



eControl aviation - TQMS
**Organisation and Booking
of Qualification Events**

White paper

1. Training procedure <u>without</u> TQMS	3
1 Identifying training needs	3
2 Planning events	3
3 Managing participants	3
4 Inviting participants	3
5 Preparing training	3
6 Performing training	3
7 Producing the list of signatures	4
8 Documenting results	4
9 Archiving the list of signatures	4
2. Training procedure <u>with</u> TQMS	5
1 Identifying training needs	5
2 Planning events	6
3 Setting up the event in the system	7
4 Managing participants	9
5 Communication with the participants	11
6 Printing list of participants	12
7 Performing training	12
8 Distributing the list of participants	13
9 Batch processing function / documenting results	13
10 Archiving list of signatures and proofs of performance	14

Publisher: Arconda Systems AG
Hesestücken 17
22453 Hamburg

Editors: Frank Espenhain
Pascal Rohmann

Copyright: Distribution, copying and reproduction is only permitted with written approval from Arconda Systems AG. This also applies to recording in electronic databases and copying onto storage mediums. All data is protected by copyright.

Date: 07 / 2017

Layout&Graphics: Torben Petrina

1 Training procedure without TQMS

① Identifying training needs

The need for training is usually taken from tabular records, which have to be checked at regular intervals for the purpose. If checks are missed, or the “training records” that are updated by different people contain errors, the need for training is inevitably distorted.

② Planning events

Depending on the size of the company and the complexity of the organisational structure, different planning procedures are used. Generally, every airfield operator will try to hold qualification events in times of low capacity utilisation, to keep any interference with operational processes to the absolute minimum.

Phases of low capacity utilisation can be found in the flight schedule. Insofar as training dates are mainly focussed on time windows where capacity utilisation is low, the problem exists that the time windows with increasing demands on the training system are too short and participants suffer appointment conflicts, because events overlap.

③ Managing participants

There is often no planning of training events in the employees’ training records; instead, a “training day” is marked across the board in the employees’ rosters. There is no advance assignment of people to qualification events, as a result of which the systematic planning of events, checking requirements, etc. is not possible.

④ Inviting participants

There is no inviting of participants to events, because they are released by their specialist departments on training days. The trainee can hardly support the training process through his own initiative.

⑤ Preparing training

The trainer has no precise knowledge of which and how many people will participate in the planned event. Lists of participants and signatures cannot be produced in advance.

⑥ Performing training

The trainer must check the necessary prerequisites immediately before holding a training course, as far as this is possible in practice. Capacity bottlenecks only become recognisable at the time of the training course. In addition to substantive requirements, the trainer has to cope with avoidable organisational problems.

7 Producing the list of signatures

A form on which the participants who are present register in writing serves as a list of signatures.

