



Implementation EASA Aerodromes Regulation, Swiss Approach

5.5.2015, Martin Schilt



Agenda

- 1. Introduction**
- 2. Swiss Regulatory Context**
- 3. EASA Aerodromes Implementation Project**
- 4. EASA Certification Process**
- 5. Current Status**
- 6. Challenges**
- 7. Key Messages**





Switzerland

- **8'000'000 population**
 - **41'290 km² area**
 - **4 national languages (D, F, I, Rumantsch)**
 - **Federal Office of Civil Aviation (Bern, Zürich Airport)**
 - **200 staff (6 Aerodromes, 5 Air Navigation Obstacles)**
-
- **3 National aerodromes**
 - **11 Regional aerodromes**
 - **44 Airfields**
 - **26 Heliports**
 - **40 Mountain Landing Sites (no infrastructure)**



Zürich

264'970 Mov, 25'477'622 Pax (2014)





Sion



CIV MIL mixed operations



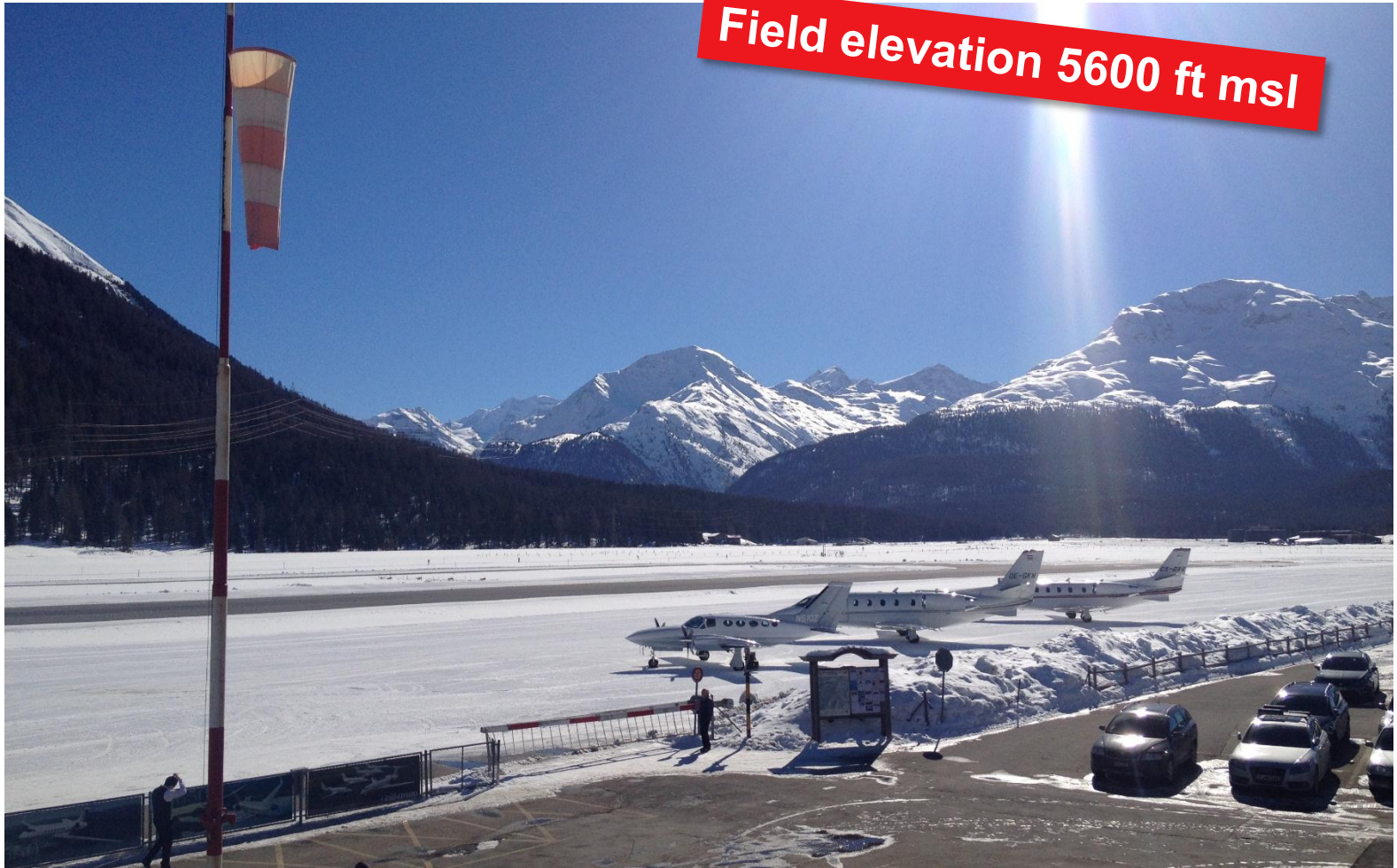
