



THE NEW CLASSIFICATION – AEROPLANE DESIGN GROUP (ADG)

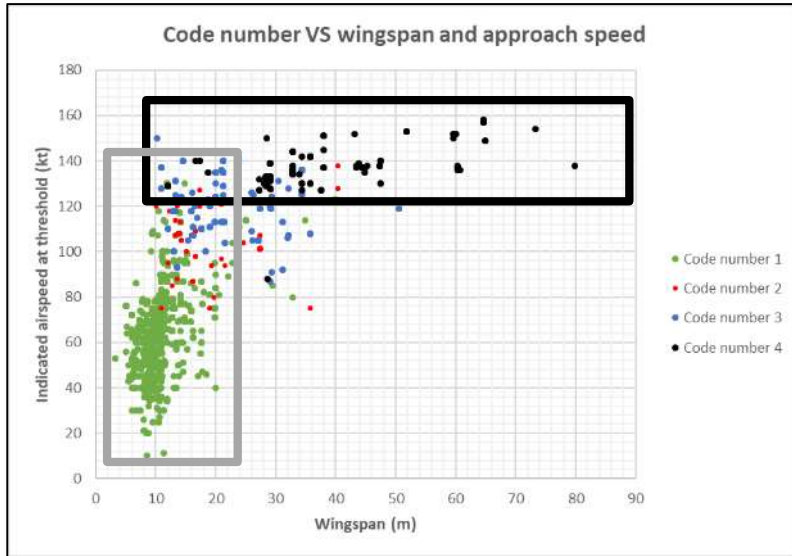
Aeroplane design group	Indicated airspeed at threshold		Wingspan
I	Less than 169 km/h (91 kt)	and	Up to but not including 24 m
IIA	Less than 169 km/h (91 kt)	and	24 m up to but not including 36 m
IIB	169 km/h (91 kt) up to but not including 224 km/h (121 kt)	and	Up to but not including 36 m
IIC	224 km/h (121 kt) up to but not including 307 km/h (166 kt)	and	Up to but not including 36 m
III	Less than 307 km/h (166 kt)	and	36 m up to but not including 52 m
IV	Less than 307 km/h (166 kt)	and	52 m up to but not including 65 m
V	Less than 307 km/h (166 kt)	and	65 m up to but not including 80 m

1. Rationale of the new classification

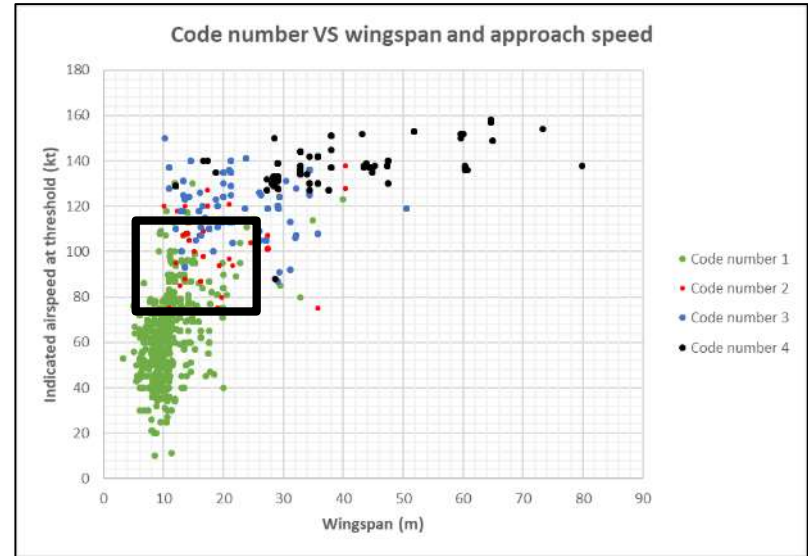


Limits

Surfaces and aircraft



Highly different aircraft may imply the same surfaces.

