



# EASA

European Aviation Safety Agency

## AERODROMES WORKSHOP Cologne, Germany

4 – 5 May 2015

### WS 7: Establishment of CB

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Aerodromes Section  
5 May 2015

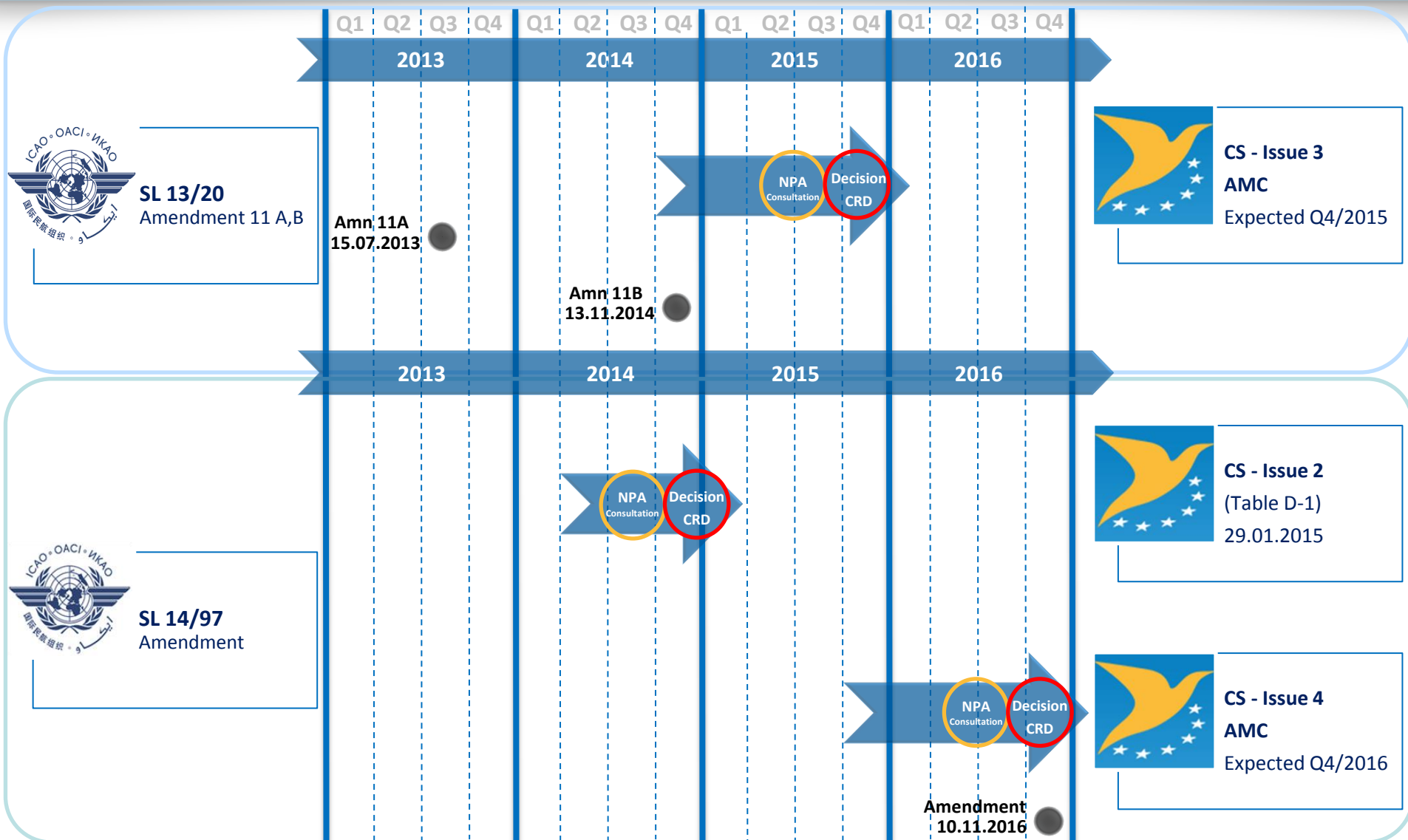
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# Harmonising EASA rules with ICAO