8 Documenting results

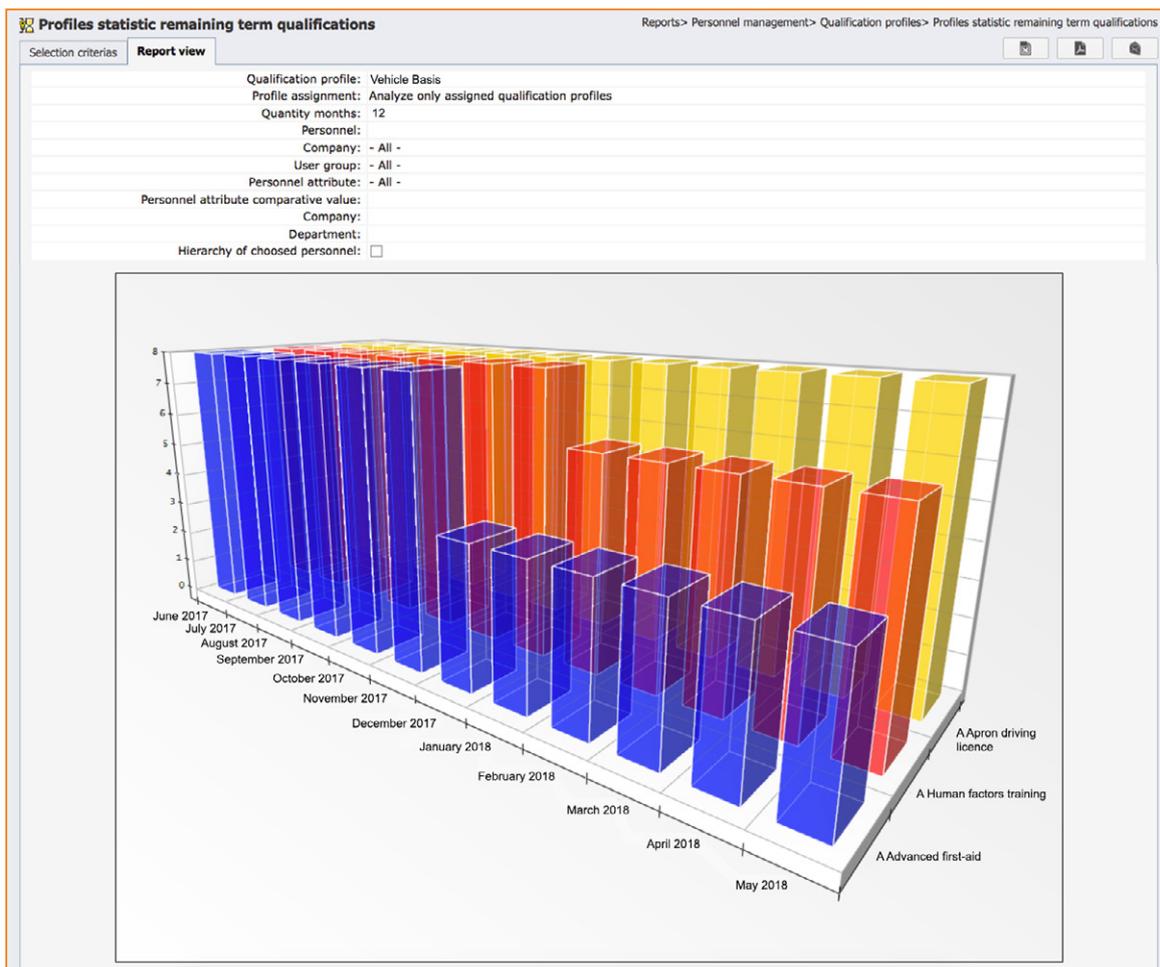
The tabular records are updated using the lists of signatures, which were used for the training needs analysis in Point 1. In order to keep these lists compact and manageable, participation in earlier events is often overwritten. Errors in the manual updating frequently remain unnoticed. If entries are overwritten, the training history cannot be reconstructed reliably and only with great effort.

9 Archiving the list of signatures

The list of signatures is archived in paper form, either centrally or decentrally by the trainers.

b) Qualifications and profiles over time

The eControl TQMS provides various reports and graphics to identify the people who have the qualifications or profiles for the respective planning period.



c) Independent monitoring of training needs by the employee and hierarchical superiors

The dialogue „MyeControl > Qualifications“ delivers an overview of qualifications for the logged-in user and for those persons whose hierarchical superior this user is. The current training needs can be read with the aid of status information and time remaining.

2 Planning events

Advance planning of training appointments has to take the flight schedule into account even with eControl TQMS, in order to schedule appointments so that any interference with operational processes can be kept to a minimum.