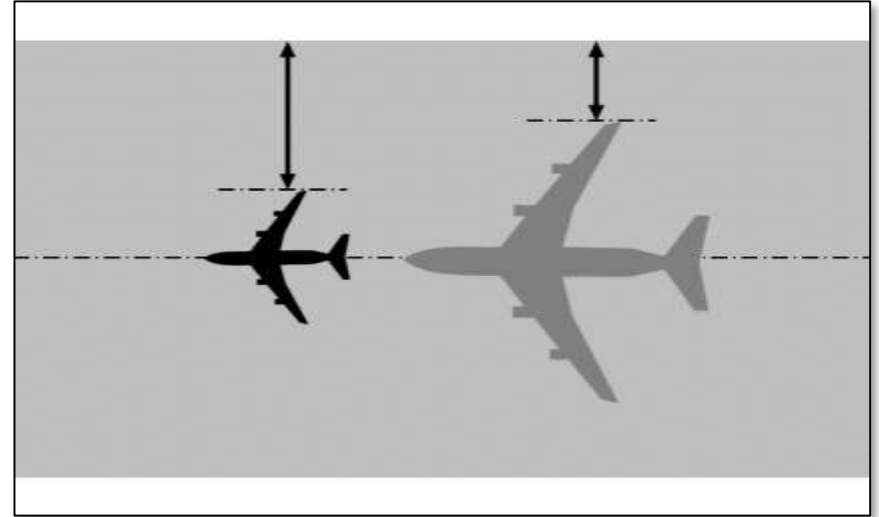
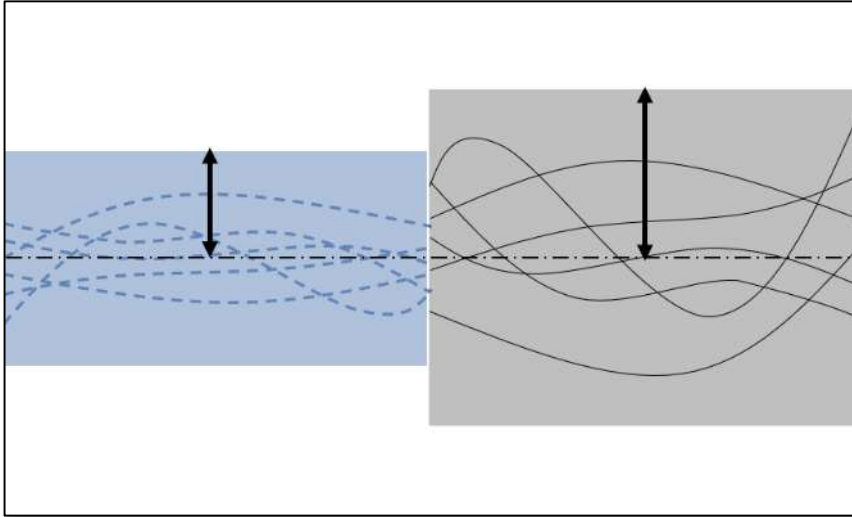


Comparable aircraft may imply different OLS.

Code number may be inconsistent with the performances and size of aircraft

Objectives

Consistency with the performances and size of aircraft



Need to provide surfaces matching aircraft operations and size.

Objectives

Consistency with the criterion of instrument procedures

OES intend to establish the airspace where obstacles can affect all the intended operations, including instrument operations.



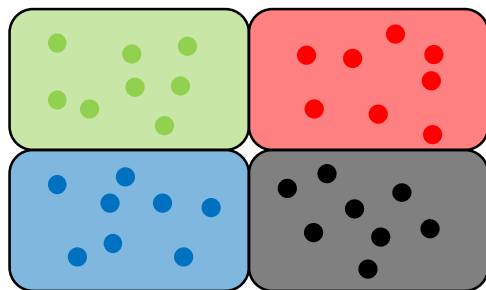
In the 70's, the Aerodrome Reference Code Panel: **Runway length requirements and approach speed are related**