Schwarzsee





Samedan

Field elevation 5600 ft msl





Olten



Glider airstrip



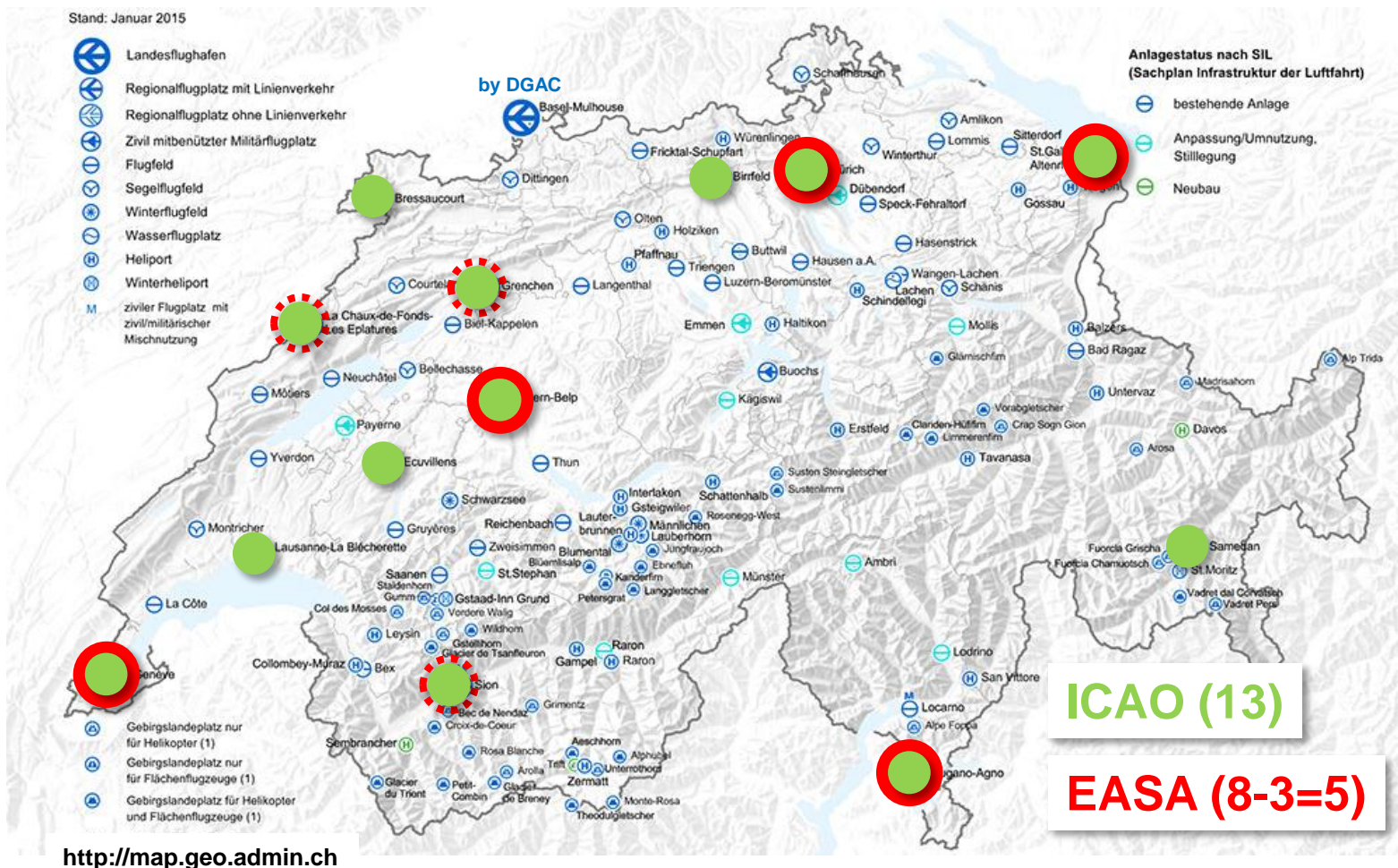
Kanderfirn

Mountain Landing Site





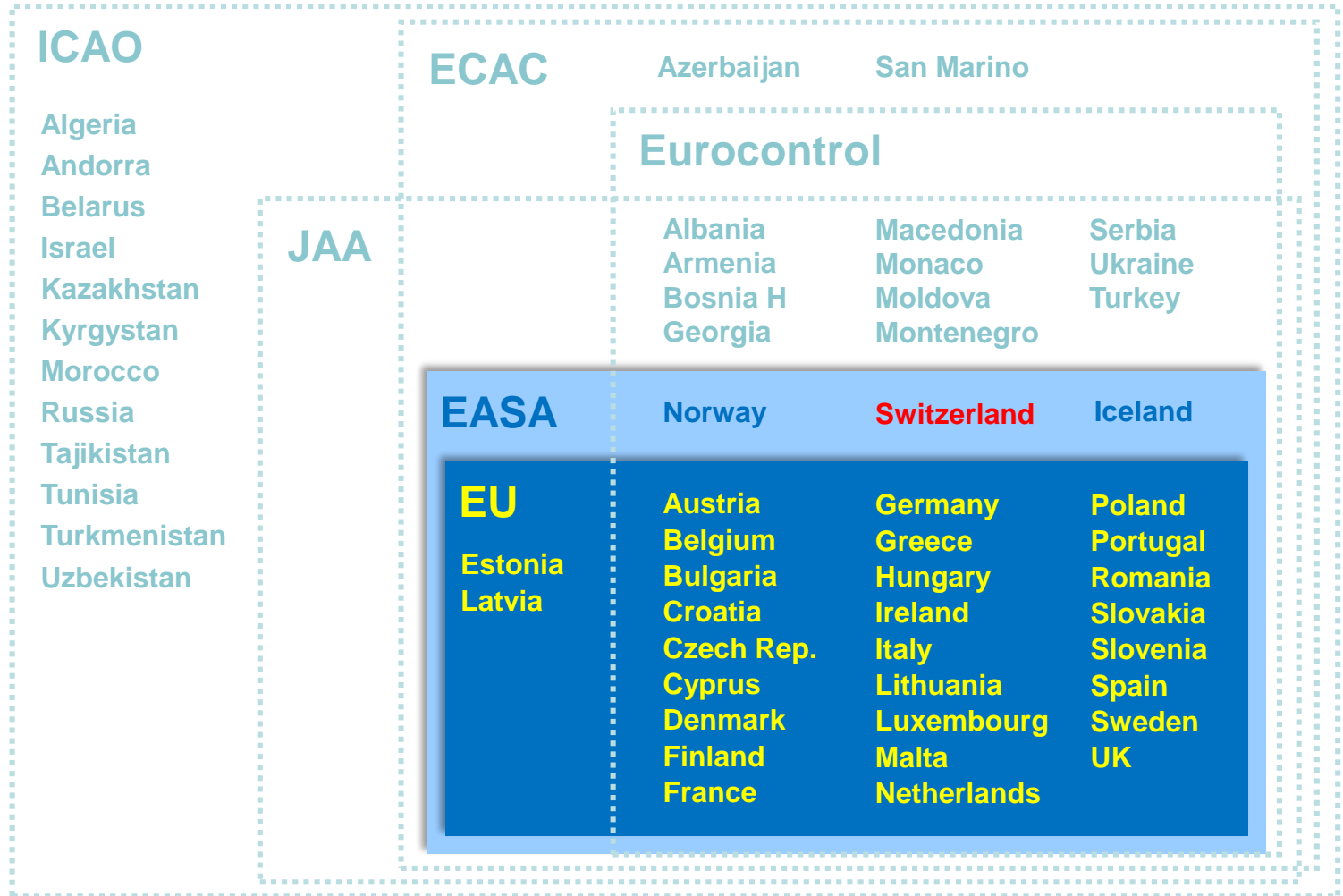
Aerodrome Certification







International Memberships





Civil Aviation Safety Regulations

Swiss civil aviation safety is regulated by regulations and directives of the EU, the EASA and Eurocontrol, as well as ICAO SARPS and Swiss legislation

- **ICAO Annexes and Manuals directly applicable**
- **EU / EASA regulations and directives** (directly applicable after adoption by the Joint Committee into the appendix to the bilateral agreement on air transport between Switzerland and the EU)
- **Eurocontrol regulations directly applicable**
- **Swiss legislation**





