Boeing	Bodo		Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000015		Brown	Peter	19/06/1975	Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000012		Consultant Joness	Richard		M2P Consulting	Trainer	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000013		Consultant Woodstock	Peter		M2P Consulting	Debitor/Credito	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000017		Drive	Daniel	16/12/1965	Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000004		Espenhain	Frank		Arconda Airport	Trainer	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000009		Hope	Bob		Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000011		Lee	Tim		Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000006		Maschke	Markus		Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000014		Peters	Karin	24/03/1981	Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000005		President	Phil			Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000003		Rohmann	Pascal		Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000018		Sender	Jill		Arconda Airport	Trainer	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000010		Smith	Barbara		Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000002		SMSADMIN	SMSADMIN		Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0000019		Wellington	Tom		Arconda Airport	Participant	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- Identification of the person responsible (PR) by means of:
  - “ID number”
  - “Personnel number”
  - “Name” and “Company”
- Display of the available master data following selection of a person in the eForm

eControl provides a search and preview dialogue for the selection of personalised master data records. There are many selection criteria, whereby the ID or employee numbers in particular can be read from the relevant ID card on-site and which enable the person responsible of the violation to be easily and clearly identified. If no ID card is available, a search can be made using the company affiliation, name and many other criteria. When the person is found, the data can be transferred by clicking on the **OK** button.

The person with regulatory responsibility (PRR) should always try to select a person from the available database. If the search is unsuccessful and the person cannot be found, a quick capture of the HR master data can be done in the dialogue shown below. If a duplicate is inadvertently created during this process, points thresholds are cancelled.

### 15.6.3 Manual capture of HR master data

The manual capture of HR master data is necessary if, and only if a personalised violation is to be captured, for which no HR master data record can be applied in the system.

Insofar as the personal details are regularly supplied by the data supply service with new or amended HR master data records, the manual capture of HR master data is the exception.

Manual capture is only necessary if the data update is not completed often enough or a particular group of people – e.g. visitors – are either not or not fully captured by the upstream systems.

The data can be captured both from the eForm “Violation” and from data capture by the mobile client.

An HR master data record must include at least the following mandatory data fields, which are highlighted in yellow in accordance with the eControl system standard:

- Name
- First name
- Sex
- Company affiliation
- E-Mail

The dialogue “Record personnel data” is shown below and is opened by clicking on the button “New”:

**Record personnel data**

Name:	Fisher	First name:	Marc
Title:		Gender:	male
Company:	Ground Handling Ltd.	Department:	Ramp Services
Location:	Arconda Airport	Affiliation:	External
Street / Address:		Phone:	
ZIP / City:		E-mail:	m.fisher@gmx.com
Country:		Email notification	<input type="checkbox"/>
Personnel number:		Language:	
ID number:			

**Create and assign** **CANCEL**

## 15.6.4 Maintenance of HR master data

The manual maintenance of HR master data is required, if errors occur when capturing HR master data or if a change requirement is identified when HR master data are compared.

They must also be maintained if the associated line manager – normally automatically allocated via the company affiliation – is either not or not correctly associated.

Both the person with regulatory responsibility (PRR) and the violation representative (VR) have – provided that the user right “Personnel master data” has been assigned to them – the possibility to maintain the Personnel master data via the menu item

*“Business applications/ Personnel management **Personnel master data**”*

The central aim of the collection, processing and use of personalised data and the selection and organisation of data processing systems is to collect, process and use as little personalised data as possible. As eControl requires only a very small volume of data to be captured, both operational requirements and agreements with the data protection officer and/or the operational co-determination bodies must be flexibly taken into account when maintaining personnel master data.

### 15.6.5 Employee hierarchies

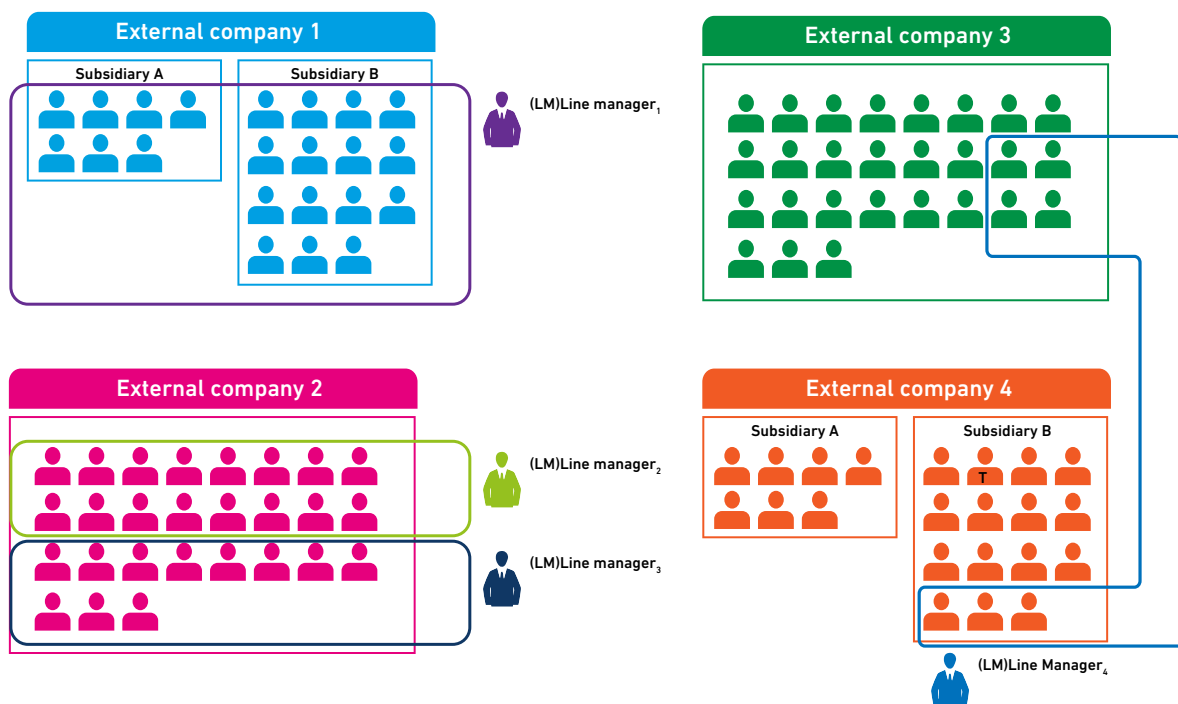
Employee hierarchies are used in the context of violation management, in order to record a hierarchical relationship to line managers or representatives. These hierarchies enable not only the person responsible of the violation but also the designated line managers to be informed by the generation of emails. This is particularly important for people who do not communicate via individual email addresses.

By informing line managers / representatives, specialised departments and third-party companies can be effectively and promptly involved in the implementation of preventive measures.

The nature of the hierarchies presented is dynamic – if new people arrive, to whom hierarchies apply with regard to company affiliation or other criteria, they – once defined – are automatically repeatedly suggested when emails are sent.

The definition of employee-to-line manager relationships is completely flexible with eControl.

A line manager designated to deal with violations can be appointed company-wide for the internal company or for third-party companies. Accordingly, as many line managers as desired can be defined, in order to reproduce hierarchies. Line managers can also be positioned company-wide, so that a single point of contact can be established for employees of officially independent subsidiaries of the same parent company.





In the course of personalised master data provision via the data supply service, a company attribute is fully automatically assigned to the employees. This can be used for the above-mentioned definition of employee hierarchies. This attribute is also fully automatically managed when HR master data is captured manually via the web form or when data is captured with eControl mobile.

The attribute “Company affiliation” can of course be edited at any time via the HR master data dialogue, in order to correct the hierarchy if it deviates from the standard.

Each HR master data record that is relevant for violation management has the attribute “Company affiliation”:

Personnel master data

Business applications> Personnel management> Personnel master data

HR master record | **Attributes** | 4 Personnel hierarchy | Documents | Qualifications | Qualification profiles | Correspondence

Personnel 00000020 • Tom • Bird • External, no eControl User

☐ Show only used attributes ☐ Show detailed information

Attribute	E	Value
Department	✓	
Airside worker	✓	Yes
Aircraft Handling	✓	
Executive employee	✓	
Trainee	✓	
Company affiliation	✓	Company: <u>Ground Handling</u>

The value “Company: Ground Handling” for the company affiliation attribute is now applied as standard for the hierarchical relationship with regard to violation management.

The only requirement for this is that a corresponding employee hierarchy be recorded for this line manager.

This employee hierarchy can be recorded as follows:

Attribute Company = “Company Ground Handling”

This line manager can also be fully automatically informed by eControl about whether the driving licences of any of his employees are due to expire shortly, if they are invited to forthcoming qualification events, etc.

If a line manager is only to be informed about violations, the notification logic can be restricted by applying the system parameter “[special hierarchy] – violation management” as qualification.

Below an employee hierarchy – as described in the example - has been structured for all employees affiliated to the company “Ground Handling” for the employee “Peter Smith”.