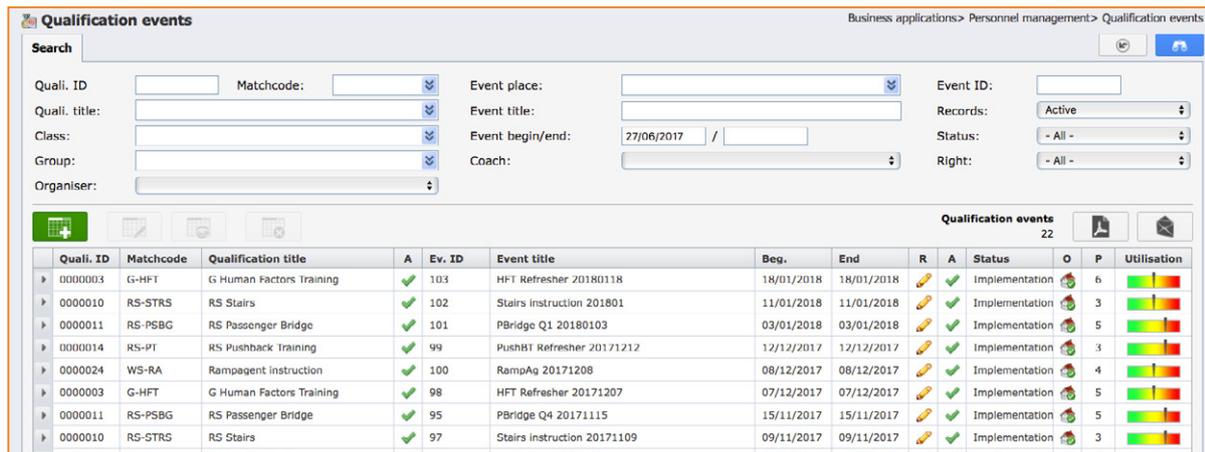
3 Setting up the event in the system

The "Qualification events" dialogue is available via the following menu entry:

„Business applications > Personnel management > Qualification events“

This menu option is strictly available when the logged-in user has the relevant user rights „Personnel master data“. The user may only view and edit those qualification events for which he has been personally authorised at the level of the respective qualification.

In the following dialogue „Qualification events“ a comfortable filtering of the available qualification events is possible via the selection criteria „Qualification title“ and „Event begin/end“. To set up a new qualification event, click the  button.



Qualification events Business applications > Personnel management > Qualification events

Search

Quali. ID: Matchcode: Event place: Event ID:

Quali. title: Event title: Records: Active

Class: Event begin/end: 27/06/2017 / Status: - All -

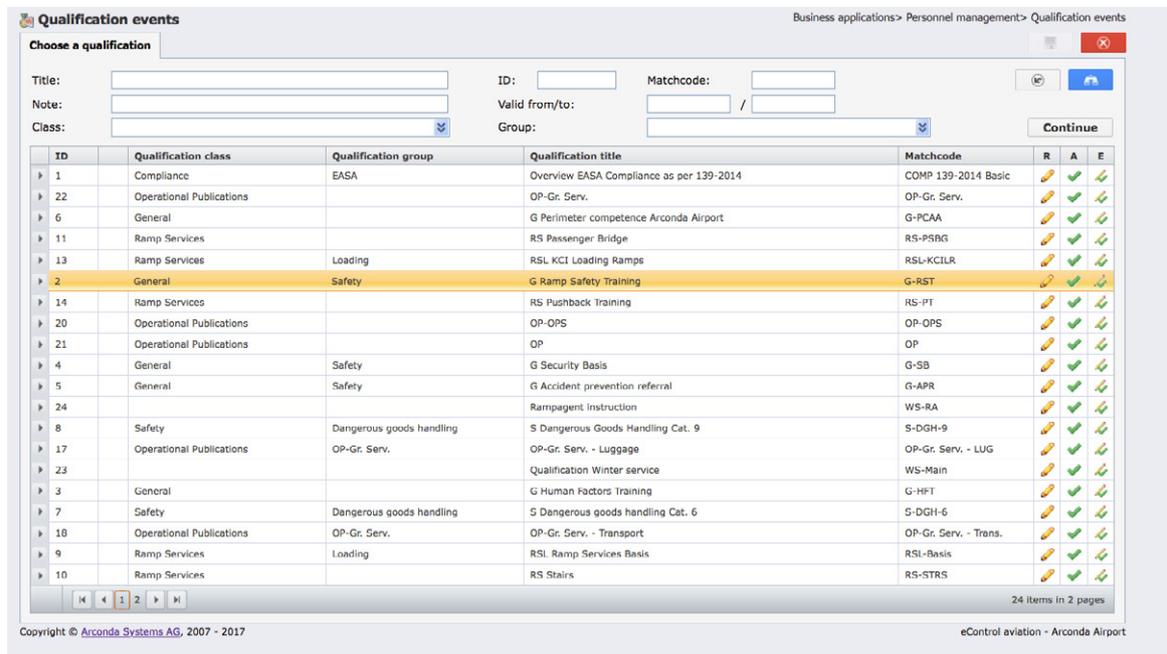
Group: Coach: Right: - All -

Organiser:

Quali. ID	Matchcode	Qualification title	A	Ev. ID	Event title	Beg.	End	R	A	Status	O	P	Utilisation
0000003	G-HFT	G Human Factors Training	✓	103	HFT Refresher 20180118	18/01/2018	18/01/2018	🔧	✓	Implementation	📅	6	<div style="width: 100%; height: 10px; background: linear-gradient(to right, green, yellow, red);"></div>
0000010	RS-STRS	RS Stairs	✓	102	Stairs instruction 201801	11/01/2018	11/01/2018	🔧	✓	Implementation	📅	3	<div style="width: 100%; height: 10px; background: linear-gradient(to right, green, yellow, red);"></div>
0000011	RS-PSBG	RS Passenger Bridge	✓	101	PBridge Q1 20180103	03/01/2018	03/01/2018	🔧	✓	Implementation	📅	5	<div style="width: 100%; height: 10px; background: linear-gradient(to right, green, yellow, red);"></div>
0000014	RS-PT	RS Pushback Training	✓	99	PushBT Refresher 20171212	12/12/2017	12/12/2017	🔧	✓	Implementation	📅	3	<div style="width: 100%; height: 10px; background: linear-gradient(to right, green, yellow, red);"></div>
0000024	WS-RA	Rampagent instruction	✓	100	RampAg 20171208	08/12/2017	08/12/2017	🔧	✓	Implementation	📅	4	<div style="width: 100%; height: 10px; background: linear-gradient(to right, green, yellow, red);"></div>
0000003	G-HFT	G Human Factors Training	✓	98	HFT Refresher 20171207	07/12/2017	07/12/2017	🔧	✓	Implementation	📅	5	<div style="width: 100%; height: 10px; background: linear-gradient(to right, green, yellow, red);"></div>
0000011	RS-PSBG	RS Passenger Bridge	✓	95	PBridge Q4 20171115	15/11/2017	15/11/2017	🔧	✓	Implementation	📅	5	<div style="width: 100%; height: 10px; background: linear-gradient(to right, green, yellow, red);"></div>
0000010	RS-STRS	RS Stairs	✓	97	Stairs instruction 20171109	09/11/2017	09/11/2017	🔧	✓	Implementation	📅	3	<div style="width: 100%; height: 10px; background: linear-gradient(to right, green, yellow, red);"></div>

d) Selecting a qualification

As a first step, select the qualification for which a qualification event is to be created:



Qualification events Business applications > Personnel management > Qualification events

Choose a qualification

Title: ID: Matchcode:

Note: Valid from/to: /

Class: Group: Continue

ID	Qualification class	Qualification group	Qualification title	Matchcode	R	A	E
1	Compliance	EASA	Overview EASA Compliance as per 139-2014	COMP 139-2014 Basic	🔧	✓	✓
22	Operational Publications		OP-Gr. Serv.	OP-Gr. Serv.	🔧	✓	✓
6	General		G Perimeter competence Arconca Airport	G-PCAA	🔧	✓	✓
11	Ramp Services		RS Passenger Bridge	RS-PSBG	🔧	✓	✓
13	Ramp Services	Loading	RSL KCI Loading Ramps	RSL-KCILR	🔧	✓	✓
2	General	Safety	G Ramp Safety Training	G-RST	🔧	✓	✓
14	Ramp Services		RS Pushback Training	RS-PT	🔧	✓	✓
20	Operational Publications		OP-OPS	OP-OPS	🔧	✓	✓
21	Operational Publications		OP	OP	🔧	✓	✓
4	General	Safety	G Security Basis	G-SB	🔧	✓	✓
5	General	Safety	G Accident prevention referral	G-APR	🔧	✓	✓
24			Rampagent instruction	WS-RA	🔧	✓	✓
8	Safety	Dangerous goods handling	S Dangerous Goods Handling Cat. 9	S-DGH-9	🔧	✓	✓
17	Operational Publications	OP-Gr. Serv.	OP-Gr. Serv. - Luggage	OP-Gr. Serv. - LUG	🔧	✓	✓
23			Qualification Winter service	WS-Main	🔧	✓	✓
3	General		G Human Factors Training	G-HFT	🔧	✓	✓
7	Safety	Dangerous goods handling	S Dangerous goods handling Cat. 6	S-DGH-6	🔧	✓	✓
18	Operational Publications	OP-Gr. Serv.	OP-Gr. Serv. - Transport	OP-Gr. Serv. - Trans.	🔧	✓	✓
9	Ramp Services	Loading	RSL Ramp Services Basis	RSL-Basis	🔧	✓	✓
10	Ramp Services		RS Stairs	RS-STRS	🔧	✓	✓

24 Items in 2 pages

Copyright © Arconca Systems AG, 2007 - 2017 eControl aviation - Arconca Airport

e) Assigning meaningful names

The assignment of names for training events should be standardised to simplify the selection of the desired training event for the participant. It is recommended that the date on which the event is held be included in the name and formatted so that alphanumeric sorting is possible (YYYYMMDD):

Content, date, type (initial qualification/refresher) - e.g. „Humanfactors 20170119 Refresher“

f) Set date of execution, location and notes

The screenshot displays the 'Qualification events' management interface. The breadcrumb trail at the top right reads 'Business applications > Personnel management > Qualification events'. The main content area is divided into several sections:

- Master data:** Includes 'Qualification master data (view)'. The 'Qualification' section shows 'Matchcode: G-RST' and 'Title: G Ramp Safety Training (ID: 2)'. The 'Qualification event' section shows 'ID: 104' and 'Title: G Ramp Safety Training 20170627'.
- Event details:** 'Certificate valid from/to: 27/06/2017 / 26/06/2019'. 'Realised by: Own execution'. 'Capacity planning' includes 'Min.: 5', 'Target: 7', 'Max.: 10', and 'Status: Implementation'. There are also checkboxes for 'Inv.', 'Conf.', 'Attend.', 'Qualified', 'Not qualified', 'CX NS', and 'Concl.'.
- Event locations and dates (27/06/2017 - 27/06/2017):** This section includes a green '+ Add' button. It shows 'Title: Theory', 'Place: Room 109, Building 102', 'Start: 27/06/2017 09:00', 'End: 27/06/2017 14:00', and 'Status: Planned'. The 'Coach' is listed as 'Consultant Jones, Richard'.
- Additional fields:** 'Location info:', 'Note:', and 'Internal:' are represented by empty text input boxes. 'Created on/by:' is '27/06/2017 13:12, FRANK' and 'Changed on/by:' is '27/06/2017 13:12, FRANK'.

Once a qualification event has been set up, this will be published fully automatically in the training calendar, which can be viewed by all system users at "My eControl > Training calendar". In addition to the date of the event, information for the qualification event can be stored that ensures a smooth training process for the participants, hierarchical superiors and trainers.

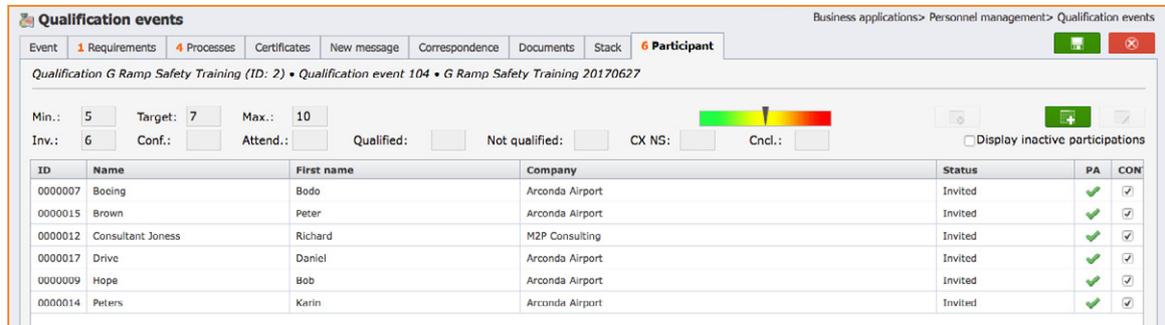
4 Managing participants

With the eControl TQMS, trainees can be assigned to a training event with a few mouse clicks (see section „3 Setting up the event in the system“a).

g) Select qualification event and open it for editing

h) Select the registration tab “Participant”

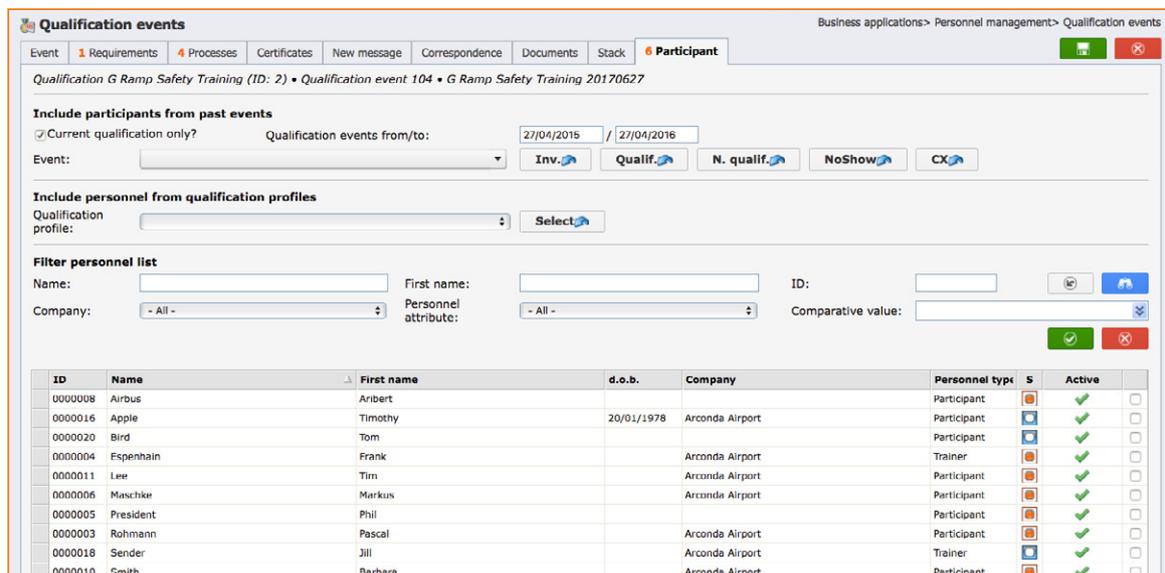
This registration tab displays all participants that have already been assigned to the qualification event. Other participants can be added by clicking on the  button.



ID	Name	First name	Company	Status	PA	CON
0000007	Boeing	Bodo	Arconda Airport	Invited	✓	✓
0000015	Brown	Peter	Arconda Airport	Invited	✓	✓
0000012	Consultant Joness	Richard	M2P Consulting	Invited	✓	✓
0000017	Drive	Daniel	Arconda Airport	Invited	✓	✓
0000009	Hope	Bob	Arconda Airport	Invited	✓	✓
0000014	Peters	Karin	Arconda Airport	Invited	✓	✓

i) Filtering people

The following dialogue displays all persons who were either set up as system users in the user master data or for whom Personnel master records have been set up in the Personnel master data. Depending on the respective system configuration, Personnel master records can also be automatically imported via an interface.



ID	Name	First name	d.o.b.	Company	Personnel type	S	Active
0000008	Airbus	Aribert			Participant	✓	✓
0000016	Apple	Timothy	20/01/1978	Arconda Airport	Participant	✓	✓
0000020	Bird	Tom			Participant	✓	✓
0000004	Espenhain	Frank		Arconda Airport	Trainer	✓	✓
0000011	Lee	Tim		Arconda Airport	Participant	✓	✓
0000006	Maschke	Markus		Arconda Airport	Participant	✓	✓
0000005	President	Phil			Participant	✓	✓
0000003	Rohmann	Pascal		Arconda Airport	Participant	✓	✓
0000018	Sender	Jill		Arconda Airport	Trainer	✓	✓
0000010	Smith	Barbara		Arconda Airport	Participant	✓	✓

As a rule, a large number of in-house employees and a very large number of people from third party companies are displayed. 500 people can be administered with the TQMS standard licence; an additional licence is required for additional people, in accordance with the eControl licence conditions. Generally, an unlimited number of people can be administered by the eControl aviation TQMS. It is assumed that the user has previously determined from one of the system reports which people should be considered for the respective qualification event (see step „1 Identifying training needs“)

The following selection criteria are available:

- Participants of previous events
- Participants by qualifications profile
- Participants by organisational structure / personnel list

j) Selecting people

Enable checkbox for the desired participants

k) Accept selection 

l) Save qualification event

To permanently save the expanded list of participants at a qualification event, the editing dialogue box „Qualification events“ must be completed by clicking on the:  button.

After saving, the assignment of participants can be viewed by authorised users. Authorised persons are the employees made available, their hierarchical superiors, the trainers and the training department. As soon as a participant has been selected, he is assigned the status “Invited”, which is displayed in the system in addition to the current qualification status, to show that steps have already been initiated to maintain the qualification of the employee.

5 Communication with the participants

The eControl TQMS supports the trainer in his communicating with the participants.

m) Select event and open it for editing

n) Registration tab "New message"

Step 1: Select participant and delivery method

Form letters in PDF format and e-mail circulars using the list of participants are available as media or delivery methods. The participants in the qualification event can either all be selected, or individually for the respective letter.

Step 2: Select form letter

With the eControl TQMS, dynamic form letters can be stored for a wide range of different letters. Placeholders ensure that a once-defined dynamic form letter can be used for a wide range of qualification events.

Qualification events Business applications> Personnel management> Qualification events

Event 1 Requirements 4 Processes Certificates **New message** Correspondence Documents Stack 5 Participant

Qualification G Ramp Safety Training (ID: 2) • Qualification event 58 • G Ramp Safety Training - complete training

Recipient: **Message creation** Mixing result

Text block: Invitation for qualification events

Subject: Invitation

Internal send notice:

Dear @@RECIP_NAME@@

we want to invite you on behalf of the specialist department @@RECIP_DEPARTMENT@@ to the qualification event @@QUALIEVENT_TITLE@@, which will take place on @@QUALIEVENT_BEGIN@@.

The goal of this event is to obtain the qualification @@QUALI_TITLE@@.

Please confirm your participation in a timely manner by clicking the following link: @@CONFIRMATION@@

If your schedule does not allow your participation on the suggested event date, please contact the responsible specialist department or training department. Of course you may offer an own proposal via the training calendar in "My eControl".

Kind regards

@@SENDER_FIRSTNAME@@ @@SENDER_SECONDNAME@@
@@SENDER_EMAIL@@
@@SENDER_DEPARTMENT@@

Existing dynamic form letters can be edited as needed. If a dynamic form letter is required for re-use, it can be saved via the manage dialogue at the end of the dialogue.

Save text module

Description: Invitation qualification event @@QUALIEVENT_TITLE@@

Category: Public text module:

Note: Invitation qualification event, asking for confirmation.

With the „Public text module“ option, form letters can be saved so that they can be used by all authorised users.

Step 3: Merging form letter and addressee (participant)

With the press of a button, the addressee (participant) and form letter can be merged. The merged result is shown in a preview and can be changed if required.

Step 4: Sending to participants and hierarchical superiors

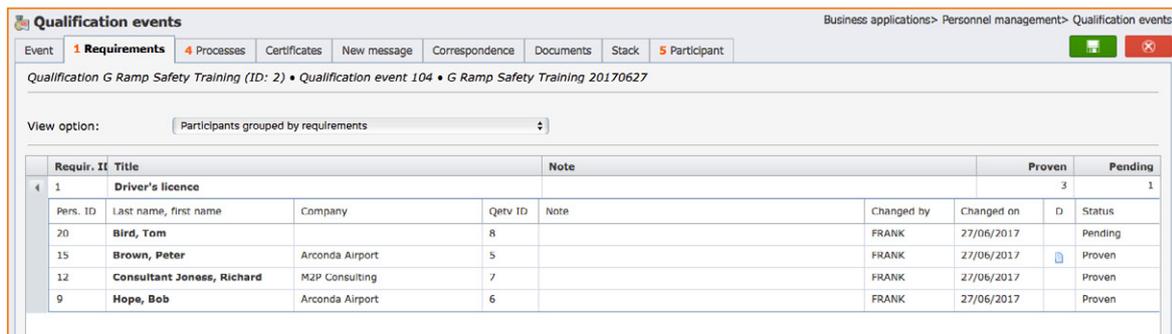
TQMS messages are always sent to the participant in the qualification event and his hierarchical superior. In this way, the hierarchical superior can be integrated into the training process and are always kept up to date. Furthermore, it would be sufficient for the fully automatic e-mail communication if at least the respective hierarchical superior were contactable via e-mail. The e-mails to the hierarchical superior are sent in an abbreviated tabular format, in order to be able to bundle several messages in one e-mail.

6 Printing list of participants

Before holding the qualification event, a trainer prints out a list of participants with detailed information for his internal use, as well as a list of participants in the „Signature list“ format for circulation among the participants at the end of the event (see step „8 Distributing the list of participants“).

„Reports> Personnel management > Qualification events list of participants“

The eControl TQMS provides lists of participants for the trainer. The lists of participants offer an overview of the planned participants in the event, detailed information on the qualification event and whether the participant-specific requirements are met.



The screenshot shows a web application interface for 'Qualification events'. The breadcrumb trail is 'Business applications> Personnel management> Qualification events'. The main menu includes 'Event', '1 Requirements', '4 Processes', 'Certificates', 'New message', 'Correspondence', 'Documents', 'Stack', and '5 Participant'. The current view is 'Qualification G Ramp Safety Training (ID: 2) • Qualification event 104 • G Ramp Safety Training 20170627'. The 'View option' is set to 'Participants grouped by requirements'. The table below lists participants for requirement '1 Driver's licence'.

Requir. ID	Title	Note	Proven	Pending				
1	Driver's licence		3	1				
Pers. ID	Last name, first name	Company	Qetv ID	Note	Changed by	Changed on	D	Status
20	Bird, Tom		8		FRANK	27/06/2017		Pending
15	Brown, Peter	Arconda Airport	5		FRANK	27/06/2017		Proven
12	Consultant Jones, Richard	MJP Consulting	7		FRANK	27/06/2017		Proven
9	Hope, Bob	Arconda Airport	6		FRANK	27/06/2017		Proven

7 Performing training

8 Distributing the list of participants

Insofar as no written performance checks are made, this list of participants can be signed by the participants in the seminar and be used as proof of participation.

Qualification events list of participants



Print date: 27/06/2017
By: Frank Espenhain

Qualification event:

<i>Ev. ID:</i> 104	<i>Event title:</i> G Ramp Safety Training 20170627	<i>Beg.:</i> 27/06/2017
<i>Quali. ID:</i> 2	<i>Qualification title:</i> G Ramp Safety Training	<i>End:</i> 27/06/2017
<i>Realised by:</i> Own execution		

Venues and dates:

Title	Place	Start	End	Coach
Theorie	Room 109, Building 102	27/06/2017 09:00	27/06/2017 14:00	Consultant Joness, Richard

Participants overview:

ID	Name Implementation	First name Date from	Company Date to	Department Place	Present	Signature	Absent
16	Apple	Timothy	Arconda Airport	Ramp Services	<input type="checkbox"/>	_____	<input type="checkbox"/>
20	Bird	Tom			<input type="checkbox"/>	_____	<input type="checkbox"/>
15	Brown	Peter	Arconda Airport	Ramp Services	<input type="checkbox"/>	_____	<input type="checkbox"/>
12	Consultant Joness	Richard	MP Consulting		<input type="checkbox"/>	_____	<input type="checkbox"/>
9	Hope	Bob	Arconda Airport	OPS	<input type="checkbox"/>	_____	<input type="checkbox"/>

9 Batch processing function / documenting results

The batch processing function of the TQMS software module makes it possible to make identical bookings for a group of participants with a single command.

- o) Select event and open it for editing
- p) Select register tab „Stack“
- q) Select booking type (here: Previous status)
- r) Set desired participant status (e.g. „Confirmed“)
- s) Select participant for whom the status is to be set
- t) Perform batch processing 
- u) Save qualification event

A list of signatures (see step „8 Documenting results“) signed by the participants should be present for every qualification event. Based on this list of participants, the status of the participants is reset from „Invited/Confirmed“ to „Participated/Qualified“, as long as no final tests were performed as an individual proof of performance.

This batch processing function can also be used for booking proofs of performance.

10 Archiving list of signatures and proofs of performance

Documents for the qualification event (e.g. a list of signatures) and for the individual participants can be attached to a qualification event. In accordance with the eControl system standard, archiving is audit-proof, including fully automatic release management. The capacity of the eControl document archive is unlimited. Access to the attached documents is only possible if the user has "Personnel management" authorisation or has been authorised as a specialist administrator for holding qualification events.

eControl

Process Management

Operation Management

Safety Management

Audit Management

Qualification Management

Compliance Management

Environmental Bird Control Management

Customers:



District Government of Upper Bavaria



Customers international:

