



**EASA**  
European Aviation Safety Agency

# Rotorcraft Safety Roadmap

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# Main helicopter types in Europe and in the World

## Europe (TOP 10 Types)

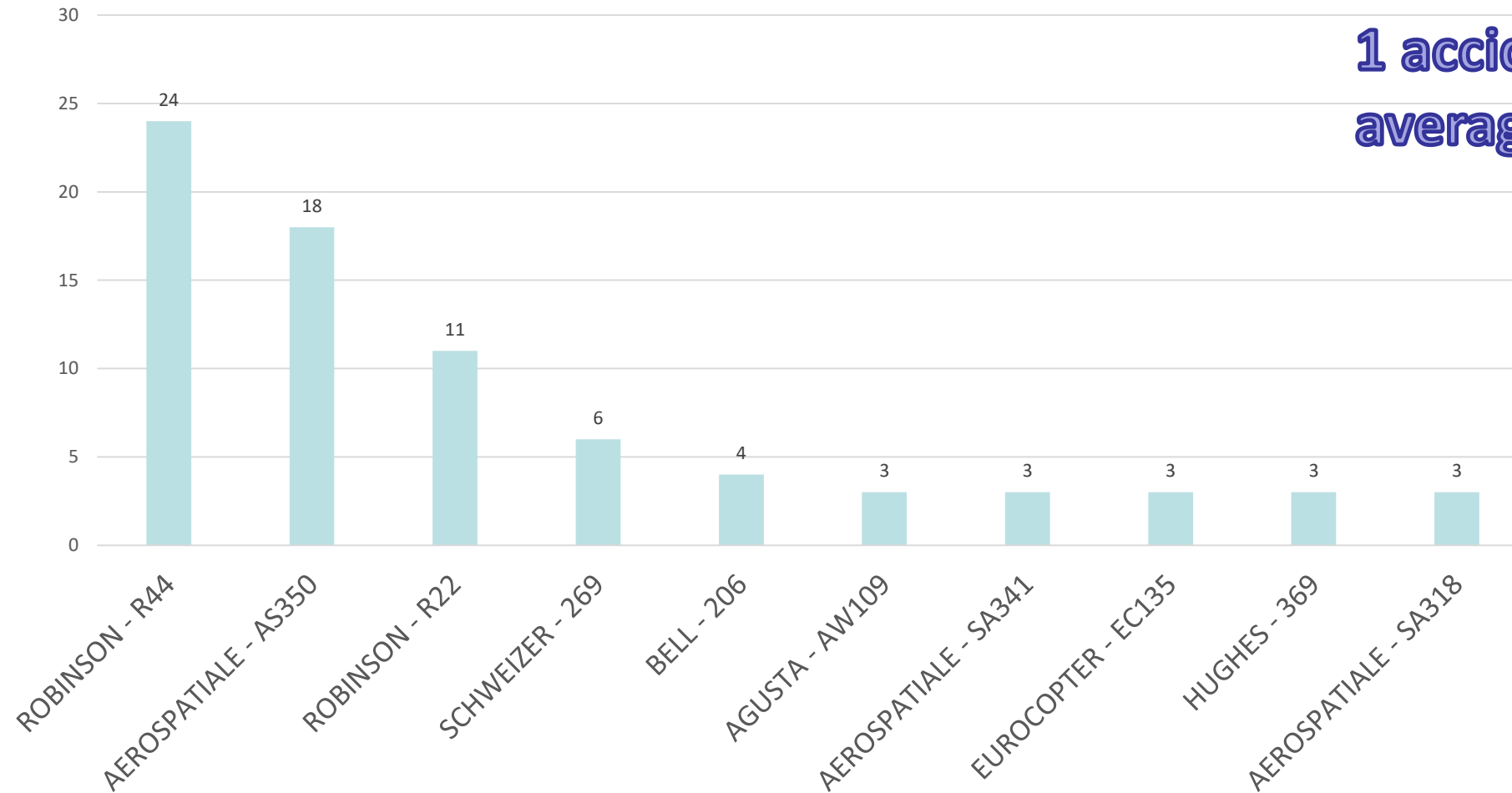
R44	1,014
H125 / AS350	670
R22	611
H135 / EC135	379
Bell 206	357
Hughes 269	283
AW109	280
AS355	200
H120	200
H145 / EC145	136

## World (TOP 20 Types)

R44	5,491
Bell 206	4,136
Mi-8	3,699
H125 / AS350	3,607
R22	2,975
MD500 / Hughes 369	1,794
Hughes 269	1,433
Bell 407	1,333
H135 / EC135	1,069
AW109	1,051
Bell 412	1,050
Bell 212	796
AW139	753
Mi-2	719
H120	717
S-76	688
Bo105	621



# Top 10 Rotorcraft Make/Models by number of fatal accidents during 2008 - 2017 in EASA Member States



**1 accident a week in average in Europe**



# Main Target: light rotocraft

## ► Data review indicates that priorities are:

### ► Light rotorcraft

R22/R44, H125 / AS350 and H135 / EC135 and Bell 206.



### ► Small operators

90% of European operators have a fleet of 5 or less helicopters.

### ► Operational issues

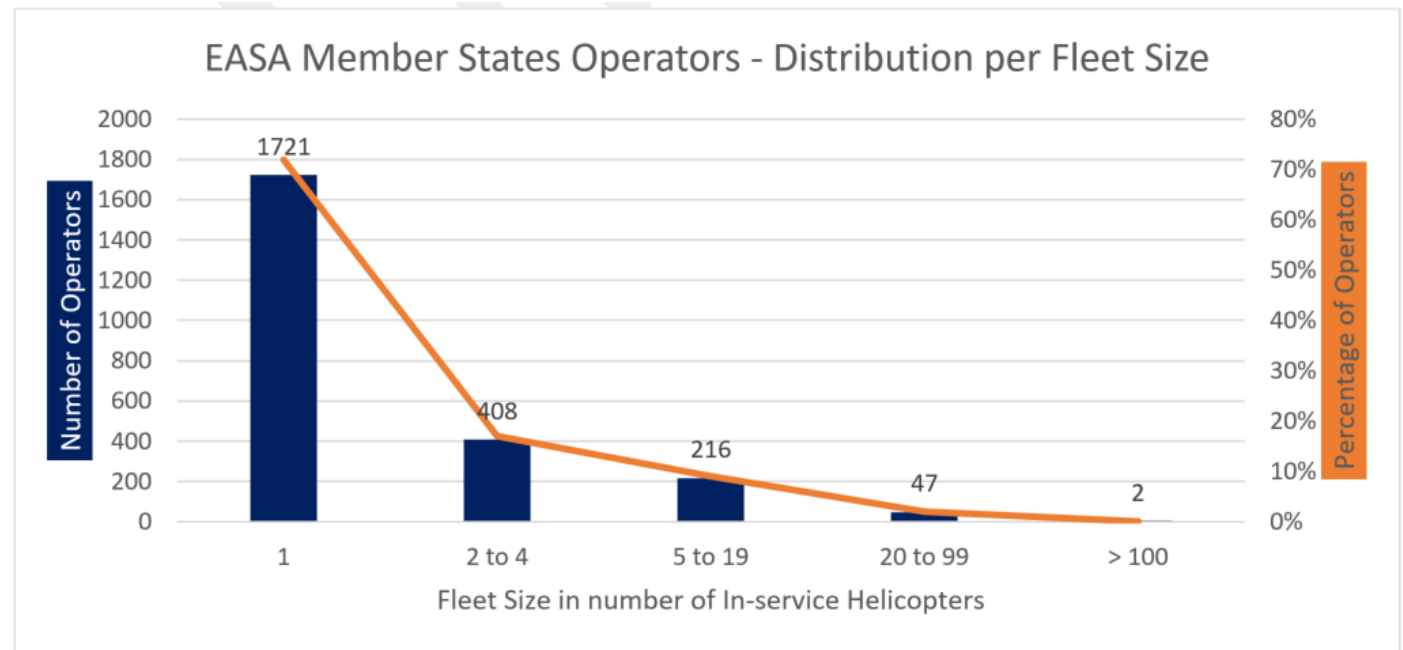
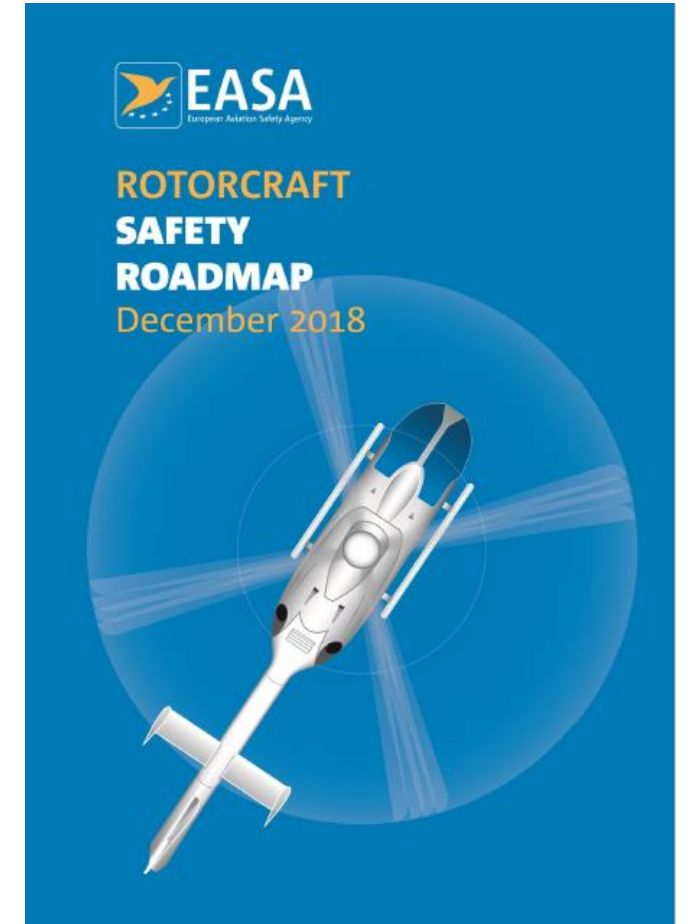


Figure 4 – Distribution of EASA MS Operators by fleet size of In-service Helicopters. Source: [FlightGlobal](#) (aka Ascend)



# Roadmap

- EASA tasked a Group of external experts supported by EASA (CT/FS) to propose actions.
- Roadmap endorsed by EASA in November 2018
- Presented at the EASA Rotorcraft Symposium in December 2018 (video online)





# Rotorcraft safety is becoming a Priority for EASA

**Improve Rotorcraft safety by 50% within the next 10 years**

**Make positive and visible changes to the Rotorcraft safety trends within the next 5 years**

**Develop performance-based and proportionate solutions that help maintain competitiveness, leadership and sustainability**



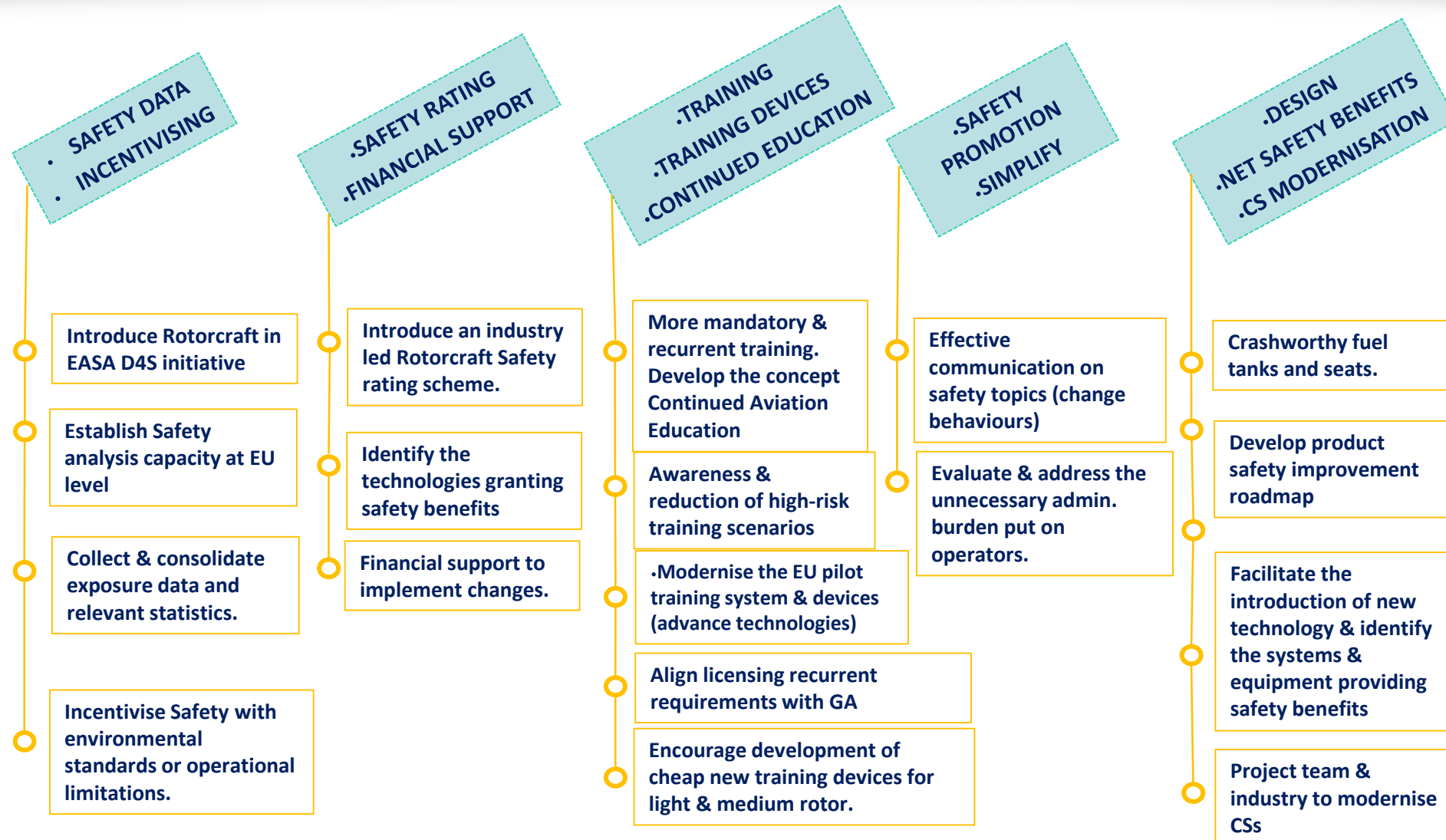


# Rotorcraft Safety - Roadmap 2019 - 2029





# Rotorcraft Safety - Roadmap 2019 - 2029





# Extracts of actions

- Most of the actions are addressing operational factors.
- The work-stream “Helicopter Design improvements” is the most relevant for Structure experts as it deals with Airworthiness.
- Some actions:
  - Pushing for Crashworthy fuel tanks and seats,
  - Type specific safety improvement roadmaps,
  - Keep Certification Specifications up to date.

.DESIGN  
.NET SAFETY BENEFITS  
.CS MODERNISATION

Crashworthy fuel  
tanks and seats.

Develop product  
safety improvement  
roadmap

Facilitate the  
introduction of new  
technology & identify  
the systems &  
equipment providing  
safety benefits

Project team &  
industry to modernise  
CSs



# Conclusions

- Improving operational safety and influencing safety culture and behaviours through awareness campaign is a long lasting task...
- For subjects for which EASA is the competent authority (like initial and continuing airworthiness): We have the means to take actions and we have to Go for it!
- Look for: Rotorcraft Web-portal on the EASA Website ! April/May 2019



**EASA**  
European Aviation Safety Agency

**Thank you for your attention!**

Any questions....?

**Your safety is our mission.**

An agency of the European Union 