EASA Aerodromes Implementation Project

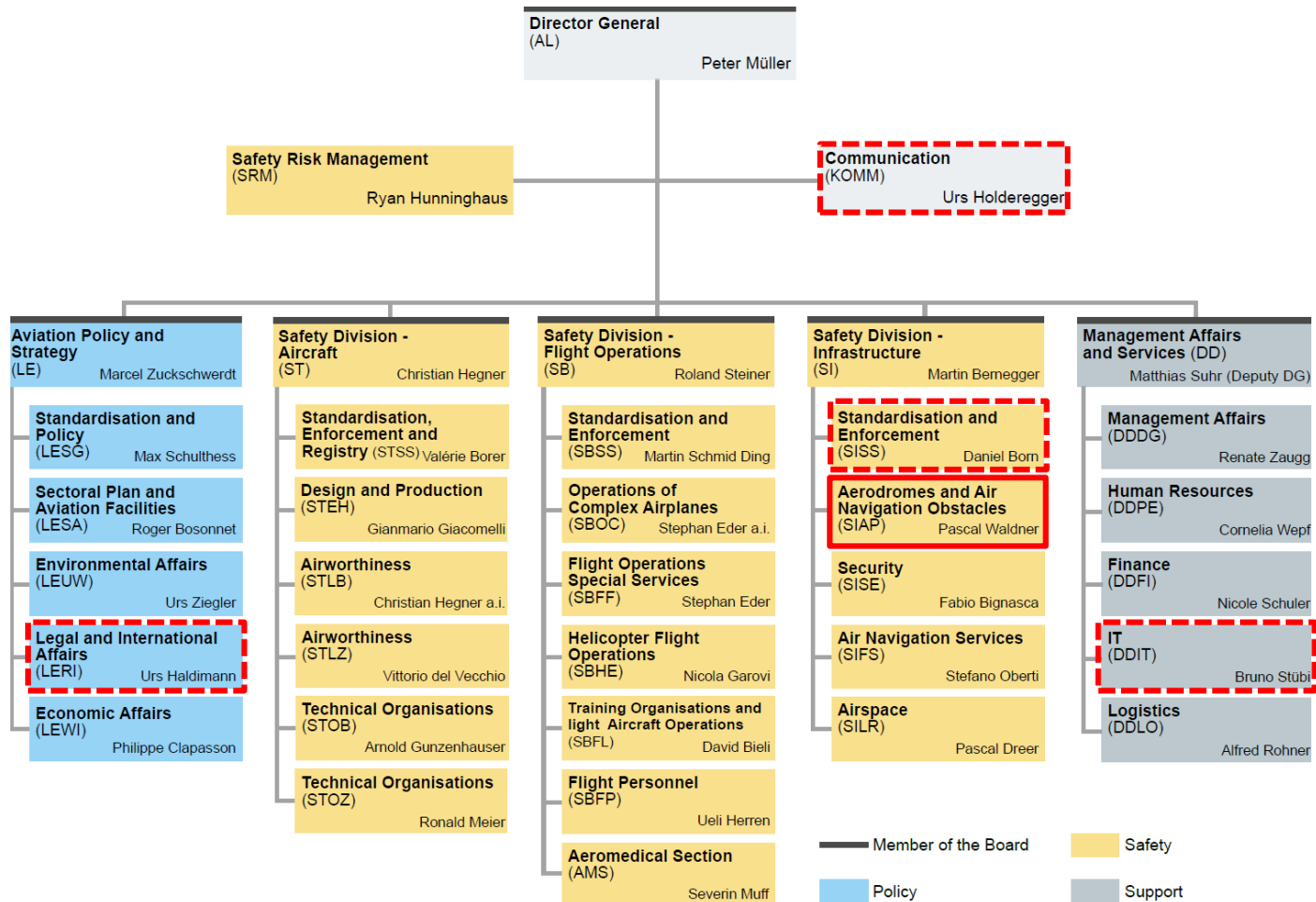


Starting Point

- **11 nationally (ICAO) certified aerodromes, 2 ongoing certifications**
- **Existing working group for ICAO certification**
- **Good working relation with certified aerodromes**
- **6 FOCA aerodrome inspectors (supported by legal, international affairs, IT, communications)**
- **EASA NPA 2011-20 as early draft of aerodrome regulation with request for comments (end of 2011)**



Federal Office of Civil Aviation (FOCA)





Project Definition

- **Internal working sessions with aerodromes section to clarify project scope, relevant aerodromes, time frame**
- **Appointment of transition project manager, start of project definition, phases, working packages, roadmap, team, roles and responsibilities, project risk assessment**
- **Exchange with other FOCA sections, EASA, Member States, active participation in the rulemaking process (NPA commenting, EASA workshops, etc.)**



Project Definition

- **New working group for EASA certification under FOCA lead with experts from aerodromes in scope and Swiss Aerodromes Association**
- **Kickoff meeting (internal and external) with briefing on**
 - **Project phases**
 - **Working packages**
 - **Timeline**
 - **Principles**
 - **Working methods**
 - **Roles and responsibilities**



Project Team

Functions	FTE
1 Project Manager, Aerodrome Safety Inspector	30%
5 Aerodrome Safety Inspectors	10%
1 International Affairs advisor	On request
1 Legal advisor	On request
1 IT support	On request
1 Communications	On request

- **Total ~ 1 full time position for EASA transition**
- **Same people for development of national regulations, ICAO (re)certification, continuous oversight**
- **Limited resources, efficient solution needed**



Project Phases

Nr	Phase	Result	AD	FOCA
0	Project definition	Approved mandate		X
1	Preparation	Methods, tools		X
2	EASA application	Certificate extension	X	X
3	Gap analysis	Diff. EASA-national		X
4	Applicability	Applicable rules		X
5	Compliance	Deviations	X	X
6	Doc. Actionplan	OB/CB established	X	X
7	EASA Testaudit	Lessons Learned		X
8	Impl. Actionplan	Evidence	X	X
9	EASA Audit	EASA certificate	X	X



Project Phases

Nr	Phase	Timeline May 2015				
		2013	2014	2015	2016	2017
✓	0 Project definition					
✓	1 Preparation					
	2 EASA application					indiv.
✓	3 Gap analysis *					
✓	4 Applicability *					
	5 Compliance *					
	6 Doc. Actionplan *					
	7 EASA Testaudit					
	8 Impl. Actionplan *					indiv.
	9 EASA Audit			indiv.		

* incl. AR

Workshops



Principles and Decisions

- **Integrate EASA transition into regular oversight cycle (avoid additional «light conversion» audits, full EASA audits looking at everything, not just the gaps)**
- **Extension of existing (national) ICAO certificates until the end of transition period (avoid ICAO recertification during EASA preparation phase, minimise audit planning effort)**
- **National (ICAO) regulations and certificates remain for subjects not (yet) regulated by EASA (separate national certificate for Heliports, Apron Management etc.)**



Principles and Decisions

- **FOCA compliance with Authority Requirements parallel to aerodromes (sinergy due to «mirror effect» of EASA regulations, AR compliance checklist)**
- **Definition of oversight scheme during transition**
 - **Infrastructure: according EASA after adoption (Switzerland 15.8.2014) to avoid future non-compliances**
 - **Organisation, Operations: according EASA after EASA certification (individual for each aerodrome)**



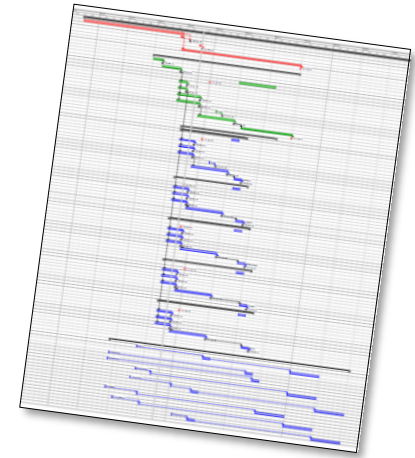
Principles and Decisions

- **Certification Basis (CB), Organisations and Operations Basis (OB) are living documents, updates may be triggered by**
 - a) **New or changed EASA regulations**
 - b) **Change to aerodrome infrastructure**
 - c) **Change to aerodrome organisation, operations**
- **Update «established» CB, OB**
- **«Mini-Conversion» for new elements**
- **Same process can be used**



Timing

Aerodrome	Conversion
Geneva	Q2/2016
Lugano	Q3/2016
Altenrhein	Q4/2016
Zürich	Q1/2017
Bern	Q2/2017



- **6 months buffer until end of transition period (31.12.2017)**
- **DAAD available until 31.12.2024 (if falling into scope later)**
- **Parallel ICAO (re)certifications for 8 aerodromes**



Resources

FOCA	Each Aerodrome
Phases 0 – 9 (10 phases)	Phases 2, 5, 6, 8, 9 (5 phases)
Initial estimate: 800 days	Initial estimate: 200 days
Today actual: ~ 270 days - 4 phases completed - 3 phases ongoing	Today actual: ~ 130 days - 2 phases completed - 2 ongoing

- **Workload for AD varies (size, complexity, conformity)**
- **Effective total time probably less than initial estimate**
- **Integration of new/updated rules (AMS, CS issue 2,3, etc.) will come on top**



Working Methods

- **Lean, flexible project management (project steering: task list, decision log, resources log, status reports)**
- **Team coordination meetings every 2 weeks**
- **Internal coordination meetings for EASA advisory groups**
- **«Testing» where possible**
 - **Simulation of certification process with project team**
 - **Test audit with Geneva airport (using CB and OB established by FOCA)**