Personnel master data Business applications> Personnel management> Personnel master data

HR master record | 1 Attributes | **Personnel hierarchy** | Documents | Qualifications | 1 Qualification profiles | Correspondence

Personnel 00000016 • Timothy • Apple • External, no eControl User

☐ Show deactivated records

Rule ID	Personnel	User group	Personnel attribute	Qualification	Qualification profile	A
9			Department = RS			✓

Page 1 of 1 (1 items)

Rule ID: 9 ✕ Active ☒

Personnel:

User group:

Personnel attribute: Department

Ground Handling ☒

Qualification:

Qualification profile:

Note:

If the compliance manager “John Doe” is appointed for the subsidiaries:

- “Handling A Ltd.”
- “Handling B Ltd.”
- “Handling C Ltd.”
- “Handling D Ltd.”

and must be exclusively informed about the violation issues of the four companies mentioned above, the following adjustments must be made:

**Personnel master data** Business applications> Personnel management> Personnel master data

HR master record | **Attributes** | Personnel hierarchy | Documents | Qualifications | Qualification profiles | Correspondence

Create a new personnel file for a non-eControl user. • External, no eControl User

☐ Show deactivated records

Rule ID	Personnel	User group	Personnel attribute	Qualification	Qualification profile	A
10			Department = Handling A Ltd.	G Ramp Safety Training		✓
11			Department = Handling B Ltd.	G Ramp Safety Training		✓
12			Department = Handling C Ltd.	G Ramp Safety Training		✓
13			Department = Handling D Ltd.	G Ramp Safety Training		✓

Page 1 of 1 (4 items)

Rule ID: 13 ✕ Active ☒

Personnel:

User group:

Personnel attribute: Department

Handling D Ltd. ☒

Qualification: G Ramp Safety Training

Qualification profile:

Note:



Further information about employee hierarchies can be found in our catalogue: „TQMS Training and Qualification Management“

### 15.6.6 Appeals

Appeals are key to the effectiveness of violations. The process sequences are discussed in „7. Appeals in personalised violation management“.

As a rule, no manual intervention by the violation representative is necessary. The person with regulatory responsibility (PRR) informs the person responsible (PR) about his appeal options. This is documented by the person with regulatory responsibility (PRR) in the eForm or with eControl mobile in the data field “Instruction of rights of appeal on”, whereupon the appeal period begins. A background service regularly and fully automatically checks whether the appeal period has expired. As soon as this is the case, the data field “End of the appeal period” is filled and the appeal takes effect fully automatically.

If the person responsible (PR) lodges an appeal, this is processed manually by the violation representative according to the current operational agreements. This step is concluded with the specification of an appeal status, which characterises the violation as effective or ineffective.

Appeal information	
Appeal status:	Appeal dismissed
Instruction of rights of appeal on:	05/11/2015
End of appeal period:	

### 15.6.7 Validation result

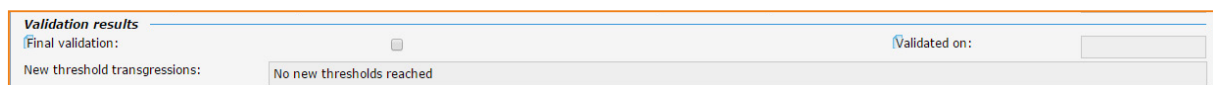
The validation of the violation is the responsibility of the violation representative (VR), is relevant for both personalised and process-specific violations and requires the user right "Evaluate violations".

As soon as the violation representative has characterised the violation as "Final validation" in the check box, the processing of the violation by the violation representative (VR) is concluded and he must then, if appropriate, initiate consequences in a separate form. This does not however mean that other specialised departments – e.g. safety management – have also concluded the processing of the violation – where appropriate, participating organisations must give their opinion at a committee meeting and propose preventive measures.

The validation of a violation arises from a violation that has become effective and for which the points account during the assessment period and the points balance is being allowed to accrue. (see section 15.7 "Account information in the violation dialogue")

The eControl system assesses whether and which thresholds are being reached by the violation that has now become effective and displays this in the data field "New threshold transgressions".

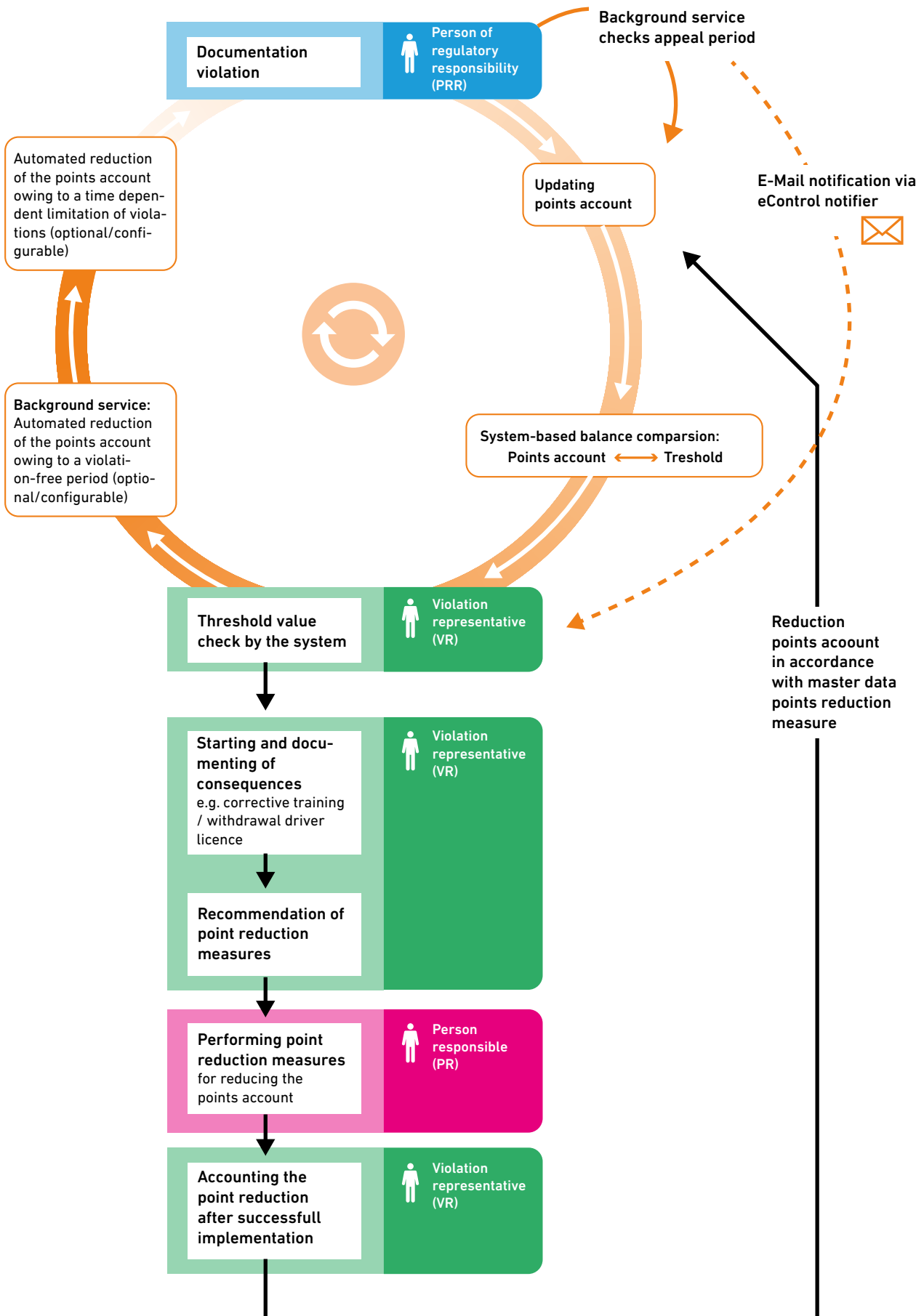
When these thresholds are reached, consequences come into force, which must be enforced and implemented by the violation representative. (see chapter 18 "eForm: Consequences")



The final audit for violations is also required for non-personalised and process-specific violations. For process-specific violations, corrective or preventive measures must also be initiated by the violation representative (VR) against the background of the current violation as the case may be.

For personalised violations where one or more thresholds have been reached, the violation representative (VR) must enter a consequence after the final audit. Consequences can also involve the obligatory participation in refresher courses or similar events, whereby participation has a reductive effect on the points account.

After the violation representative has assessed or actively taken note of the situation, the thresholds reached are automatically permanently stored. The electronic form, including the balances calculated at this point, is stored as a PDF file in the document archive.



## 15.7 Account information in the violation dialogue

The account information can only be calculated for personalised violations. eControl supports both the person with regulatory responsibility (PRR) and the violation representative (VR) by calculating and displaying individual violation accounts for each person, whereby different violation catalogues are separately managed.

The concept of violation catalogues and the general points system are described in Chapter „9. Account system for internal and external employees“.

As soon as a person has been selected, the current points balance can be automatically calculated for each violation catalogue, taking into account all violations. During the capture of the violation, the current violation is taken into account, as soon as a violation type has been selected.

In addition, only effective violations are taken into account when calculating account information – violations whose appeal period has not yet expired or for which an appeal has been lodged are not included in the calculation of the points balances.

The system also identifies whether the validity period of violations and reduction measures has expired – if these have already lapsed, they must not be taken into account.

A background service also regularly assesses whether the selected person has had a long period free of violations, which has led to an automatic points reduction, which reduces the violation account.

After the current points balance has been determined, the system can identify whether one or more thresholds have been reached.

The assessment is fully automatic and the thresholds are monitored separately. The thresholds can have different threshold values, which may deviate considerably from the overall balance of the points account. Individual assessment periods can be entered when defining thresholds and *older* violations are disregarded – e.g. “7 points in the last 12 months”.

The account information is available to both the person with regulatory responsibility (PRR) and the violation representative (VR). It is displayed in the eForm “Violation” and during the on-site capture of violations with eControl mobile.

To enable a complete and accurate calculation of the account balances, all violations, consequences and reduction measures are always indicated – irrespective of whether the person with regulatory responsibility (PRR) who is logged on has full access to all processes.

In this way, immediate measures can be reliably initiated when documenting a violation, provided that this is provided for in the relevant operational agreements.