Objectives

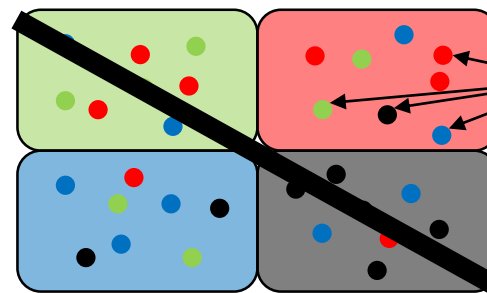
Consistency with code number

Readability of the new classification for aerodromes of given code

Today



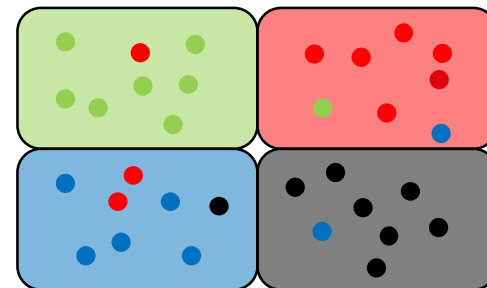
Aerodromes of
code number X



Aerodromes of
code number N

Very different
ADGs

or



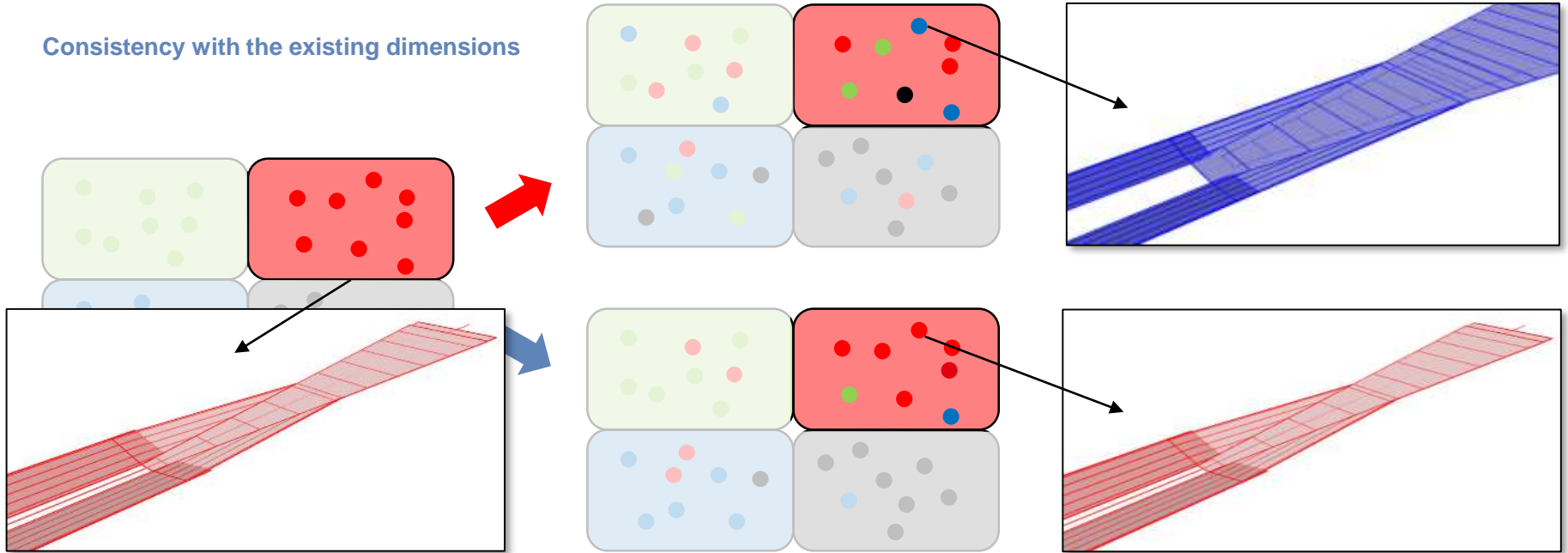
Tomorrow

Homogeneous
ADGs

Objectives

Consistency with code number

Consistency with the existing dimensions

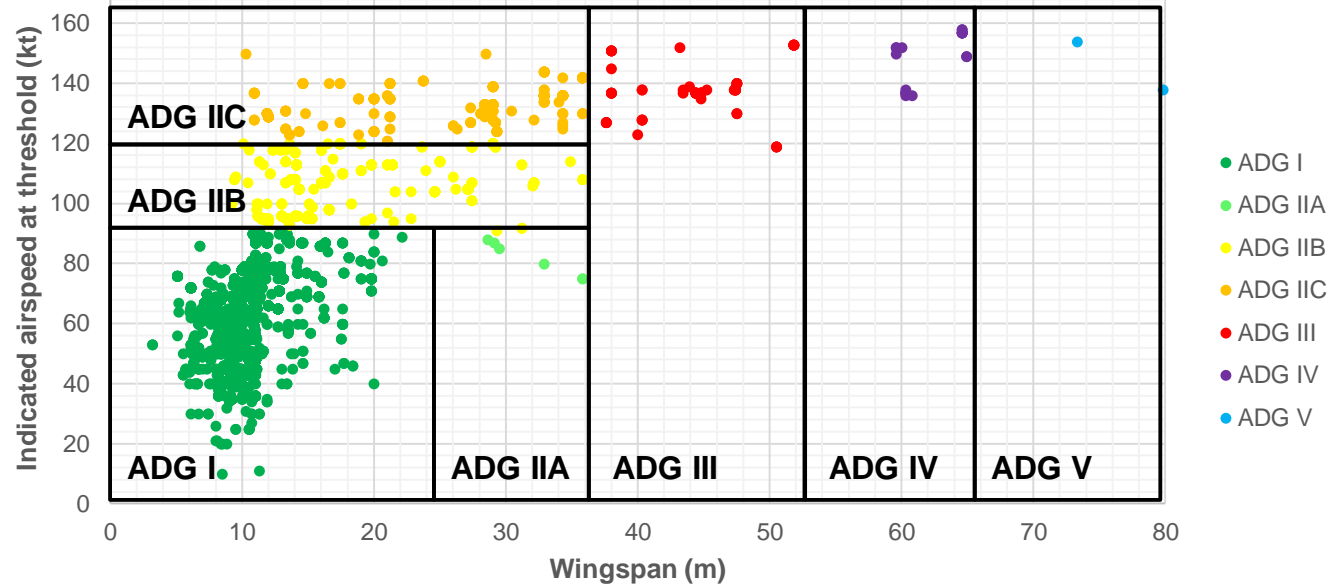


2. The proposal



The proposal

Aeroplane design groups



Aeroplane design group	Indicated airspeed at threshold	Wingspan
I	Less than 169 km/h (91 kt)	Up to but not including 24 m
IIA	Less than 169 km/h (91 kt)	24 m up to but not including 36 m
IIB	169 km/h (91 kt) up to but not including 224 km/h (121 kt)	Up to but not including 36 m
IIC	224 km/h (121 kt) up to but not including 307 km/h (166 kt)	Up to but not including 36 m
III	Less than 307 km/h (166 kt)	36 m up to but not including 52 m
IV	Less than 307 km/h (166 kt)	52 m up to but not including 65 m
V	Less than 307 km/h (166 kt)	65 m up to but not including 80 m

The proposal