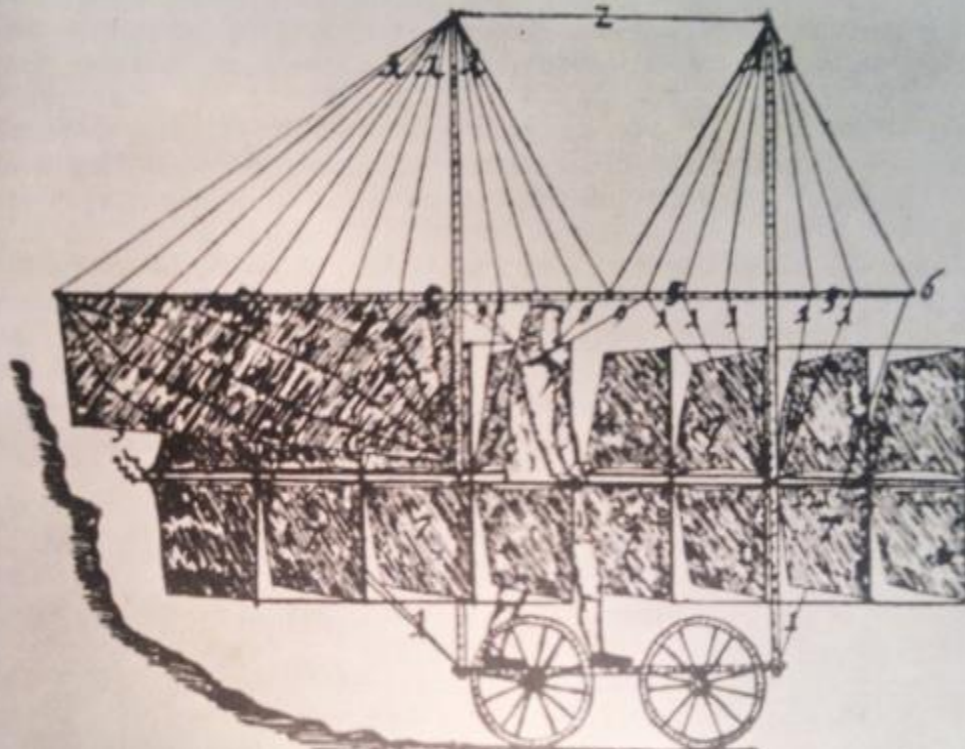
# Certification basis (CB)

## Basic Regulation, Article 8a *Aerodromes*

- Par.1 **Aerodromes, aerodrome equipment and operation of aerodromes shall comply with the essential requirements set out in Annex Va and, if applicable, Annex Vb**
- Par.2 **The compliance with 1. shall be established in accordance:**
- (a) the certificate shall be issued when the applicant has shown that the aerodrome complies with the aerodrome **certification basis** and the aerodrome is safe for operation;
  - (b) the **certification basis** shall consist of:
    - i) the applicable **CS** related to the type of aerodrome;
    - ii) the provisions for which an Equivalent Level of Safety (**ELOS**) has been accepted; and
    - iii) the Special Detailed Technical Specifications (**SC**) when the designed features of a particular aerodrome or the experience in operation render any of the specifications in i) inadequate or inappropriate to ensure conformity with ER.
  - (c), (d) and (e) ...