Account information				
Violation catalogue	Account		Points index global	
	Count	Points	Count	Points
Airport Regulations				
Violations	5	17	5	14
Point reductions or violation free time frame	0	0	0	
Consequences	0		0	
Catalogue balance		17		
Analysis of consequences Airport Regulations				
Retraining, if 15 points in 12 months months	Currently: 16 Threshold reached			
Loss of Apron Driver Licence, if 20 points in 12 months months	Currently: 16			
Loss of Apron Driver Licence, if 30 points in 24 months months	Currently: 17			
Apron Regulation				
Violations	1	5	1	5
Point reductions or violation free time frame	0	0	0	
Consequences	0		0	
Catalogue balance		5		
Safety Regulations				
Violations	0	0	0	0
Point reductions or violation free time frame	0	0	0	
Consequences	0		0	
Catalogue balance		0		
Global				
Violations			6	19
Point reduction			0	
Consequences			0	

The accounting and threshold assessment logic is visualised by means of the bar chart shown below, using a specific example.

The above bar chart shows the violations at the time when they were committed, displaying them on the time axis in chronological order with regard to their validity period. The points for each violation are expressed by the height of the bars.

In examples 1 and 2 a threshold is assessed at different assessment dates, taking into account any violations committed in the last 12 months.

In example 1 the date „12-2015“ is assessed

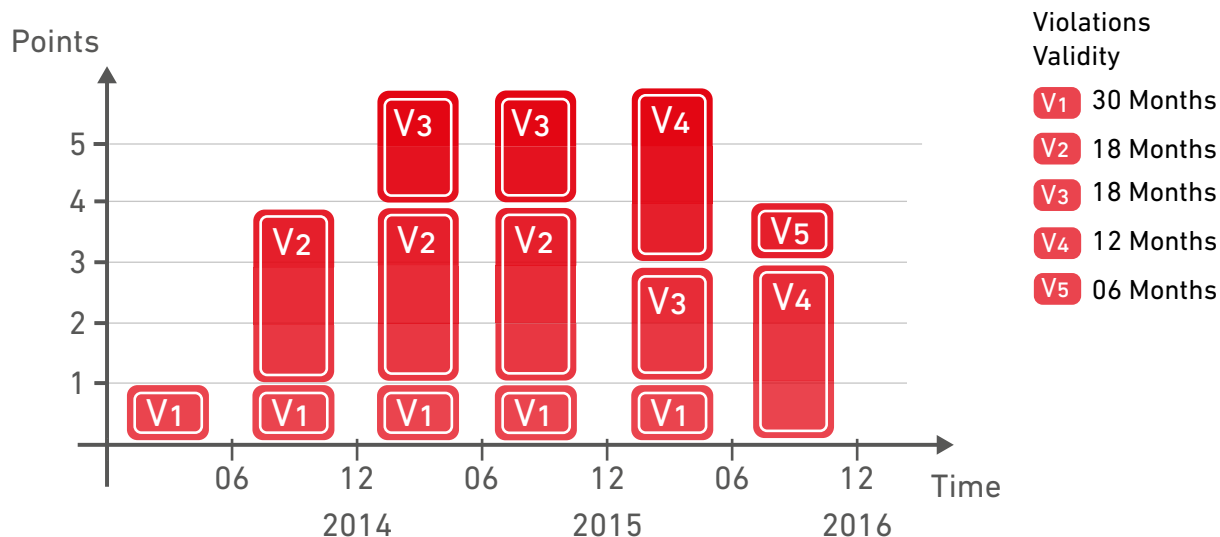
Violations V1 and V2 are older than the assessment period limited to 12 months – in this case only violation V3 is relevant. The threshold-specific points balance therefore only consists of the two points of violation V3.

In example 2 the date “12-2016” is assessed.

Violation V3 is also now older than 12 months and therefore falls outside the scope of the calculation. However, violations V4 and V5 have been committed during the assessment period of 12 months and give rise to a threshold-specific balance of four points.

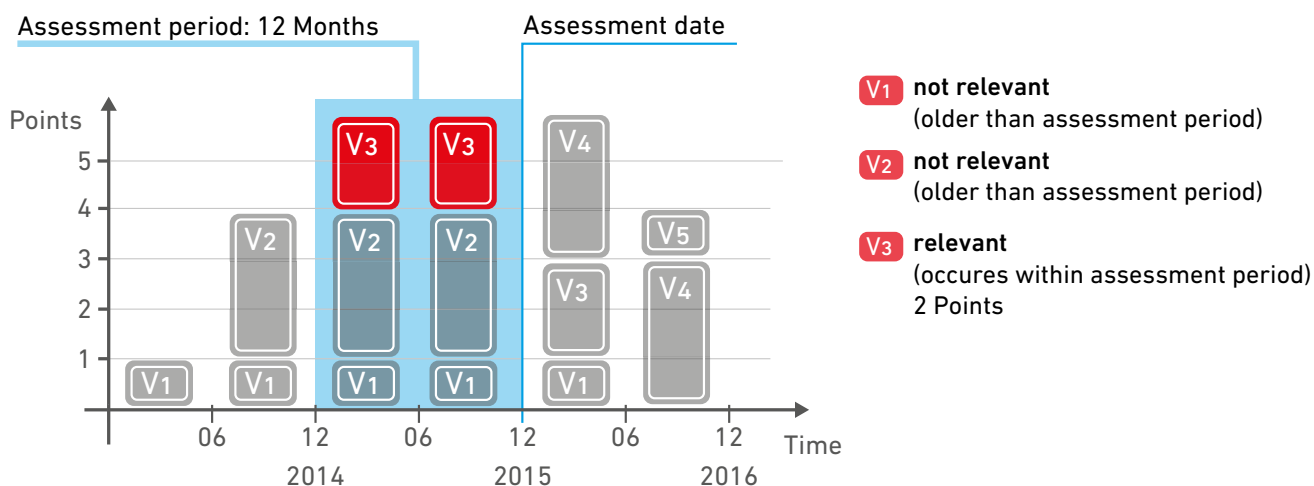
Whether or not the threshold under consideration has led to a consequence, depends on the individual definition of the threshold (see chapter 12 “Administration of threshold values”).





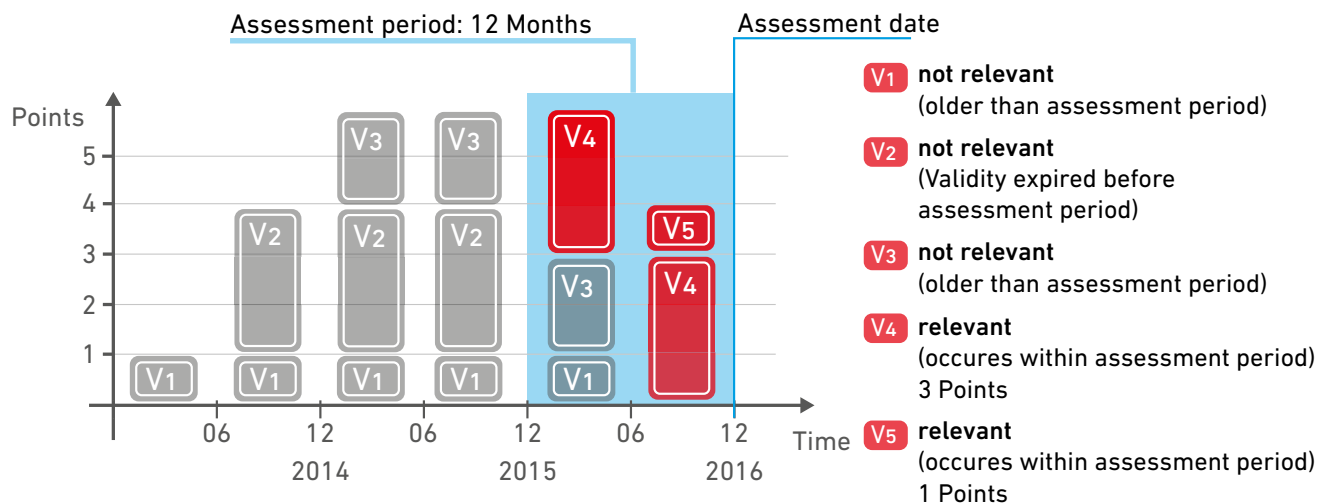
## Sample 1:

Threshold Account = 2 Points



## Sample 2:

Threshold Account = 4 Points



## **15.8 The legal framework - as complex as your organisation's operational agreements**

eControl has at its disposal a number of options for mapping a wide variety of regulations of different organisations, without the need for expensive and maintenance-intensive individual programming.

This flexibility enables the violation processing sequences to be quickly and reliably adapted to amended operational agreements or prevention programmes.

All validity periods for violations, reduction measures, thresholds and for automatic limitations for violation-free periods are optional. These settings can, but do not have to be applied. A violation type without a validity period never expires.

In practice, existing data are carried over by the manufacturer, the legal framework in the form of deadlines, catalogues and background services is initially configured and the employees are taught how to operate the system.

The day-to-day business and the occasionally required adjustments to amended framework conditions can then be managed smoothly by the violation representative (VR) himself.

## 15.9 Violation list

The violation list is available both in the eForm and in eControl mobile.

In the eForm a list of all violations committed by the selected person or the specified company is indicated in a separate register tab.

The violation list can be used for both personalised and process-specific violations.

The violation list shows when and which violations have been committed, how many points they have accrued and whether consequences have already been initiated.

This information enables the person with regulatory authority (PRR) on-site to form an authentic overview – repeat offenders are reliably identified. This information is essential if the person responsible (PR) is to be given the proper guidance by the person with regulatory authority (PRR).