Consistency with the criterion of instrument procedures

Aeroplane design group	Indicated airspeed at threshold	Wingspan
I	Category A: less than 169 km/h (91 kt) indicated airspeed (IAS)	to but not including 24 m
IIA		up to but not including 36 m
IIIB	Category B: 169 km/h (91 kt) or more but less than 224 km/h (121 kt) IAS	including 36 m
IIIC		including 36 m
III	Category C: 224 km/h (121 kt) or more but less than 261 km/h (141 kt) IAS	including 52 m
IV		including 65 m
V	Category D: 261 km/h (141 kt) or more but less than 307 km/h (166 kt) IAS	including 80 m



Category A: less than 169 km/h (91 kt) indicated airspeed (IAS)
 Category B: 169 km/h (91 kt) or more but less than 224 km/h (121 kt) IAS
 Category C: 224 km/h (121 kt) or more but less than 261 km/h (141 kt) IAS
 Category D: 261 km/h (141 kt) or more but less than 307 km/h (166 kt) IAS
 Category E: 307 km/h (166 kt) or more but less than 391 km/h (211 kt) IAS
 Category H: see 1.4.7, "Helicopters".

Def: Speed at threshold based on 1.3 times stall speed V_{so} or 1.23 times stall speed V_{s1g} in the landing configuration at maximum certificated landing mass.

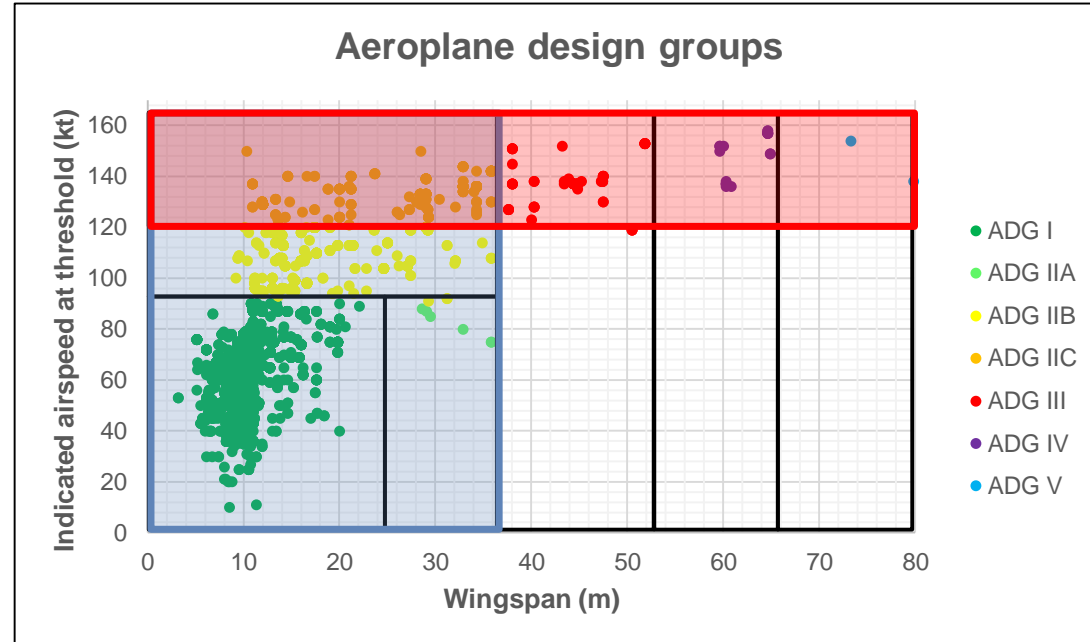
The proposal

Consistency with the performances and size of aircraft

On runways of 30m and less, the **aircraft have similar flight trajectories.**

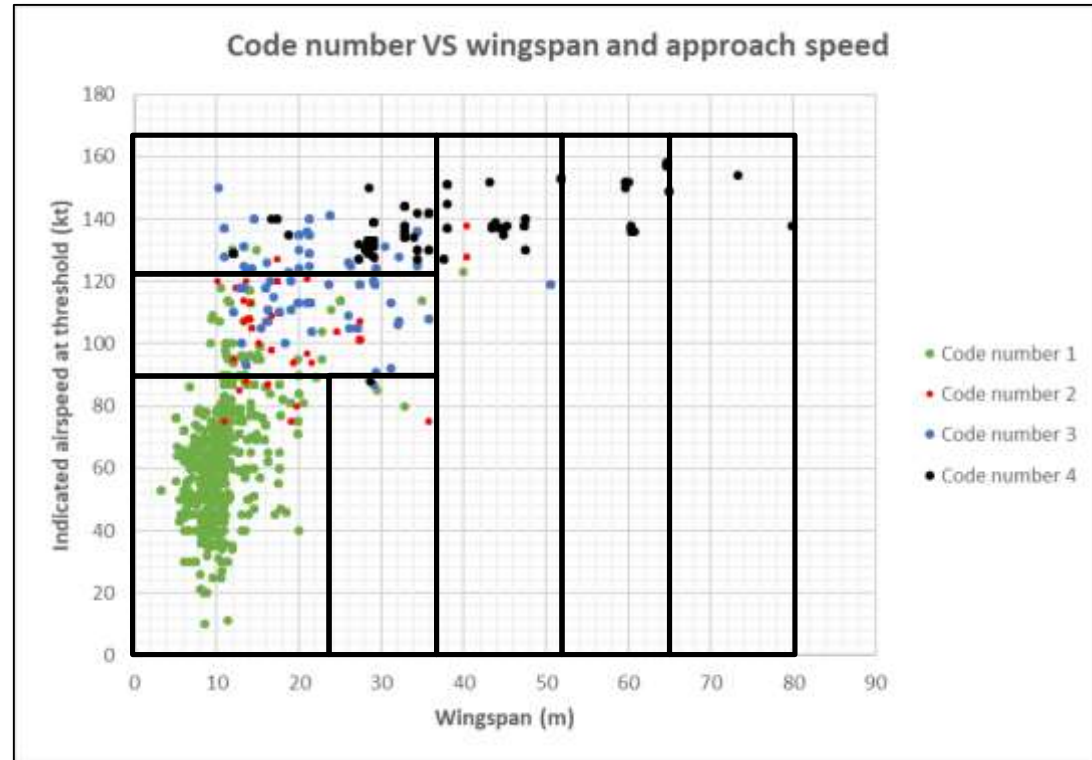
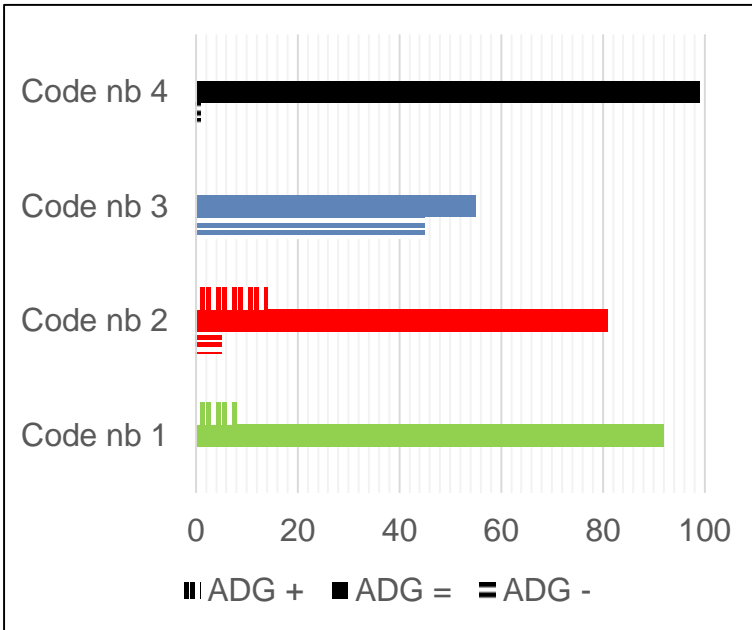
On runways of 45m and more, the **aircraft have similar flight trajectories.**

Wingspan allows to tailor the width of surfaces to the size of aircraft.



The proposal

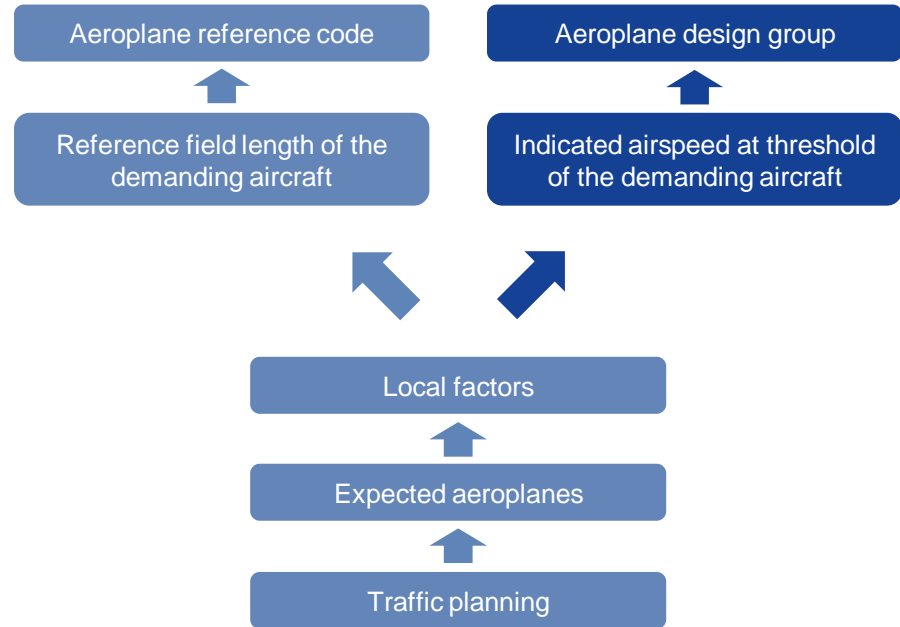
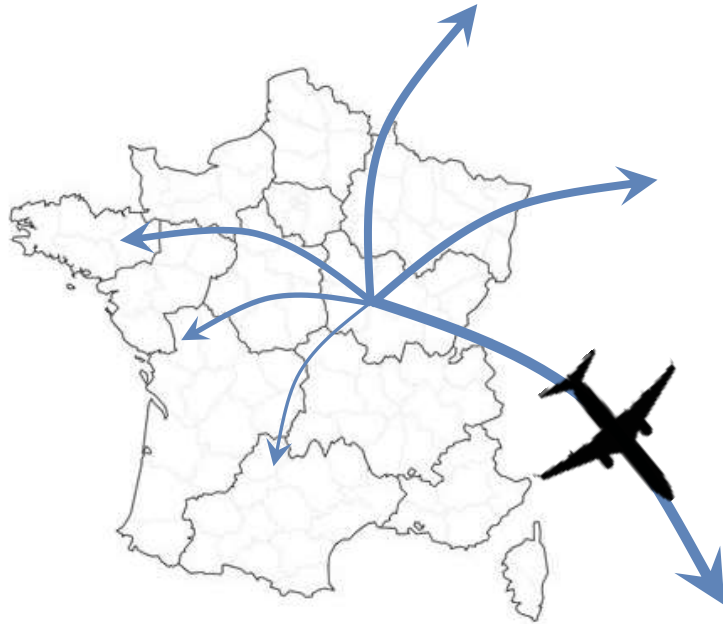
Consistency with code number



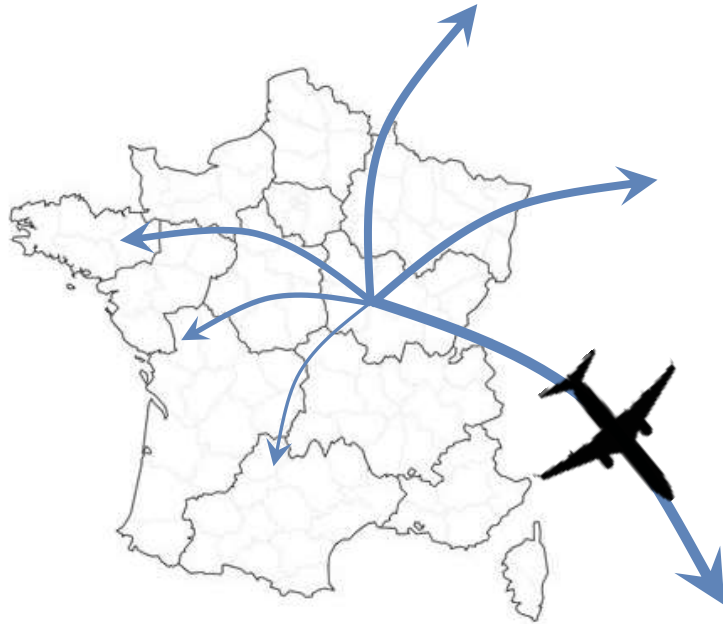
3. Application



Application



Application



Aircraft type	IAS at THR (kt)	Wingspan (m)	ADG
Airbus 320-200	121-141	35+	IIC
Boeing 737-200	121-141	35+	IIC
ATR-42-300	91-121	24+	IIB
ATR-72-201	91-121	27+	IIB
CRJ 100, 200, 440, 700	121-141	20+ / 23+	IIC
Cessna 120, 152, 162	0-91	9+ / 10+	I
Cessna Citation CJ2, CJ3, CJ4	91-121	15+	IIB
Dash 6	0-91	19+	I
Dash 7	0-91	28+	IIA
Dash 8	91-121	25+ / 27+	IIB
Learjet 23, 24, 25, 28...	121-141	10+	IIC
PA-28	0-91	9+ / 10+	I