Working Methods

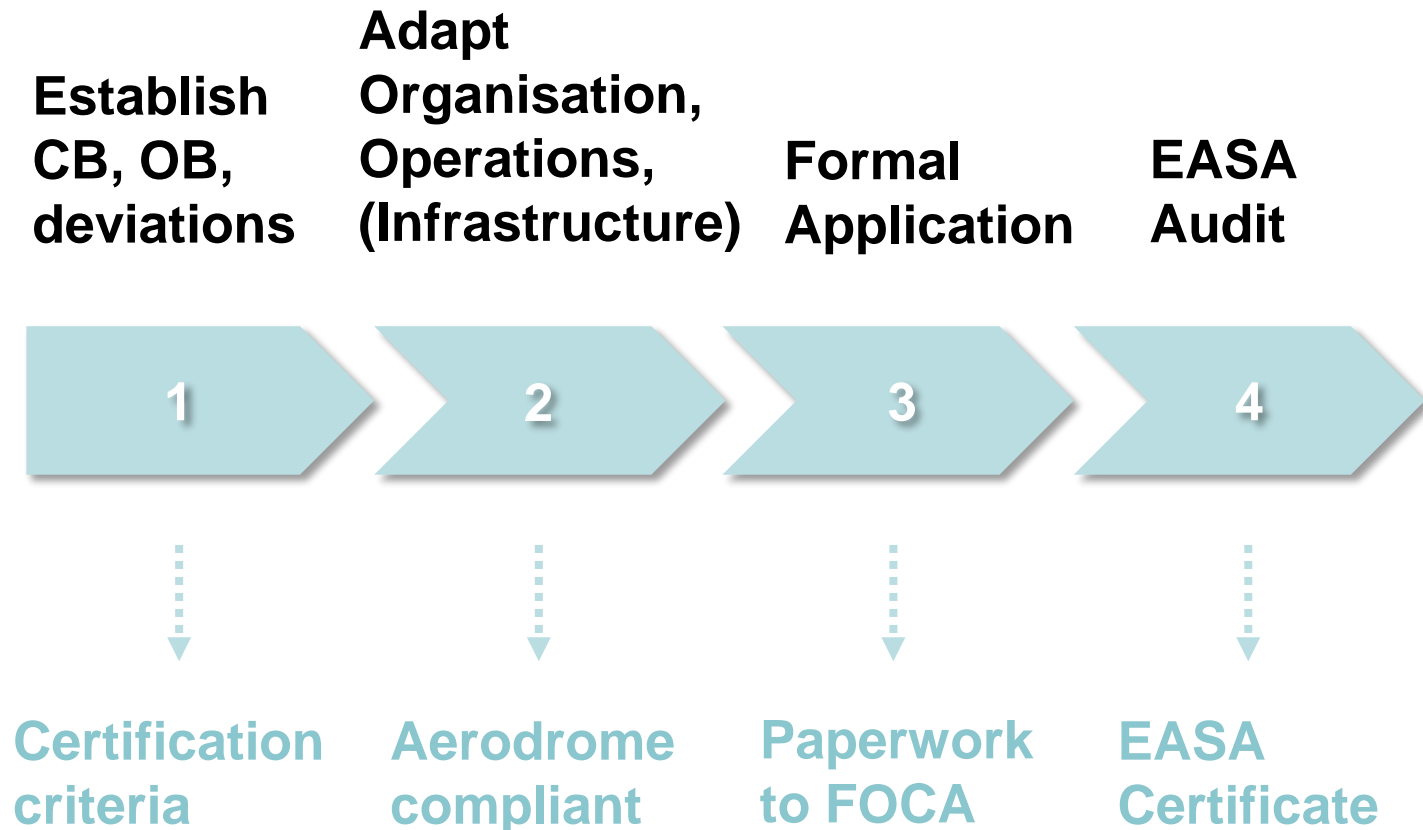
- **Frequent information exchange with aerodromes in scope, information of aerodromes not in scope**
- **Thematic Workshops between FOCA and aerodromes**
 - **discuss EASA requirements, expectations**
 - **establish a common understanding**
 - **basis for CB and OB establishing**
- **Active participation in the EASA rulemaking process and advisory bodies**



EASA Certification Process



Transition National (ICAO) to EASA





EASA «Certification Package»

- **Certification Checklist for Aerodromes**
- **Compliance Checklist for EASA Aerodromes Regulation**
- **EASA Aerodrome Manual structure**
- **Application Form**
- **Declaration of Compliance Form**
- **Forms for ELOS, DAAD, SC, AltMOC**

→ Available on [FOCA website](#)





EASA Certification Checklist

- **Guidance for Aerodromes with description of steps**
- **Switzerland: only conversions of existing certificates**

The image shows a document titled "Checklist EASA Certification for Aerodromes". It is a checklist with 9 numbered steps. The document is from the Swiss Confederation, specifically the Federal Department of the Environment, Transport, Energy and Communications (DETEC), and the Federal Office of Civil Aviation (FOCA). The checklist includes the following steps:

- 1 Prepare and propose Certification Basis (CB) and Organisation and Operations Basis (OB) in coordination with FOCA.
- 2 Adapt organisation, operations and infrastructure based on the established Certification Basis (CB) and Organisation and Operations Basis (OB).
 - Adapt Aerodrome Manual structure according "EASA Aerodrome Manual Structure"
 - Adapt organisation, operational processes and infrastructure based on the established Certification Basis (CB) and Organisation and Operations Basis (OB).
 - Produce safety evidence for deviations (or reference to existing documentation)
- 3 Complete and sign:
 - Deviation Acceptance and Action Document (DAAD) Form
 - Equivalent Level of Safety (ELOS) Form
 - Special Condition (SC) Form
 - Alternative Means of Compliance (AltMOC) Formfor each deviation according the established Certification Basis (CB) and Organisation and Operations Basis (OB).
- 4 Complete and sign "Application Form for EASA Aerodrome Certificate".
- 5 Complete and sign "Declaration of Compliance for Aerodrome Operators".
- 6 Submit to FOCA before the EASA certification audit:
 - Application Form for EASA Aerodrome Certificate
 - Declaration of Compliance for Aerodrome Operators
 - Deviation Acceptance and Action Document (DAAD) Form(s)
 - Equivalent Level of Safety (ELOS) Form(s)
 - Special Condition (SC) Form(s)
 - Aerodrome Manual
 - Certification Basis (CB)
 - Organisation and Operations Basis (OB)including any documentation referred to in the above forms (e.g. evidence documentation). FOCA encourages submission of required documentation as early as possible.
- 7 EASA certification audit.
- 8 Submission of action plan according audit results.
- 9 Issuance of EASA Certificate for Aerodrome Operator (terms of certificate will be attached).

FOCA SIAP / Version 1.0 / 5.1.2015

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Establish CB, OB and Deviations

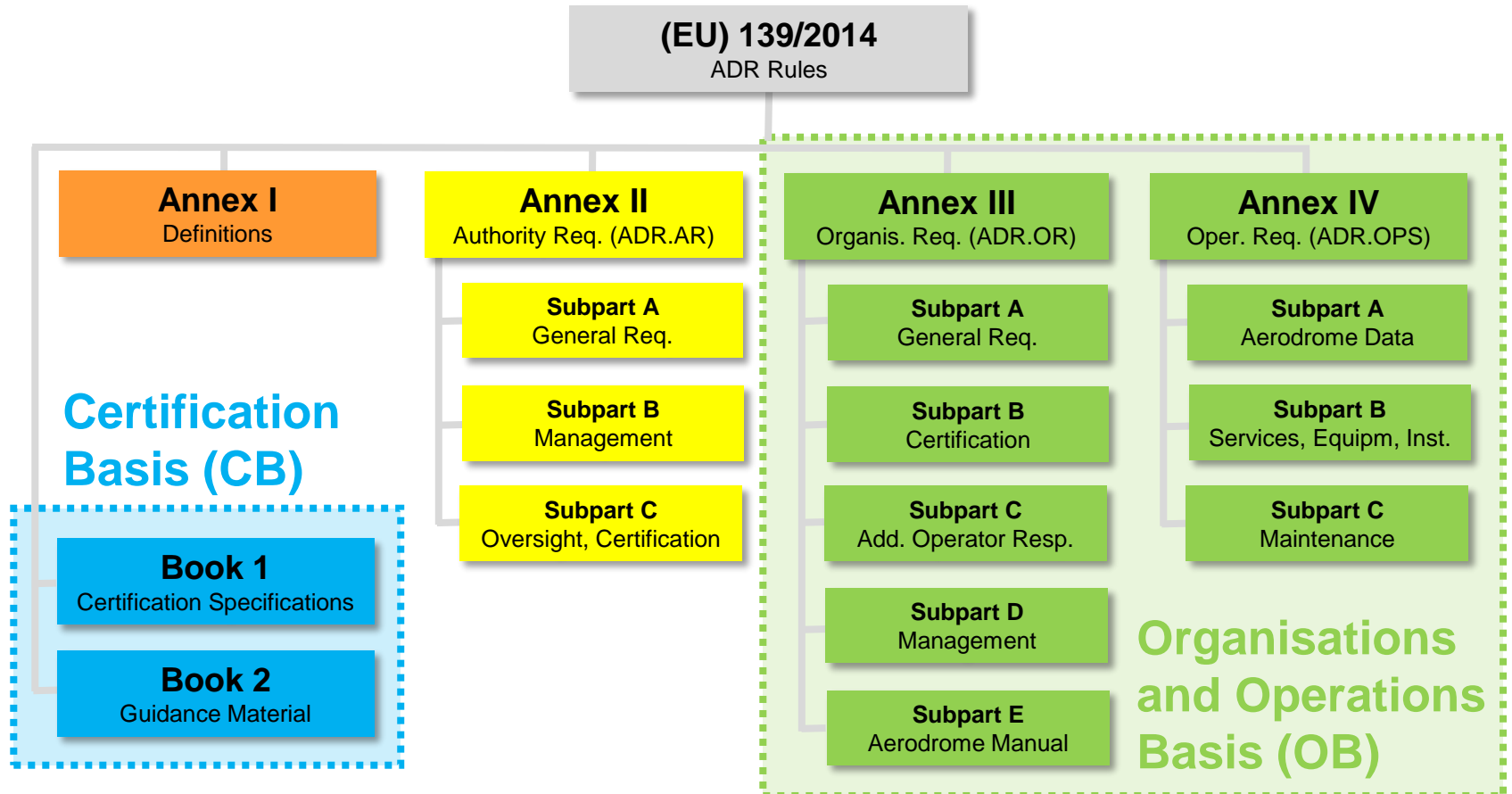


1. Identify applicable rules
2. Check compliance
3. Define action for non-compliances
 - a) Comply with requirement
 - b) Deviation
4. AD proposes Certification Basis (CB)
5. AD proposes Organisation and Operations Basis (OB)
6. FOCA reviews and «establishes» CB, OB





CB and OB





EASA Certification Basis				EASA Organizations and Operations Basis				Justification and Evidence				FOCA Decision		
Requirement				Requirement				Justification and Evidence				Established	Accepted	Remarks
Book 1 - Certification Specifications				Annex II, Part Operator Requirements (ADR OR) + AMC/AMC								12.11.2014		
Chapter A - General				Subpart A - General Requirements								12.11.2014		
CS ADR-DSN A.001				ADR OR A.001				compliant after submission of application				12.11.2014		
CS ADR-DSN A.002				ADR OR A.002				compliant after submission of application				12.11.2014		
CS ADR-DSN A.003				ADR OR A.003				compliant after submission of application				12.11.2014		
CS ADR-DSN A.004				ADR OR A.004				compliant after submission of application				12.11.2014		
CS ADR-DSN A.005				ADR OR A.005				compliant after submission of application				12.11.2014		
CS ADR-DSN A.006				ADR OR A.006				compliant after submission of application				12.11.2014		
Chapter B - Airworthiness				Subpart B - Certification								12.11.2014		
CS ADR-DSN B.015				ADR OR B.015				compliant after submission of application				12.11.2014		
CS ADR-DSN B.020				ADR OR B.020				compliant after submission of application				12.11.2014		
CS ADR-DSN B.025				ADR OR B.025				compliant after submission of application				12.11.2014		
CS ADR-DSN B.030				ADR OR B.030				compliant after submission of application				12.11.2014		
CS ADR-DSN B.035				ADR OR B.035				compliant after submission of application				12.11.2014		
CS ADR-DSN B.040				ADR OR B.040				compliant after submission of application				12.11.2014		
CS ADR-DSN B.045				ADR OR B.045				compliant after submission of application				12.11.2014		
CS ADR-DSN B.050				ADR OR B.050				compliant after submission of application				12.11.2014		
CS ADR-DSN B.055				ADR OR B.055				compliant after submission of application				12.11.2014		
CS ADR-DSN B.060				ADR OR B.060				compliant after submission of application				12.11.2014		
CS ADR-DSN B.065				ADR OR B.065				compliant after submission of application				12.11.2014		
CS ADR-DSN B.070				ADR OR B.070				compliant after submission of application				12.11.2014		
CS ADR-DSN B.075				ADR OR B.075				compliant after submission of application				12.11.2014		



Flexibility Options

For CB (infrastructure)

Option	Criteria
Equivalent Level of Safety (ELOS)	Demonstration of same level of safety as CS
Deviation Acceptance and Action Document (DAAD)	Deviation from CS existed prior to entering into force of EASA regulation, intention to remove (under definition of a period)
Special Condition (SC)	CS inadequate or inappropriate due to physical, topographical or similar limitations



Flexibility Options

ELOS example

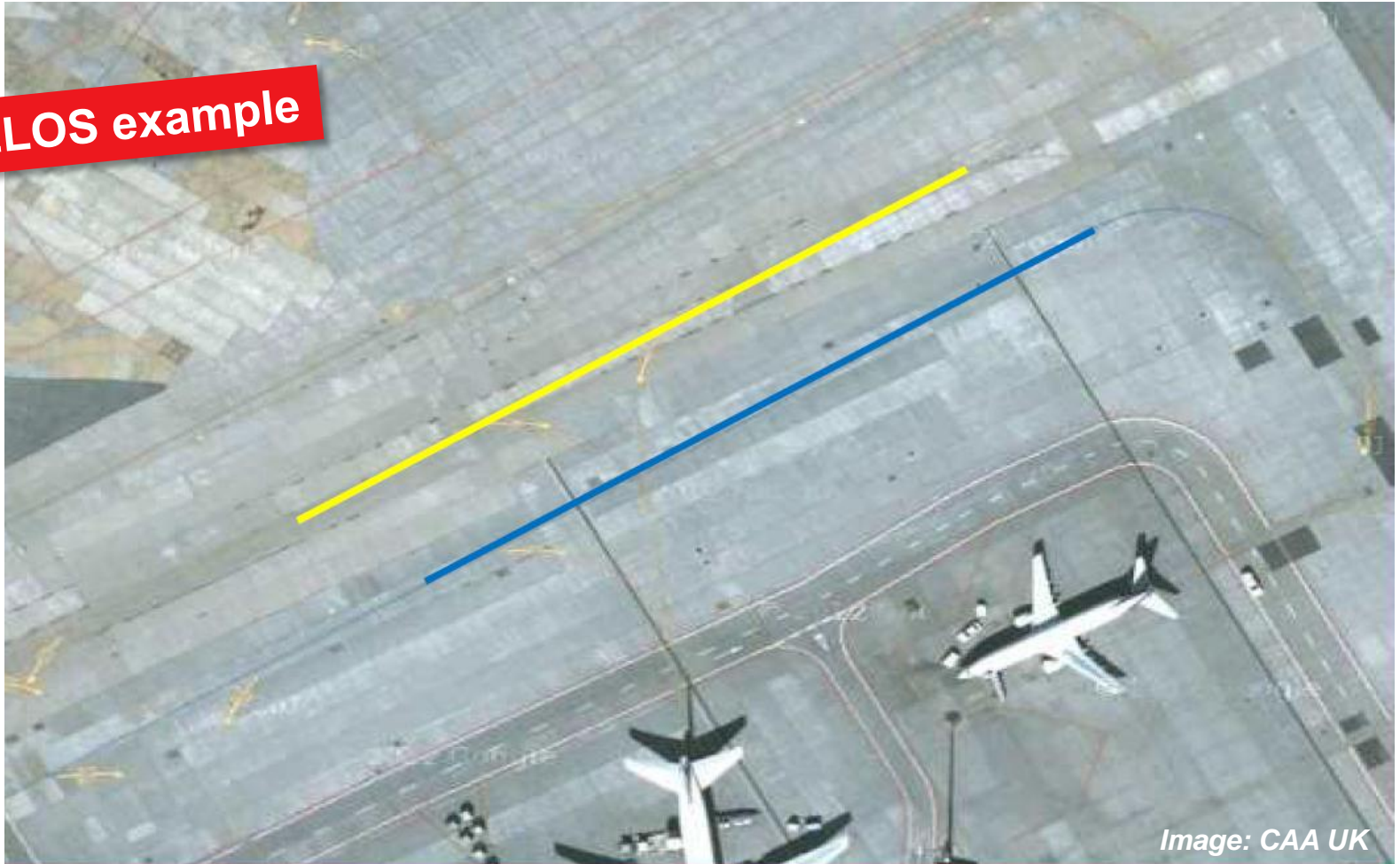


Image: CAA UK



Flexibility Options

DAAD example



Image: CAA UK



Flexibility Options

SC example



Image: CAA UK



Flexibility Options

For OB (Organisation, Operations)

Option	Criteria
Exemption	Deviation from IR under Art.14(4) BR (EASA approval required)
Derogation	Deviation from IR under Art.14(6) BR (EASA approval required)
Alternative Means of Compliance (AltMOC)	Alternative means to demonstrate compliance with an AMC



Establishing the CB and OB

- **Very interactive process between Competent Authority and Aerodromes: certification «ping pong»**
- **FOCA chose to conduct 5 thematic workshops**
 - **Full day working sessions «chapter by chapter» with subject experts**
 - **Interpretation of requirements**
 - **Discussion of applicability, compliance and actions**
 - **Common understanding**
 - **Harmonised implementation**
 - **Quick CB/OB establishing after workshops**



«Established» CB and OB

Organisation and Operation Basis	
Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra	
Annex III, Part Operator Requirements (ADR/OR) + AMC/G	
Subpart A – General Requirements	
ADR/OR A.005	Competent Authority
ADR/OR A.010	Means of compliance
ADR/OR A.015	Means of compliance
Subpart B – Certification	
ADR/OR B.005	Certification basis
ADR/OR B.015	Application for certification
AMC1 ADR/OR B.015(a)	Application for certification
AMC1 ADR/OR B.015(b)(1)-(4)	Application for certification
AMC1 ADR/OR B.015(b)(5)	Application for certification
AMC1 ADR/OR B.015(b)(6)	Application for certification
AMC1 ADR/OR B.015(b)(7)	Application for certification
AMC1 ADR/OR B.015(b)(8)	Application for certification
AMC1 ADR/OR B.015(b)(9)	Application for certification
ADR/OR B.025	Demonstration of compliance
AMC1 ADR/OR B.025(a)(1)	Demonstration of compliance
AMC2 ADR/OR B.025(a)(1)	Terms of the certificate
ADR/OR B.030	Continued validity
ADR/OR B.035	Changes
ADR/OR B.040	Changes
AMC1 ADR/OR B.040(a)(b)	Continuing compliance
ADR/OR B.050	Termination of certificate
ADR/OR B.065	Termination of certificate
Subpart C – Additional Aerodrome Operator Responsibilities	
ADR/OR C.005	Aerodrome operator
AMC1 ADR/OR C.005(c)	Aerodrome operator
ADR/OR C.015	Access
ADR/OR C.020	Findings
AMC1 ADR/OR C.020(b)	Findings
ADR/OR C.025	Immediate rectification
ADR/OR C.030	Occurrence report
AMC1 ADR/OR C.030	Occurrence report
ADR/OR C.040	Prevention of fire
AMC1 ADR/OR C.040	Prevention of fire
ADR/OR C.045	Use of alcohol
Subpart D – Management	
ADR/OR D.005	Management system
AMC1 ADR/OR D.005(b)(1)	Management system
AMC1 ADR/OR D.005(b)(2)	Management system
AMC1 ADR/OR D.005(b)(3)	Management system
AMC1 ADR/OR D.005(b)(4)	Management system
AMC1 ADR/OR D.005(b)(5)	Management system
AMC1 ADR/OR D.005(b)(6)	Management system
AMC1 ADR/OR D.005(b)(7)	Management system

Certification Basis	
Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra	
Book I, Certification Specifications (CS ADR-DSN) + Book II, Guidance Material (GM ADR-DSN)	
Chapter A – General	
CS ADR-DSN A.001	Applicability
CS ADR-DSN A.002	Definitions
CS ADR-DSN A.005	Aerodrome reference code
Chapter B – Runways	
CS ADR-DSN B.015	Number, siting and orientation of runways
CS ADR-DSN B.030	Runway threshold
CS ADR-DSN B.035	Actual length of runway and declared distances
CS ADR-DSN B.040	Runways with stopways or clearways
CS ADR-DSN B.045	Width of runways
CS ADR-DSN B.060	Longitudinal slopes of runways
CS ADR-DSN B.065	Longitudinal slope changes on runways
CS ADR-DSN B.070	Sight distance for slopes on runways
CS ADR-DSN B.075	Distance between slope changes on runways
CS ADR-DSN B.080	Transverse slopes on runways
CS ADR-DSN B.085	Runway strength
CS ADR-DSN B.090	Runway strength
CS ADR-DSN B.095	Surface of runways
CS ADR-DSN B.090	Surface of runways
Section 1 – Runway Turn Pads	
Section 2 – Runway Shoulders	
CS ADR-DSN B.125	Runway shoulders
CS ADR-DSN B.130	Slopes on runway shoulders
CS ADR-DSN B.135	Width of runway shoulders
CS ADR-DSN B.140	Strength of runway shoulders
CS ADR-DSN B.145	Surface of runway shoulders
Section 3 – Runway Strip	
CS ADR-DSN B.150	Runway strip to be provided
CS ADR-DSN B.155	Length of runway strip
CS ADR-DSN B.160	Width of runway strip
CS ADR-DSN B.165	Objects on runway strips
CS ADR-DSN B.170	Grading of runway strips
CS ADR-DSN B.175	Grading of runway strips
GM1 ADR-DSN B.175	Longitudinal slopes on runway strips
CS ADR-DSN B.180	Longitudinal slopes on runway strips
CS ADR-DSN B.185	Transverse slopes on runway strips
CS ADR-DSN B.190	Strength of runway strips
Section 4 – Clearways, Stopways and Radio Altimeter Operating Area	
CS ADR-DSN B.195	Clearways
CS ADR-DSN B.205	Radio altimeter operating area
Chapter C – Runway End Safety Areas	
CS ADR-DSN C.210	Runway End Safety Areas
CS ADR-DSN C.215	Dimensions of runway end safety areas

- Applicable rules for that specific aerodrome
- Granted deviations (multiple for each article is possible)



Adapt Organisation and Processes



- **Workoff actions based on compliance checklist and established OB, CB**
 - **Adapt aerodrome manual structure**
 - **Adapt organisation, operational processes, infrastructure (Switzerland: no case of infrastructure change due to EASA transition)**
 - **Produce safety evidence documentation (safety assessments) for deviations (reference to existing safety documentation possible)**



Aerodrome Manual Structure

- Based on ADR.OR.E.005, AMC3 ADR.OR.E.005
- Slight adjustments and specifications for practical reasons
- Translation

EASA Aerodrome Manual Structure (AMC3 ADR.OR.E.005, AMC3 ADR.OR.E.005)

Part	Section	Manual Section	Manual Section	Manual Section	Manual Section
1	General	1.1	Administration and control of the aerodrome manual	1.1	Administration and control of the aerodrome manual
		1.2	Administration and control of the aerodrome manual	1.2	Administration and control of the aerodrome manual
		1.3	Administration and control of the aerodrome manual	1.3	Administration and control of the aerodrome manual
		1.4	Administration and control of the aerodrome manual	1.4	Administration and control of the aerodrome manual
		1.5	Administration and control of the aerodrome manual	1.5	Administration and control of the aerodrome manual
		1.6	Administration and control of the aerodrome manual	1.6	Administration and control of the aerodrome manual
		1.7	Administration and control of the aerodrome manual	1.7	Administration and control of the aerodrome manual
		1.8	Administration and control of the aerodrome manual	1.8	Administration and control of the aerodrome manual
		1.9	Administration and control of the aerodrome manual	1.9	Administration and control of the aerodrome manual
		1.10	Administration and control of the aerodrome manual	1.10	Administration and control of the aerodrome manual
2	Safety Management	2.1	Safety Management	2.1	Safety Management
		2.2	Safety Management	2.2	Safety Management
		2.3	Safety Management	2.3	Safety Management
		2.4	Safety Management	2.4	Safety Management
		2.5	Safety Management	2.5	Safety Management
		2.6	Safety Management	2.6	Safety Management
		2.7	Safety Management	2.7	Safety Management
		2.8	Safety Management	2.8	Safety Management
		2.9	Safety Management	2.9	Safety Management
		2.10	Safety Management	2.10	Safety Management
3	Operations	3.1	Operations	3.1	Operations
		3.2	Operations	3.2	Operations
		3.3	Operations	3.3	Operations
		3.4	Operations	3.4	Operations
		3.5	Operations	3.5	Operations
		3.6	Operations	3.6	Operations
		3.7	Operations	3.7	Operations
		3.8	Operations	3.8	Operations
		3.9	Operations	3.9	Operations
		3.10	Operations	3.10	Operations
4	Quality Management	4.1	Quality Management	4.1	Quality Management
		4.2	Quality Management	4.2	Quality Management
		4.3	Quality Management	4.3	Quality Management
		4.4	Quality Management	4.4	Quality Management
		4.5	Quality Management	4.5	Quality Management
		4.6	Quality Management	4.6	Quality Management
		4.7	Quality Management	4.7	Quality Management
		4.8	Quality Management	4.8	Quality Management
		4.9	Quality Management	4.9	Quality Management
		4.10	Quality Management	4.10	Quality Management



Formal Application



- **Submit paperwork to FOCA before audit**
 - **Application Form**
 - **Declaration of Compliance Form**
 - **Aerodrome Manual**
 - **Certification Basis (CB)**
 - **Organisation and Operations Basis (OB)**
 - **Forms for ELOS, DAAD, SC, AltMOC**



Application Form

- Contains references to relevant documents (Manuals etc.)
- Includes list of aerodrome services delegated to third parties

The image shows a sample of the 'Application Form for EASA Aerodrome Certificate'. The form is titled 'Application Form for EASA Aerodrome Certificate' and is issued by the Swiss Confederation (Schweizerische Eidgenossenschaft / Confédération suisse / Confederazione Svizzera / Confederaziun svizra / Swiss Confederation) and the Federal Department of the Environment, Transport, Energy and Communications (DETEC), specifically the Federal Office of Civil Aviation (FOCA) Section Aerodromes and Air Navigation Obstacles.

The form contains a table with the following fields:

Field	Field
Aerodrome ¹	
Aerodrome Operator	
Safety Manager	
Compliance Manager	
Organisational diagram ²	
Aerodrome layout map ³	
Land ownership ⁴	
Type of operations ^{1,4}	
Services delegated to third parties	If applicable, please use attachment
Organisation and Operations Basis (OB) date, version	
Aerodrome Manual: date, version	
Infrastructure characteristics (runway orientation, dimensions of physical characteristics, visual aids) ⁵	
Certification Basis (CB): date, version	
Obstacle Limitation Surfaces Chart ⁵ date, version	

Application: The aerodrome operator mentioned above hereby applies for an aerodrome certificate according regulation (EU) No. 139/2014.

Accountable Manager

Date, signature

1 ICAO 4-letter code
2 Reference to aerodrome manual including version and date
3 Information about the land ownership within the aerodrome perimeter
4 Reference to aerodrome manual and/or operations regulation (Betriebsreglement, règlement d'exploitation, regolamento d'esercizio) including version and date
5 Sicherheitszonenplan, plan de la zone de sécurité, piano delle zone di sicurezza (or Hindernisbegrenzungskataster, catastrophe des surfaces de limitation d'obstacles, catasto delle superfici di limitazione delle ostacoli)

FOCA SIAP / Version 1.0 / 17.12.2014

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Declaration of Compliance Form

- **Formal confirmation of compliance**
- **Signed by the Accountable Manager**

The form is titled "Declaration of Compliance for Aerodrome Operators" and is issued by the Swiss Confederation (Schweizerische Eidgenossenschaft, Confédération suisse, Confederazione Svizzera, Confederaziun svizra, Swiss Confederation). It is part of the Federal Department of the Environment, Transport, Energy and Communications (DET/EC), specifically the Federal Office of Civil Aviation (FOCA), Section Aerodromes and Air Navigation Obstacles.

The form contains a table for the following information:

Aerodrome ¹	
Aerodrome Operator	
Organisation and Operations Basis (OB): date, version	
Aerodrome Manual: date, version	
Certification Basis (CB): date, version	

Declaration of compliance of Aerodrome Operator: In accordance with Commission Regulation (EU) No 139/2014 on aerodrome design and operation the aerodrome operator hereby declares that:

1. The certification basis is complied with, and the aerodrome, as well as its obstacle limitation and features making it unsafe for operation.
2. All personnel are qualified, competent, and trained in accordance with the applicable requirements.
3. The management system documentation, including the aerodrome manual, comply with the applicable requirements set out in Part-ADR.OR and Part-ADR.OPS.
4. The operation and maintenance of the aerodrome will be carried out in accordance with the requirements of Regulation (EC) No 216/2008 and its Implementing Rules, the terms of the certificate, and the procedures and instructions specified in the aerodrome manual.
5. The information disclosed in this declaration is correct.

The form also includes a section for the Accountable Manager's signature and date.

Accountable Manager	
Date, signature	

¹ ICAO 4-letter code

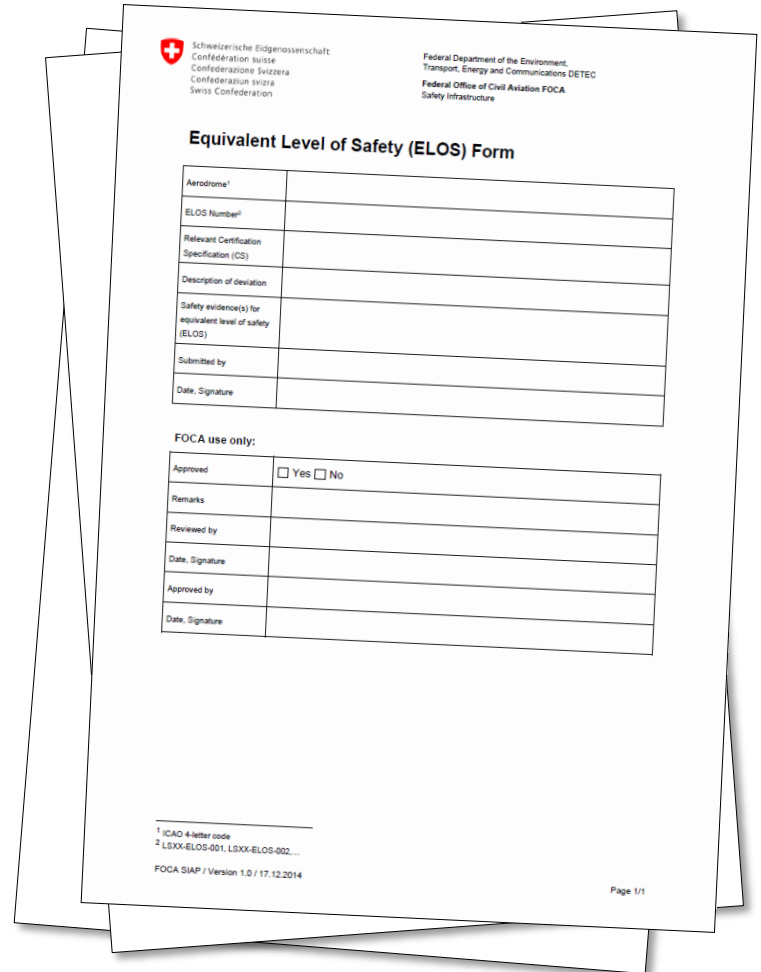
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Deviation Forms

- For each case of ELOS, SC, DAAD, AltMOC
- Submitted with safety evidence documentation (safety assessments)
- Approval by FOCA



The image shows a stack of 'Equivalent Level of Safety (ELOS) Form' documents. The top document is from the Swiss Confederation, specifically the Federal Department of the Environment, Transport, Energy and Communications (DETEC), and the Federal Office of Civil Aviation (FOCA). The form is titled 'Equivalent Level of Safety (ELOS) Form' and contains several sections for data entry.

Equivalent Level of Safety (ELOS) Form	
Aerodrome ¹	
ELOS Number ²	
Relevant Certification Specification (CS)	
Description of deviation	
Safety evidence(s) for equivalent level of safety (ELOS)	
Submitted by	
Date, Signature	

FOCA use only:

Approved	<input type="checkbox"/> Yes <input type="checkbox"/> No
Remarks	
Reviewed by	
Date, Signature	
Approved by	
Date, Signature	

¹ ICAO 4-letter code
² LSXX-ELOS-001, LSXX-ELOS-002, ...
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EASA Audit



1. FOCA audit

- **Verification of compliance**
- **Combination of Desktop and Onsite audit**
- **Switzerland: audit fully integrated into regular oversight (not just EASA-ICAO gaps)**

2. Aerodrome submits action plan based on audit results

3. FOCA issues EASA certificate



EASA Certificate

- Unlimited duration with max. oversight cycle 4 years
- Terms of certificate attached
- Separate national (ICAO) certificate for subjects not (yet) regulated by EASA (e.g. heliports)







Current status

- **CB and OB established for all aerodromes**
- **Adaption of processes ongoing (AD, FOCA)**
- **Internal test audit completed**
- **External test with Geneva Airport in May 2015**
- **CB and OB update (Apron Management) in Summer 2015**
- **First conversion Q2/2016 (allow max. time to adapt)**



Current status





Current status





Current status





Current status

3 DAAD

1 ELOS

5 SC

0 Derogations

0 Exemptions

0 AltMOC

Lugano





Current status

9 DAAD

0 ELOS

11 SC

0 Derogations

0 Exemptions

0 AltMOC

Bern





Current status

0 Exemptions

0 Derogations

0 AltMOC

FOCA Aerodromes





Overview Deviations

Airport	DAAD	ELOS	SC	Total
Zürich	7	6	11	24
Geneva	7	0	9	16
Altenrhein	0	0	3	3
Lugano	3	1	5	9
Bern	9	0	11	20
Total	26	7	39	72

- **No granted deviations for Organisation, Operations**
- **No deviations for Authority Requirements (FOCA)**





Challenges

- **Dynamic project with changes on the way (e.g. new or changed rules before end of transition)**
- **Resources (small team, staff rotation, many other responsibilities, predictability of aerodrome resources difficult)**
- **Common understanding of requirements and expectations: exchange of information between multiple organisations and at all levels (internal, external, vertical, horizontal)**
- **Simultaneous operation under two regulatory systems for aerodromes under EASA and ICAO**



Challenges

- **Proportionality: some EASA-ICAO gaps lead to more stringent requirements for smaller aerodromes under ICAO (e.g. graded area of runway strips, strength of RESA, RFF response testing in difficult environment)**
- **Coordination of EASA and ICAO rules is not an easy task (different players, process, timing etc.)**
- **Resistance by some aerodromes to adapt aerodrome manual structure (cost benefit), FOCA believes it is beneficial to adapt for easy accommodation of future rules**



Challenges

- **Aerodrome Data Quality requirements (large, complex, expectations not entirely clear yet: transition looks only at (EU) 139/2014, (EU) 73/2010 later)**
- **Integration of rules from ongoing rulemaking tasks into certification process (Apron Management Services, CS issue 2,3,4, RFF, Heliports etc.)**





Key Messages

- **The EASA rules are similar to ICAO, but not the same**
- **EASA rules are for Aerodromes and CAA**
- **Rules provide good flexibility for implementation by the Member States**
- **CB and OB are living documents reflecting the local situation**
- **Implementation approaches «light conversion» vs. intergration in oversight cycle**



Key Messages

- **National regulations will only be kept for subjects not (yet) regulated by EASA or for specification beyond EASA**
- **Frequent information exchange is key to common understanding (allows efficient implementation)**
- **Active participation of Member States in the rulemaking process is very beneficial for all involved parties**
- **Keep the project management simple and flexible, changes will happen on the way (e.g. new rules)**



Key Messages

- **Allow enough time for aerodromes for adaption of aerodrome manual and production of safety evidence**
- **Resources are an issue for small organisations (Competent Authority, Aerodromes)**
- **Parallel operation of two regulatory systems is tricky (national regulation and oversight of aerodromes outside EASA scope continues)**
- **CAA and aerodromes must work together**

Guidance material available on FOCA website