In order to enable a complete and accurate presentation of the violation list, all violations, consequences and reduction measures are always indicated – irrespective of whether the person with regulatory responsibility (PRR) who is logged on has full access to all processes.

Incidents

Incident

Map

List of breaches

Documents

IERC

Measures

Rights

History

METAR

ObjectExplorer

ID 00013927 • 27/02/2016 14:38 • Violation • Airport Regulations Not-wearing the visibility clothing

Violation catalogue: 

- All -

Show appealed violations

Violation account of Boeing, Bodo:

Date	ID	Type	Violation catalogue	Violation type	W.f. status	Points	valid to	significant	Account Global
27/02/2016	13927	Violation	Airport Regulations	Not-wearing the visibility clothing	<div></div>	1 (1)	27/02/2017	1 (1)	23
10/02/2016	13926	Consequence	Airport Regulations	Retraining	<div></div>	from breach: 13924			
		Threshold:	15; 12; Retraining						
25/01/2016	13924	Violation	Airport Regulations	Ignore the sign "Stop during taxiing traffic"	<div></div>	12 (12)	-	12 (12)	23
28/12/2015	13925	Violation	Airport Regulations	Ignore the smoking ban	<div></div>	6 (6)	28/12/2017	6 (6)	11
05/11/2015	13905	Violation	Airport Regulations	Ignore the sign "Stop during taxiing traffic"	<div></div>	5 (5)	-	5 (5)	5
04/01/2015	13914	Violation	Airport Regulations	Not-wearing the visibility clothing	<div></div>	2 (2)	04/01/2016	-	

## 15.10 Document management

eControl enables all available documents connected with the current violation to be centrally stored in the eControl document archive.

A detailed image documentation can be provided, particularly when using mobile terminals, whereby saved images can be automatically stored in the archive with the built-in camera.

The document archive is also used to store correspondence. With personalised form letters that are archived as standard, eControl makes it easier for the violation representative (VR) to correspond.

eControl documents the assessment of each violation by the violation representative (VR), by archiving the violation form with the current account balances fully automatically as a PDF document.

A number of other documents may also emerge during the administrative processes involved in violation management, e.g.

- Appeal documents
- Opinions of the person responsible (PR)
- Violation committee (VC) documents

The eControl document archive has a number of different standards that are also available for violation management:

- Tagging of documents for research across all processes
- Fully automatic version management
- Unlimited number of documents
- Display of documents of linked objects
- Access to the violation-specific documents requires read permissions for this violation

Incidents

Incident
Map
List of breaches
2 Documents
1 IERC
1 Measures
1 Rights
History
METAR
ObjectExplorer

ID 00013905 • 05/11/2015 14:55 • Violation • Airport Regulations Ignore the sign "Stop during taxiing traffic"

☐ Show deactivated documents
☐ Show release history
☐ Show only checkedout documents
☒ Group documents by category

General documents
ID 00013905
Picture documentation
Picture documentation
Event 13905 - Violation - Message No.1 [301]
Linked documents

Document ID: 404
Release state: 1
Checked in ☒
Active ☒

Title: Picture documentation
Category: Picture documentation
Keywords:
Note:

Source file: 2-BUD-Follow\_Me.jpg (00010082\_001.jpg)

Created on/by: 22/02/2016 15:22, FRANK
Changed on/by: 22/02/2016 15:22, FRANK

Preview document "Picture documentation"

## 15.11 Measures

eControl measure management is used for the organisation, monitoring and verification of preventive measures.

Measure management is primarily intended for process-specific preventive measures and thus supplements the consequences of personalised violation management.

In general, all functions are available for violation management measures according to the system standard:

- Traffic light function, target dates and measure status
- Root cause analysis
- Automatic e-mail notifications for overdue measures

Measure management also comprises the documentation of immediate measures, which can be recorded by the person with regulatory responsibility (PRR) with eControl mobile when documenting a violation on-site.

The screenshot displays the 'Incidents' application window with the 'Measures' tab selected. The main content area shows the 'Measure information' tab for a specific measure. The measure details include:

- ID:** 40
- IERC:** (empty)
- Title:** Instant instruction of Bodo Boing
- Description:** (empty text area)
- Keyword 1:** (empty dropdown)
- Type:** Preventive
- Target date:** (empty date field)
- Status:** Finished
- Responsible:** President, Phil
- Keyword 2:** (empty dropdown)
- Priority:** High
- Actual date:** (empty date field)
- Realization:** (empty dropdown)
- Info:** (empty text area)
- External organisation:** (empty dropdown)
- External management:** (empty dropdown)
- Ext. info:** (empty text area)

Below the measure information, the 'Root cause analysis' section contains four text areas for documentation:

- Root cause:
- Development of a corrective action:
- Implementation of the corrective action taken:
- Monitoring and evaluation of the corrective action:

At the bottom, the creation and modification history is shown:

Created on/by: 22/02/2016 15:21, FRANK  
Changed on/by: 22/02/2016 15:21, FRANK

## 15.12 History

eControl guarantees the traceable storage of all data changes.

The system's database records

- Time of change
- Logged on user
- Data field
- Value before the change
- Value after the change

The history is shown on a separate register tab and lists the data changes in a form that is legible for the user, and which does not require a more detailed knowledge of the system. In addition to the data changes

- E-Mail notifications and
- E-Mails

are displayed, in order to obtain an overview of which form status the relevant organisational units have at their disposal.

Information can be obtained from the history about which processing status has displayed a violation and when, and can therefore serve as evidence of correct violation management.

Access to the history requires the user right "Read audit trail". The display of the names of users who have made the changes, of email dispatches and notifier notifications can also be assigned to specific users.

Incidents

Incident

Map

List of breaches

2 Documents

1 IERC

1 Measures

1 Rights

History

METAR

ObjectExplorer

Incident

Map

List of breaches

2 Documents

1 IERC

1 Measures

1 Rights

History

METAR

ObjectExplorer

ID 00013905 • 05/11/2015 14:55 • Violation • Airport Regulations Ignore the sign "Stop during taxiing traffic"

☒ Audittrail ( ☒ Without modification timestamp and -user)

☒ Incident data ☒ Incident attributes

☒ Map ☒ Documents ☒ IERC ☒ Measures ☒ Rights

☒ Notification ( ☒ Insert ☒ Update)

☒ E-mail

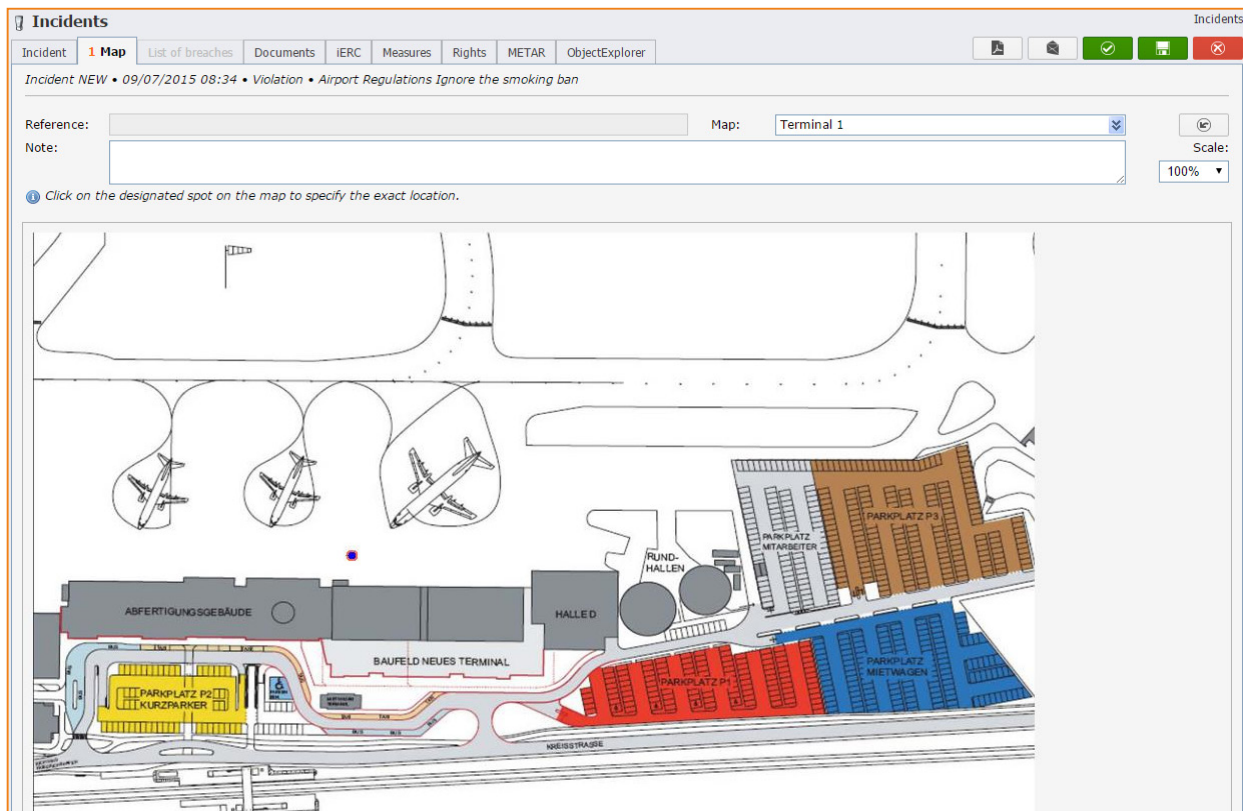
Type	Data field	Value NEW	Value OLD	Time stamp	User	
Type	Job-ID	In/Up	Message type	Time stamp	User	
	User name		Category	E-mail	Status	
	Last modified on		22.02.2016 15:31:11	22.02.2016 15:30:14	22/02/2016 15:31	Espenhain, Frank
	Instruction of rights of appeal on:		15.11.2015	22/02/2016 15:31	22/02/2016 15:31	Espenhain, Frank
	Appeal status:		Opposition period passed	Instruction of rights of appeal has not yet happened	22/02/2016 15:31	Espenhain, Frank
	Last modified on		22.02.2016 15:30:14	22.02.2016 15:24:00	22/02/2016 15:30	Espenhain, Frank
	DOC405		UPLOAD	22/02/2016 15:27	Espenhain, Frank	
	301		E-mail	22/02/2016 15:27	Espenhain, Frank	
	Free hand		b.boeing@arconda.ag			
	Last modified on		22.02.2016 15:24:00	22.02.2016 15:23:49	22/02/2016 15:24	Espenhain, Frank
	Last modified on		22.02.2016 15:23:49	22.02.2016 15:22:55	22/02/2016 15:23	Espenhain, Frank
	Incident rights		Boeing, Bodo => WRITE	22/02/2016 15:23	Espenhain, Frank	
	Last modified on		22.02.2016 15:22:55	22.02.2016 15:22:17	22/02/2016 15:22	Espenhain, Frank
	DOC404		UPLOAD	22/02/2016 15:22	Espenhain, Frank	
	Last modified on		22.02.2016 15:22:17	22.02.2016 15:21:39	22/02/2016 15:22	Espenhain, Frank
	IERC19 causal factors		Training	22/02/2016 15:22	Espenhain, Frank	
	IERC19 causal factors		Workmanship	22/02/2016 15:22	Espenhain, Frank	
	IERC19 defense mechanisms		Assistance systems	22/02/2016 15:22	Espenhain, Frank	
	IERC19 processes		Taxi In	22/02/2016 15:22	Espenhain, Frank	
	IERC19		UPLOAD	22/02/2016 15:22	Espenhain, Frank	
	Last modified on		22.02.2016 15:21:39	22.02.2016 14:56:48	22/02/2016 15:21	Espenhain, Frank
	MEASURE40		UPLOAD	22/02/2016 15:21	Espenhain, Frank	