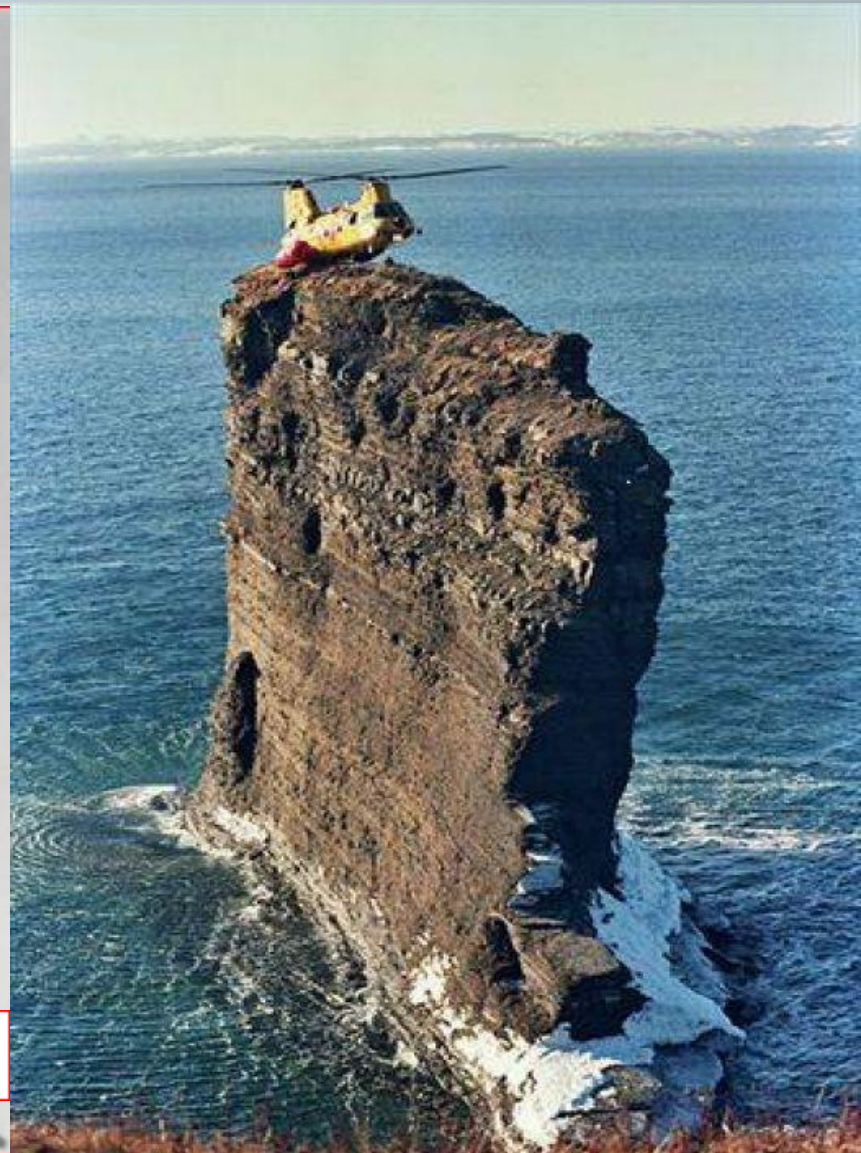


# ADR CB and Certification



Was nun der Wagen ziehen muß, ist nicht  
bedeutend, es muß nur so sein, daß er  
wie ein Aufzug, der sich durch die Luft  
bewegt, ist, und auf der Luft  
fliegen, und so fliegen soll.

Voiture céleste de Melchior Bauer  
(1764). Photo Hans Schaller.



•source: Edmond Petit, Nouvelle histoire mondiale de l'aviation





# Certification basis (CB)

**The content of the Certification Basis is set out in Article 8a (BR), no definition needed**

- Competent Authority to establish the CB (ADR.AR.C.020)**
- Based on the request received from the applicant (ADR.OR.B.015)**

**CB & Certification → negotiation process between the Competent Authority and the Applicant**



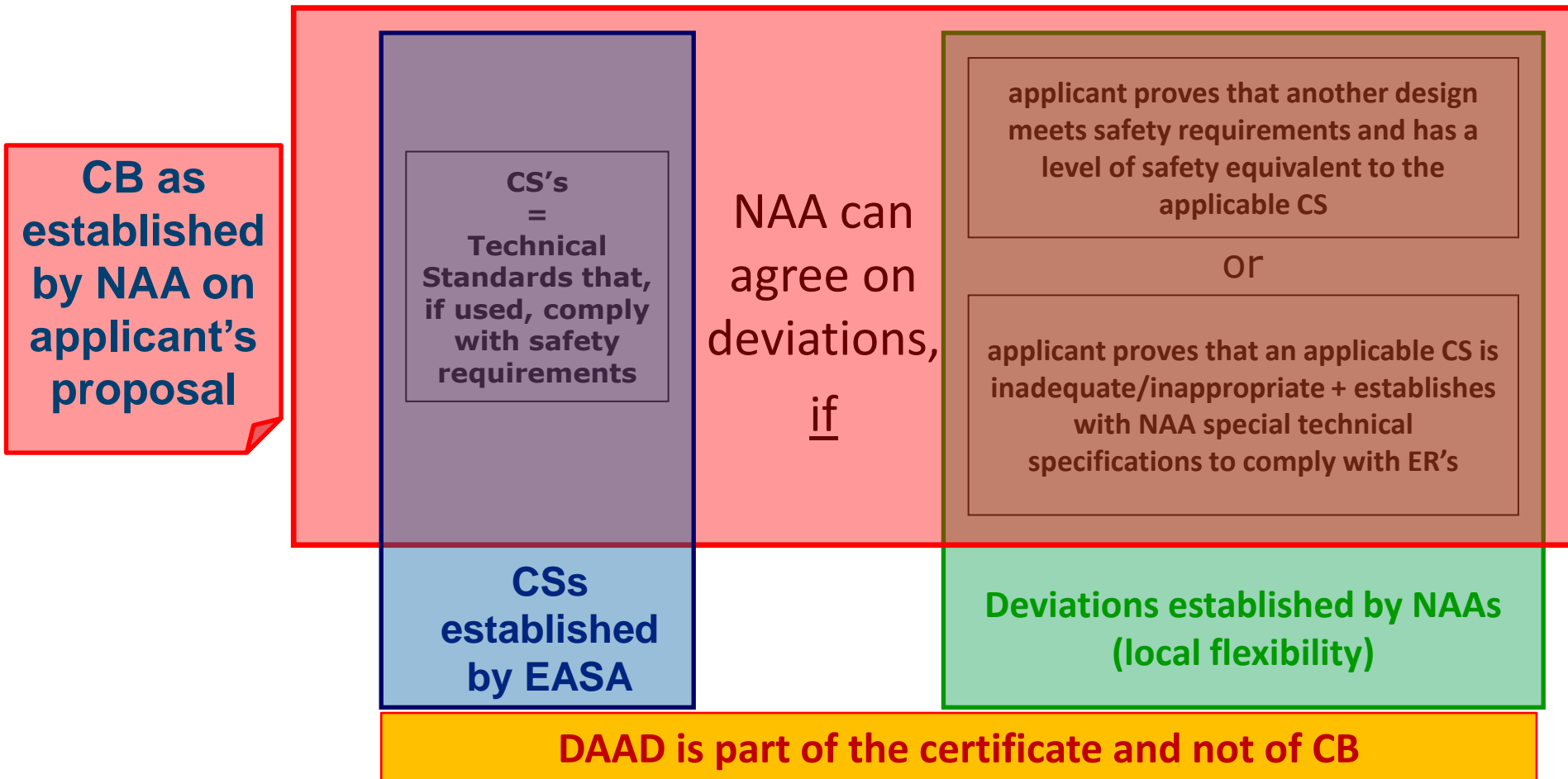
# From application to certification





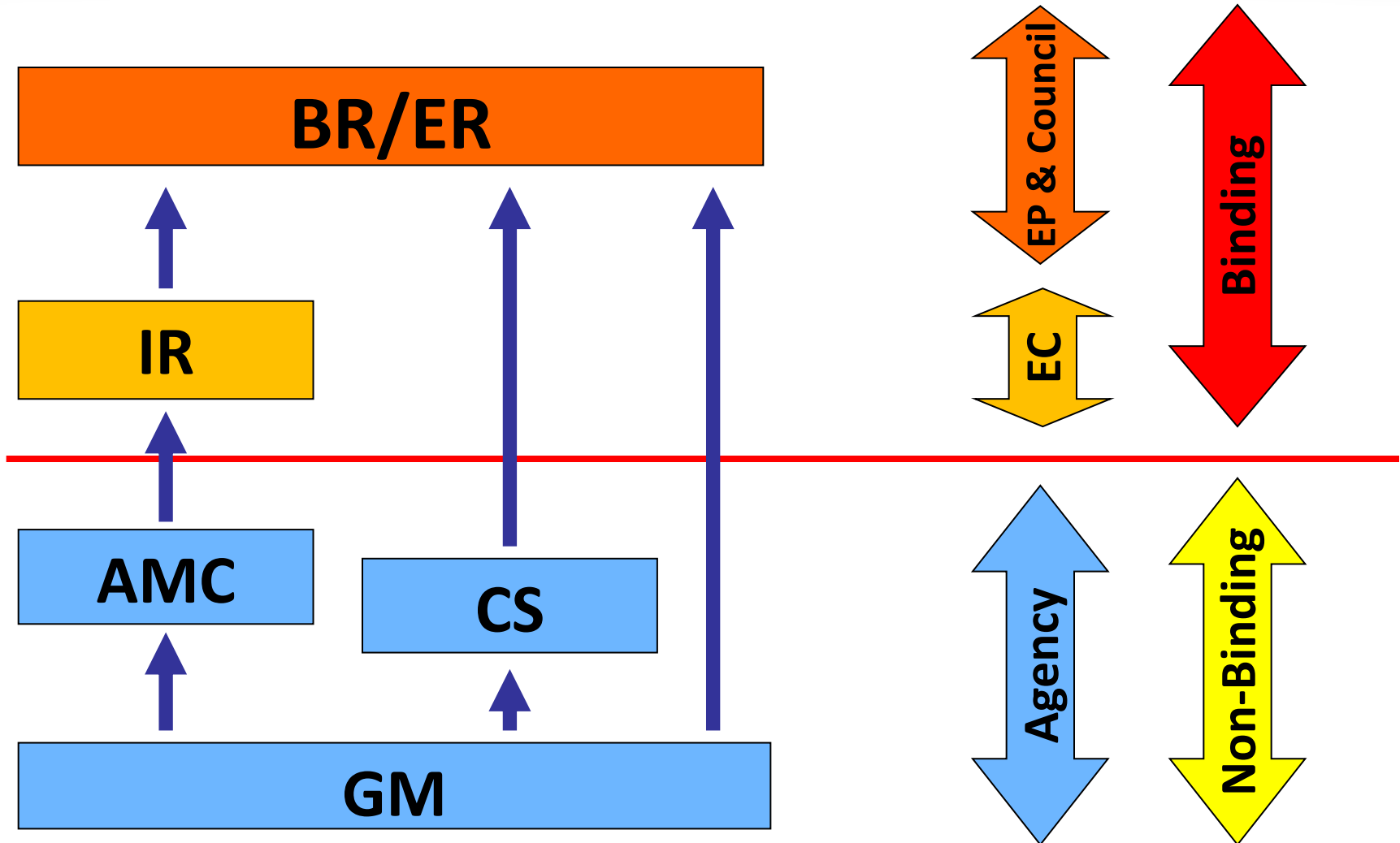
# Certification basis (CB)

CB is the NAA's confirmation of how an applicant can show compliance with the safety requirements (**ER's and IR's**)





# Regulatory framework







# From application to certification (UK web)

## Summary of three certification elements:

### 1. Certification Basis

- Applicable Certification Specifications (CS);
- any Equivalent Level of Safety (ELOS);
- any Special Conditions (SC)
- ELOS, SC, DAAD to be supported by Safety Assessment

### 2. Aerodrome Manual (content)

- General;
- Aerodrome management system, qualification and training requirements;
- Particulars of the aerodrome site;
- Particulars of the aerodrome required to be reported to the AIS; and
- Particulars of the operating procedures of the aerodrome, its equipment and safety measures.

### 3. Demonstration of Compliance (AD Operator)



# CB example Kolndorf - Conf. 2012

EASA CERTIFICATION BASIS

Attachment A

KOLNDORF AERODROME

Precision Approach Runway Cat IIIa

Parallel TWY A leading from apron to the runway

Aerodrome reference code 4E

The aerodrome is bounded by:

1. Sea, north of the RWY at a distance of 450m from RWY C<sub>L</sub>
2. Hill, 150m high, south of the RWY at a distance of 4 km from RWY C<sub>L</sub>
3. Cliff, starting 650m from the beginning of RWY 09

RUNWAYS		09	27	TWY A	Comments
CS ADR DSN.xxx	Number, siting and orientation of runways				
CS ADR DSN.xxx	Choice of maximum permissible crosswind components				
CS ADR DSN.xxx	Data to be used				
CS ADR	Runway threshold	Y	Y		



# CB example – Today

## Chapter D – Taxiways

Please complete the table below (dimensions in metres)

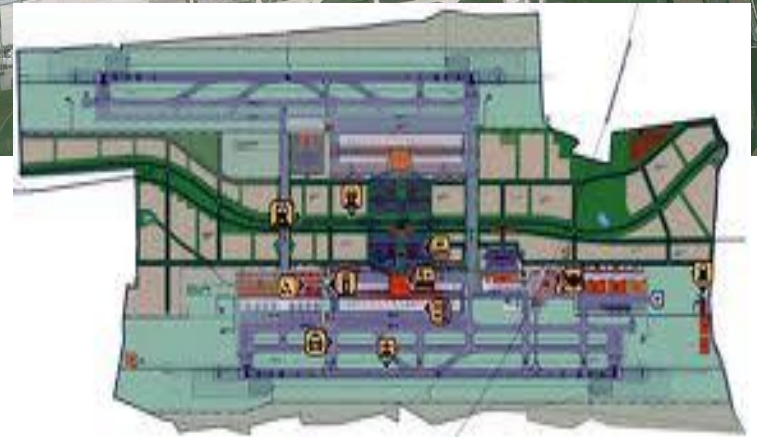
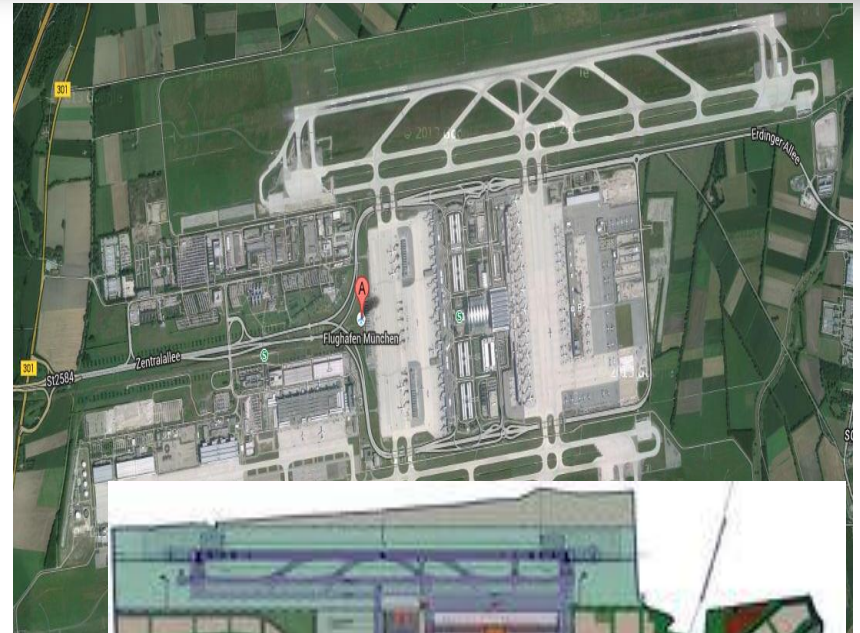
Taxiway Designator	Code	Width	Strip Width

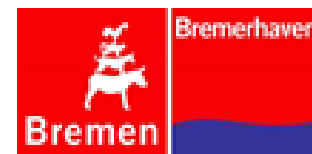
C S ADR-DSN.	Certification Specification (CS)	C S Met Yes / No / N/A
D.240	Taxiways general	Choose an item.
D.245	Width of taxiways	Choose an item.
D.250	Taxiway curves	Choose an item.
D.255	Junction and intersection of taxiways	Choose an item.
D.260	Taxiway minimum separation distance	Choose an item.
D.265	Longitudinal slopes on taxiways	Choose an item.
D.270	Longitudinal slope changes on taxiways	Choose an item.
D.275	Sight distance of taxiways	Choose an item.
D.280	Transverse slopes on taxiways	Choose an item.





# Certification basis (CB)





## Next steps

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- Determination of the final CB by the aviation authority
  - Examination of the submitted documents
  - Determination of the most critical safety aspects for each airport and carrying out of inspections/ audits in that fields
  - Ask for missing documents





# Topics for the discussion:

- CB for the conversion of certificate
- CB for new aerodrome certification
- CB for a change
- Composition / content of CB
- Application for a certificate
- Initiation of the certification process / Declaration of compliance
- Desk top review and audits / inspections
- CS versus GM
- Special condition & ELOS
- Safeguarding of Aerodromes
- Proposals for future developments



***YOUR  
OPINION  
MATTERS!*** ***IT'S  
YOUR  
TURN!***

Join the discussion, please!



EUROPEAN AVIATION SAFETY AGENCY  
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE  
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT



# Thank you!

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# Remarks on implementation 139/2014

- difference in the attitude of the aerodrome management when the Accountable Manager has to sign the Declaration of Compliance. Aerodrome operators realised that they are given more responsibility to ensure they are compliant with the rules.
- An important factor in the conversion of the aerodromes has been the flexibility built into the rules that has allowed both the CAA and the aerodrome operators to mitigate some of the unusual issues that have arisen.