## 15.13 Local information

- Local information is relevant for both a statistical evaluation and for a documentation of violations.
- With eControl mobile, local information can be recorded easily and accurately using the built-in GPS receiver of the mobile terminal
- Local information is stored in WGS84 format

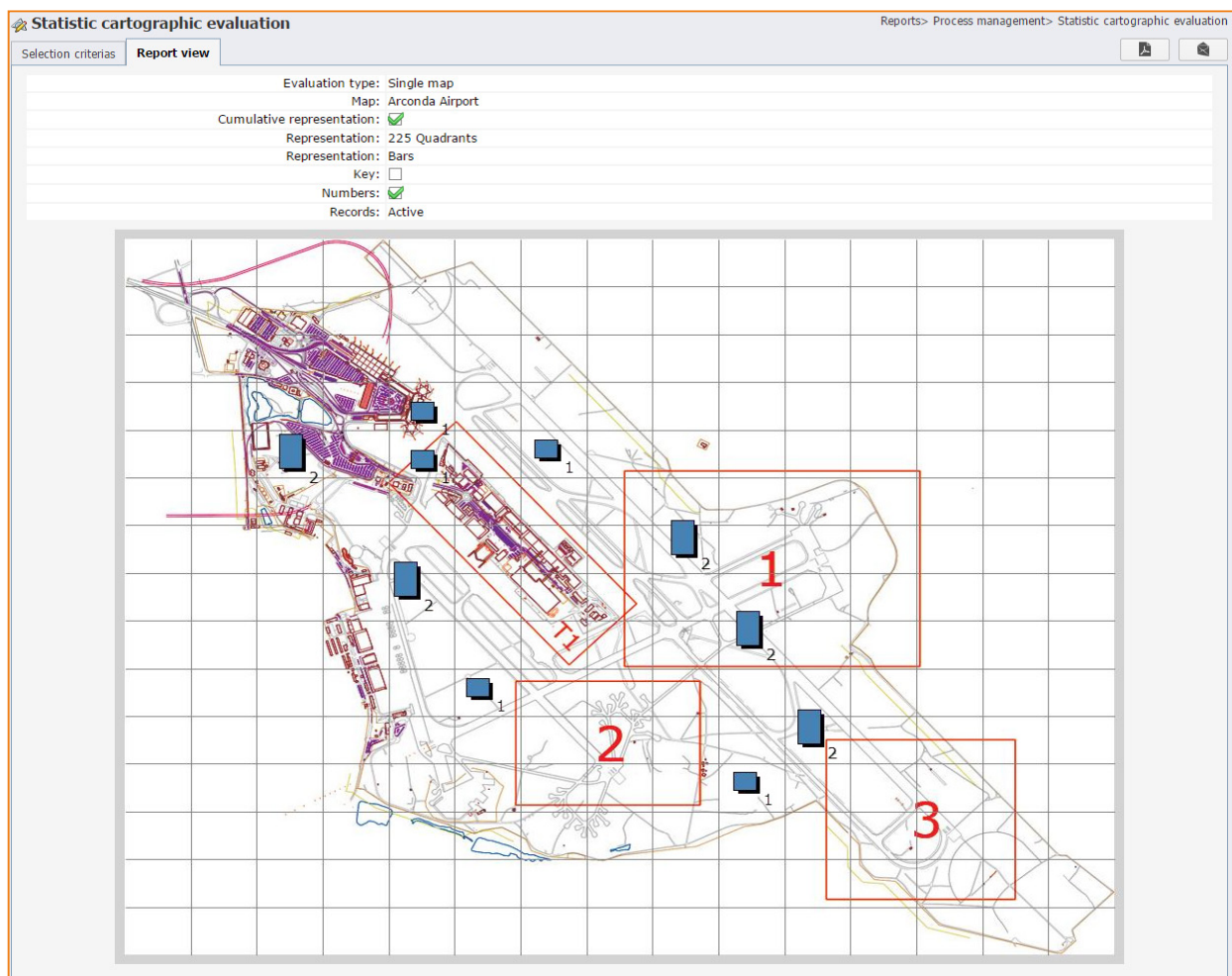
Local information can be captured and changed with both eControl mobile and in the Violations eForm by fixing a point on the recorded map. With eControl, local information can be mapped on as many calibrated maps as desired. The maps are easily calibrated by means of a software system support.

On the Map register tab a location can be specified for each violation and this is used for local statistical evaluations. In addition, a free object can be marked on the map with the eForm "Violations". This polygon can be structured as desired by the user and used for the graphic documentation of violations.





eControl has a statistical evaluation option for the evaluation of local information, by means of which so-called hotspots can be identified. eControl scans the map according to user specifications and calculates a frequency distribution.



## 15.14 Violation and safety management interface

Violations are an important source of data for safety management. They are a significant indicator for unsafe practices, which mostly go unnoticed and are repeated until the combination of different states leads to an accident or material damage.

In section „eControl notifier - E-Mail Alerts“ a notification rule is described, which informs safety management when, and only when safety-relevant violations occur.

Usually, safety management obtains read and write access to all violations, consequences and reduction measures. With this permission, information can be amended and measures created or processed.

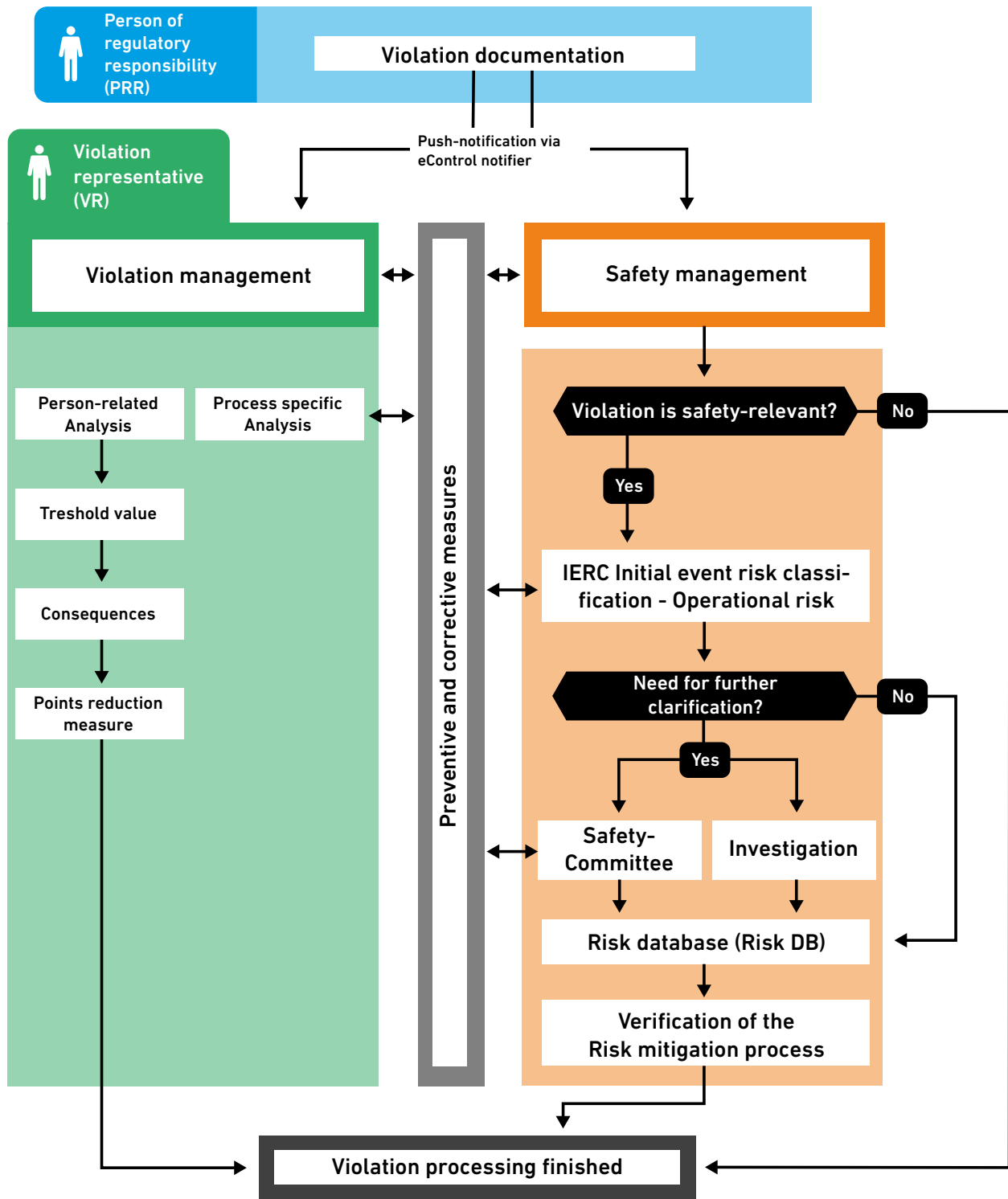
Responsibility for the violation management processing sequences rests with the violation representative (VR) – only with the user right “Evaluate violations” can the relevant process status information be maintained.

Pending measures can be processed both by the violation representative (VR) and safety management, taking into account the collaboration between these organisational units.

The register tab IERC – Initial Event Risk Classification – is available for the analysis of the operating risk. In this dialogue the safety manager classifies the initial event risk according to the methodology of the EASA Airline Risk Management Solutions (ARMS) working group.

The screenshot displays the 'Incidents' application window, specifically the 'IERC' (Initial Event Risk Classification) tab. The interface includes a top navigation bar with tabs for Incident, Map, List of breaches, Documents, IERC, Measures, Rights, History, METAR, and ObjectExplorer. The main content area shows a violation record for ID 00013905, dated 05/11/2015 at 14:55, categorized as a 'Violation' under 'Airport Regulations Ignore the sign "Stop during taxiing traffic"'. The record details include a title 'Cross follow-me car' and a description field. Below the record, there are sections for 'Hazards', 'Processes', 'Defences', 'Causal factors', and 'Consequences', each with a dropdown menu. The 'Processes' dropdown is set to '010 Taxi In', and the 'Defences' dropdown is set to '040. Assistance systems'. At the bottom right, a risk matrix is displayed, which is a 5x5 grid with rows representing event severity (Catastrophic [A], Hazardous [B], Major [C], Minor [D], Negligible [E]) and columns representing risk level (ineffective, minimal, restricted, effectively). The matrix cells contain numerical values representing risk scores, with the 'Hazardous [B]' row and 'minimal' column cell highlighted in yellow.

	ineffective	minimal	restricted	effectively
Catastrophic [A]	500	500	100	50
Hazardous [B]	100	100	20	10
Major [C]	20	20	4	2
Minor [D]	1	1	1	1
Negligible [E]				



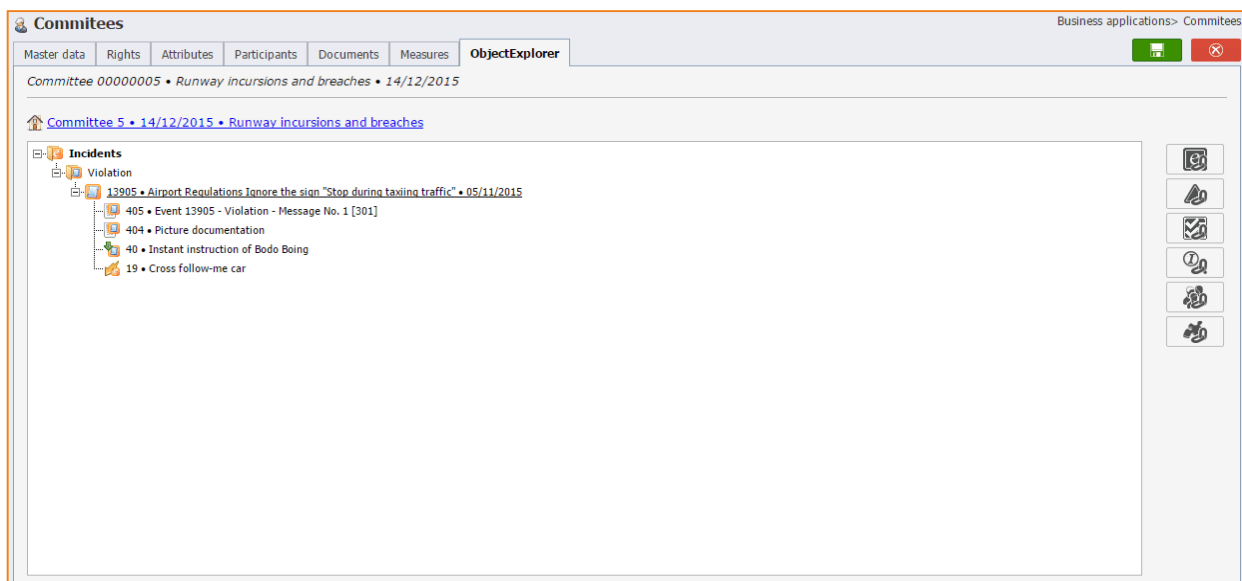
## 15.15 Objekt-Explorer

If semantic overlaps are identified with other objects recorded in the system, they can be permanently and thus reproducibly recorded in the system.

Bi-directional linking of the objects variations, consequences and reduction measures with...

- ...other eForms – e.g. with material damage attributable to a violation
- ...processes – e.g. in the case of a violation against a process description
- ...risks – e.g. if the violation is relevant for risk assessment
- ...inspections – e.g. if the violation gives rise to an inspection
- ...committee meetings – e.g. if the risk assessment of the meeting participant appears advisable
- ...audits – e.g. if the prevention of the violation is to be the focus of a future self-inspection

In the following example, violation 15583 has been linked with the committee meeting of the "Runway and Movement Committee (RMC)" on 15.12.2015. The documents recorded and measures defined are available bi-directionally, provided that there is the appropriate authorisation.



## 16 Form letter generator

eControl supports the violation representative in the generation of standard letters.

With the eControl form letter manager, reusable standard letters can be created, whose freely definable parameters enable form content with regard to

- Violations
- Consequences and
- Reduction measures

to be used.

The content of the form letters can be classified, so that their use can be clearly organised. In general, form letters - provided that there is the appropriate authorisation – can be privately or globally stored. Private form letters are available exclusively to the author, whilst global form letters can be used by all users.

The screenshot displays the 'Text blocks' management interface. The top navigation bar shows 'Settings > Master data > General > Text blocks'. The main window has two tabs: 'Master data' (selected) and 'Context'. Below the tabs, the breadcrumb path is 'ID 00000014 • Violation - Opposition period notification • Violation management'. The form fields include: ID (14), Designation (Violation - Opposition period notification), Short designation (VioOpn), and Category (Violation management). There are checkboxes for 'Public text block' (checked), 'External' (unchecked), and 'Active' (checked). The 'Text' field contains a rich text editor with a toolbar. The text content is a pre-defined form letter template for violation management, featuring several placeholders: 'Arconda Airport', 'Airport Street 23', '22453 Hamburg', 'Germany', '@@CUSTOMERLOGO\_S@@', 'Hamburg, @@SYSTEM\_DATE@@', 'Violation of @@9904001\_Violation\_catalogue@@', '@@PERS\_SALUTATION@@', 'we like to inform you that we record your violation of @@9904001\_Violation\_catalogue@@.', 'You violated against', '@@9904001\_Violation\_catalogue@@ - @@9904002\_Type\_of\_violation@@', 'on @@ERIST\_DATE\_BEGIN\_Date\_from@@ at @@ERIST\_TIME\_BEGIN\_Time\_from@@.', 'Because of this violation we added @@9904011\_Points@@ Points to your points-account.', 'If you want to contradict this statement you have to contact the department HR.', 'The opposition period expires in 14 days.', 'Kind regards', '@@SENDER\_FIRSTNAME@@ @@SENDER\_LASTNAME@@'. The text is formatted with bold and italic tags.

The violation representative (VR) can select a pre-defined form letter in the e-mail dialogue at any time and dynamically enter the current process information. This form letter can be individually edited on request prior to dispatch.

The standard system provides for a correspondence via e-mail, whereby the **person responsible (PR)** or the designated **line manager (LM)** is automatically proposed as recipient.

For the definition of hierarchical relationships, please refer to section „15.6.5 Employee hierarchies“.

The screenshot shows a web-based email composition window titled "Send". The interface includes tabs for "E-mail", "Contacts", and "Category". The "E-mail" tab is active, displaying fields for "To:", "CC:", "Subject:", and "Attachment:". The "To:" field contains "b.boeing@arconda.ag; m.maschke@arconda.ag", and the "CC:" field contains "frank@arconda.ag". The "Subject:" field is "Violation - Opposition period notification". Two PDF attachments, "Event00013925.pdf", are listed. Below these fields are checkboxes for "Log e-mail delivery in the history of the incident" and "Archive Email", both of which are checked. A "Send" button is located to the right of the "To:" field. Below the email fields is a "Text block" tab, which is active, showing a rich text editor with a toolbar. The editor contains a pre-defined form letter template. The template includes a header with the Arconda Airport logo and address, a subject line "Violation of Airport Regulations", a salutation "Dear Mr. Boeing,", a body text informing of a violation and adding points to the account, and a closing "Kind regards Frank Espenhain".

Tools> eMail> Send

E-mail   Contacts   Category

To: b.boeing@arconda.ag; m.maschke@arconda.ag

CC: frank@arconda.ag

Subject: Violation - Opposition period notification

Attachment: Event00013925.pdf, Event00013925.pdf

Upload

☒ Log e-mail delivery in the history of the incident   ☒ Archive Email

E-mail   Text block

Arconda Airport  
Airport Street 23  
22453 Hamburg  
Germany

**ARCONDA**  
Airport

Hamburg, 08/03/2016

**Violation of Airport Regulations**

Dear Mr. Boeing,

we like to inform you that we record your violation of Airport Regulations.

You violated against

**Airport Regulations - Smoking ban**

on 28/12/2015 at 10:02.

Because of this violation we added 6 Points to your points-account.

If you want to contradict this statement you have to contact the department HR.

The opposition period expires in 14 days.

Kind regards  
Frank Espenhain

The dispatch of the form letter is recorded as standard in the history of violation events. In this way it can be easily understood, who has received which letter and with which form content.

The form letter itself is also recorded in the process-specific document archive. (see section 15.10 "Document management")

## 17 eControl notifier - e-mail alerts

The eControl notifier is a freely configurable rule-based notification system, which provides for automated e-mail dispatch depending on form content.

In the context of violation management, automated e-mail notifications could for example be sent to the **violation representative (VR)** when a violation is captured by a person with **regulatory responsibility (PRR)** or after the expiry of the appeal period. Safety management notifications would also be possible depending on the violation catalogue, the violation type, the company affiliation of the person responsible or a combination of this or other form content.

The eControl notifier has a fully automatic push functionality, which notifies those involved in the process of the need for action.

The background service of the notifier sends e-mails to a freely configurable group of recipients, which contain a link giving them direct entry into eControl and enabling them to open the violation automatically, provided that the recipient has the appropriate access permissions.

The screenshot displays the 'Notifier' configuration window with the 'Conditions' tab selected. The breadcrumb trail at the top right reads 'Settings > Master data > Operation management > Notifier'. The interface includes three tabs: 'Master data', 'Recipients', and 'Conditions'. The 'Conditions' tab contains a list of rules defined by logical operators and field-value pairs. The rules are:

- Condition 1: ( Type of violation: [dropdown] = [dropdown] Ignore the sign "Stop during taxiing traffic" [dropdown] NEW [dropdown]
- Condition 2: OR
- Condition 3: ( Type of violation: [dropdown] = [dropdown] Vehicle/Equipment unsecured [dropdown] NEW [dropdown]
- Condition 4: )
- Condition 5: AND
- Condition 6: ( Company: [dropdown] = [dropdown] Arconda Airport [dropdown] NEW [dropdown]

On the right side of the conditions list, there are buttons for 'Add', 'Remove', 'AND', 'OR', and '(', ')'. Below these buttons are up and down arrow buttons and a 'SQL syntax' checkbox which is checked.

## 18 eForm: Consequences

The entry of consequences is essential to prove compliance with violation management processes. If a points threshold has been reached due to an effective violation, a consequence must be initiated and enforced by the violation representative (VR). This process is documented in the eForm "Consequences".

When a new consequence is recorded, the system independently suggests all violations for which a threshold has been exceeded, but for which no consequence has yet been recorded and which therefore requires action.

After selecting a violation, the HR master data are pre-set with the associated person. Then the threshold and the consequence provided by the system are pre-set by the system. If necessary, other consequences can also be selected, provided that they are considered against the background of the relevant legal framework.

For the sake of completeness, it must be noted that several thresholds can be triggered by a violation, which have consequences of varying magnitude – in this case the violation representative will actively select the consequence that includes all threshold excesses.

The definition of threshold values is described in chapter „12. Administration of threshold values“ and the standardisation of consequences is described in section „12.1 Consequence master data“.

Further explanations relating to the consequence can be recorded, for example explanations of the violation committee justifying the consequence. An outline of the documentation of the imposed consequence in the data field "Processing information" is documented in the inspection report "Violation process verification" – here the violation representative should always document how evidence can be provided that the consequence has actually been imposed.

Any documents relating to this can also be recorded in the document archive.

At this point the appeal has documentary status. If the legal framework of the organisation provides for appeals against consequences, these appeals must be settled before the effective consequence is entered in the system.



Incidents
Incidents

Incident
Map
List of breaches
Documents
IERC
Measures
Rights
METAR
ObjectExplorer

ID: New
Violation - consequence

Title: Drive, Daniel, Retraining
Location: Arconda Airport
Report: Ground
Start Date / time: 01/01/2016 / 15:23
End Date / time:
Responsible: Espenhain, Frank
Show extended parameters...
Priority: undefined
Status: Registration
Release:
Seen:

No In / No Out:
Aircraft / Reg:
Location:

Triggering violation
Violation: Drive, Daniel; 13935, Apron Regulation Park or hold in roll areas
Threshold: 15; 12; Retraining

Personnel information
Personnel ID: 17
Name: Drive
First name: Daniel
Personnel number: AA-121
ID number:
Affiliation: External, no eControl User
Expand
Gender: male
Language/Country: English
Great Britain

Consequence imposed by
Imposed on: 01/01/2016
Imposed by: Mr. Airbus

Consequence
Consequence: Retraining
Duration of the consequence [months]:
Justification:
Implementation note:
In effect from: 01/01/2016
In effect to: 15/01/2016

Appeal information
Appeal status: Not appealed

Account information

Violation catalogue	Account		Points index global	
	Count	Points	Count	Points
<b>Airport Regulations</b>				
Violations	1	2	1	1
Point reductions or violation free time frame	0	0	0	
Consequences	0		0	
<b>Catalogue balance</b>		<b>2</b>		
<b>Analysis of consequences Airport Regulations</b>				
Retraining, if 15 points in 12 months months		Currently: 2		
Loss of Apron Driver Licence, if 20 points in 12 months months		Currently: 2		
Loss of Apron Driver Licence, if 30 points in 24 months months		Currently: 2		
<b>Apron Regulation</b>				
Violations	2	16	2	16
Point reductions or violation free time frame	0	0	0	
Consequences	1		1	
<b>Catalogue balance</b>		<b>16</b>		
<b>Analysis of consequences Apron Regulation</b>				
Retraining, if 15 points in 12 months months		Currently: 16 <b>Threshold reached</b>		
Loss of Apron Driver Licence, if 20 points in 12 months months		Currently: 16		
<b>Global</b>				
Violations			3	17
Point reduction			0	
Consequences			1	

## 19 eForm “Points reduction”

The eForm “Points reduction” documents points reduction measures in which the relevant persons have participated.

The entry of points reduction measures is the responsibility of the violation representative (VR) and can only be done with the “Evaluate violations” permission.

The violation representative (VR) must formally enter reduction measures, so that they can reduce the violation account of the person. Reduction measures are neither violation or threshold-related, but can be taken by every person in order to reduce points balances. The selection of a threshold in the data field “In the context of the threshold” serves as a reminder for the violation representative, by noting in respect of which potential threshold a preventive reduction measure has been taken.

The master data of the reduction measures (see section 12.2 “Administration of points reduction master data”) specifies by how many points an account is reduced by a reduction measure. A validity period can also be specified here.

It must be noted that when points accounts are automatically adjusted, reduction measures do not give rise to negative points balances – if, after the acquisition of a new apron driving permit all previous violations have to be removed, a reduction measure must be created with “9999” reduction points, in order to guarantee that the points incurred for all violations have been removed.

The data field “Expires on” is filled by the background service, which monitors the validity period of violations and reduction measures.

Incidents
Incidents

Incident
Map
List of breaches
Documents
IERC
Measures
Rights
METAR
ObjectExplorer

ID: New
Violation - points reduction

Title:
Airport Regulations Retraining Airport Regulations
Location:
Arconda Airport
Report:
Ground
Start Date / time:
23/02/2016
End Date / time:
Responsible:
Espenhain, Frank
Show extended parameters...
Priority:
undefined
Status:
Registration
Release:
Seen:

FNo In / FNo Out:
Aircraft / Reg:
Location:

Violation catalog:
Airport Regulations
In context of the threshold:
15, 12; Retraining
Reduction measure:
Retraining Airport Regulations
Note:
Points index violation catalogue:
10
Points index global:
8

Personnel information
Search
Personnel ID:
11
Name:
Lee
First name:
Tim
Personnel number:
-
ID number:
AA-TL-98
Affiliation:
Internal, eControl User
Expand
Gender:
male
Language/Country:

Point reduction implementation
Implementation note:
Expires on:

Account information

Violation catalogue	Account		Points index global	
	Count	Points	Count	Points
<b>Airport Regulations</b>				
Violations	7	30	7	27
Point reductions or violation free time frame	1	-10	1	
Consequences	1		1	
<b>Catalogue balance</b>		<b>20</b>		
<b>Analysis of consequences Airport Regulations</b>				
Retraining, if 15 points in 12 months months <b>Currently: 19 Threshold reached</b>				
Loss of Apron Driver Licence, if 20 points in 12 months months <b>Currently: 19</b>				
Loss of Apron Driver Licence, if 30 points in 24 months months <b>Currently: 20</b>				
<b>Apron Regulation</b>				
Violations	2	7	2	7
Point reductions or violation free time frame	0	0	0	
Consequences	0		0	
<b>Catalogue balance</b>		<b>7</b>		
<b>Analysis of consequences Apron Regulation</b>				
Retraining, if 15 points in 12 months months <b>Currently: 2</b>				
Loss of Apron Driver Licence, if 20 points in 12 months months <b>Currently: 2</b>				
<b>Safety Regulations</b>				
Violations	0	0	0	0
Point reductions or violation free time frame	0	0	0	
Consequences	0		0	
<b>Catalogue balance</b>		<b>0</b>		
<b>Analysis of consequences Safety Regulations</b>				
Retraining, if 15 points in 12 months months <b>Currently: 0</b>				

## 20 Background services

eControl facilitates the work of the violation representative with different services that should be summarised again at this point.

### **eControl notifier notification service**

The eControl notifier notification service sends push notifications in the system to the violation representative (VR), safety management and other organisational units involved.

The notifier service permanently analyses new and processed violations, consequences and reduction measures and assesses whether rules apply that allow the system to inform pre-defined groups of recipients fully automatically with e-mails, that their involvement in the processing sequence is displayed.

### **Limitation service**

The limitation service assesses whether the period of violations and reduction measures has been exceeded and automatically enters the end of the period. From this point in time the lapsed violations and reduction measures are no longer considered when determining current points balances.

It is easy to adapt the limitation service to individual legal frameworks – e.g. if there are further constraints to be taken into consideration with regard to violation limitation periods.

### **Violation-free period assessment service**

The assessment service for violation-free periods runs permanently in the background to monitor whether any new violations have occurred in defined periods, and provides for the automatic entry of account-related reduction measures.

It is easy to adapt the limitation service to individual legal frameworks.

## 21 Reporting

In general, the standard eControl instruments are available for the analysis and reporting of violations. These instruments comprise trend analyses, indicator analyses, frequency distributions, time distributions, risk analyses, etc..

eControl also provides special violation reports and statistics, in order to make the day-to-day business of the violation representative easier.

### 21.1 Report procedure validation violation management

When verifying processes, it is necessary to distinguish between personalised and process-specific violations. A functioning management process for process-specific violations cannot be verified by means of a standardised report.

eControl provides a number of statistics and trend analyses, with which supposed correlations between processes, framework conditions and violations can be verified. The preventive measures initiated are traceably documented with eControl measure management. The effectiveness of these measures implemented by the violation representative, safety management or other specialised departments can then be verified by comparing statistical indicators before and after the implementation of the measures.

The "Report procedure validation violation management" is designed to verify personalised violations. These are verified when, and only when violations trigger thresholds on the basis of account balances, which lead to the introduction of consequences. In addition, references for consequences are cited, with which enforcement can be verified.

The "Report procedure validation violation management" requires the violation representative (VR) to have the user right "Evaluate violations".

Report procedure validation violation management








Reports> Deviation management> Report procedure validation violation management

Selection criteria

Report view

Company: Arconda Airport

Date from/to: 25/06/2015 /

Last name, first name	Company	Personnel ID			
Violation ID	Date	Violation catalogue	Violation validation from	Threshold	Consequence
W.f. status	Violation type				
Boeing, Bodo	Arconda Airport	7			
13905	05/11/2015	Airport Regulations			
	Ignore the sign "Stop during taxiing traffic"			—	—
13925	28/12/2015	Airport Regulations	23/02/2016		
	Ignore the smoking ban			—	—
13924	25/01/2016	Airport Regulations	23/02/2016	1718; 15; 12; Retraining	13926, Retraining
	Ignore the sign "Stop during taxiing traffic"				
13927	27/02/2016	Airport Regulations			
	Not-wearing the visibility clothing			—	—
Brown, Peter	Arconda Airport	15			
13932	30/06/2015	Safety Regulations			
	Blocking of emergency exits			—	—
13904	04/11/2015	Apron Regulation	23/02/2016		
	Park or hold in roll areas			—	—
Smith, Barbara	Arconda Airport	17			
13936	01/07/2015	Apron Regulation	23/02/2016		
	Park or hold in roll areas			—	—

## 21.2 Report violation catalogue

The “Report violation catalogue” report refers to the currently valid violation types grouped according to violation catalogues.

The “Report violation catalogue” report is available company-wide and documents the valid legal frameworks for the person with regulatory responsibility (PRR), violation representative (VR), person responsible (PR) and line manager (LM).

The “Report violation catalogue” report contains master data and can be called up by all users without specific user rights.a

Report violation catalogue

Selection criterias

Report view

Reports> Deviation management> Report violation catalogue

Violation catalogue: Airport Regulations

Show deactivated records: ☐

Sort order: by sort field

Violation catalogue	Catalogue ID
Violation type	Type ID
FollowUp	Points index global
Note	Order Relevant for [months]
Airport Regulations	1715
Threshold 1: ID: 1718, Designation: 15; 12; Retraining	Retraining, if 15 points in 12 months months
Threshold 2: ID: 1716, Designation: 20; 12; Loss of Apron Driver Licence	Loss of Apron Driver Licence, if 20 points in 12 months months
Threshold 3: ID: 1717, Designation: 30; 24; Loss of Apron Driver Licence	Loss of Apron Driver Licence, if 30 points in 24 months months
Not-wearing the visibility clothing	1731
	1
Vehicle/Equipment unsecured	1730
	1
Ignore the sign "Stop during taxiing traffic"	1736
	5
Ignore the smoking ban	1726
	4
Ignore the business hours	1728
	2













## 21.8 Consequences list view

The “Consequences list view” report contains a summary of all consequences.

The following display options can be selected:

- Consequences grouped according to violation catalogue
- Consequences grouped according to company

The report “Consequences list view” requires no special user right – however, the report only displays the reduction measures to which the user has at least read access.

Consequences list view Reports> Deviation management> Consequences list view

Selection criterias **Report view**

View option: Consequences grouped by violation catalogue

Violation catalogue		Incident ID	A	Date	Threshold	
Last name, first name	Personnel ID	Company	Personnel number	In effect from	In effect to	
<b>Airport Regulations</b>						
Retraining	13920			23/02/2016 09:27	15; 12; Retraining	
<b>Lee, Tim</b>	11	Arconda Airport	-		23/02/2016	23/05/2016
Retraining	13926			10/02/2016 10:04	15; 12; Retraining	
<b>Boeing, Bodo</b>	7	Arconda Airport	AA-007			



eControl mobile is a mobile application for Windows-based tablet computers with touch screen. It provides the person with regulatory responsibility (PRR) with a form especially optimised for the mobile quick capture of violations.

The mobile violation form enables both online and offline access to HR and equipment master data.

Personalised account balances (see section 15.7 "Account information in the violation dialogue") and summaries of imposed consequences, such as driving bans for example, can be called up at any time online depending on the individual permission of the mobile user.

eControl mobile is described below in summary form – for more detailed information, refer to the separate documentation provided.




- **Process management with eControl mobile**
  - Paperless quick capture of violations (eForms and routine inspections)
  - Data capture of violations online and offline
  - Mobile quick capture of violations at the scene of the incident and prompt uploading for processing by the violation representative
  - Notifier integration (e-mail alerts) for violations captured by a mobile device
  - Legally watertight data capture according to eControl system standard by Window and Oracle authentication
- **Data protection and data security**
  - Optional Windows authentication for reliable data capture in multi-user mode according to Windows safety standard
  - Continuous audit trail for violations initially captured by a mobile device
- **Ergonomics and ease of capture**
  - Optimised screen design for ergonomic and consequently error-free and authentic data capture
  - Optimal screen use irrespective of the screen diagonals of the mobile device due to portrait and landscape orientation
  - Caching and interruption of mobile recording processes
- **Mobile (image) documentation**
  - Support of camera function of mobile device for simplified image documentation
  - Version management and data protection for documents captured by a mobile device
- **(Immediate) measures**
  - Documentation of immediate measures and introduction of preventive and corrective measures, involvement of other organisational units (see section 15.11 "Measures")
  - Root cause analysis
- **GPS positioning**
  - Use of GPS module of mobile device to locate eForms and routine inspections
  - Projection of location on as many customer-specific calibrated maps as desired, e.g. for the mapping of floors
  - Unlimited spatial analysis of mobile and all other eForms and routing inspections with eControl




- **TECHNIPRL SPECIFIPRTION**

- Hardware-independent system – eControl mobile is a software product
- Operating system Windows 8.1 Professional or higher
- Suitable for software distribution
- Can be integrated in as many hardened client configurations as desired
- Offline operation with asynchronous data communication, unlimited capture volumes
- Reliable data transfer via package transfer
- Scalable system that can be used in dispersed locations as desired

Violation

Safety Management System

Titel:

Airport Regulations Ignore the smoking ban

▼

Violation type

Violation catalogue

Airport Regulations ▼

Type of violation:

Ignore the smoking ban ▼

Involved resource

Resource class

▼

Resource:

▼

Resource note

Violation description

Witness:

Description:

Person responsible

Employee affiliation:

External company ▼

Company:

Ramp Service

Personnel-ID:

Appeal information

Appeal status:

Instruction of rights of appeal has not yet happen ▼

Instruction of rights of appeal on:

▼

x

End of appeal period

▼

x

Processing information

Workflow:

econtrol.arconda.ag

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# eControl

Process  
Management

Operation  
Management

Safety  
Management

Audit  
Management

Qualification  
Management

Compliance  
Management

Environmental Bird Control  
Management

Customers:



Customers international:

