



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)

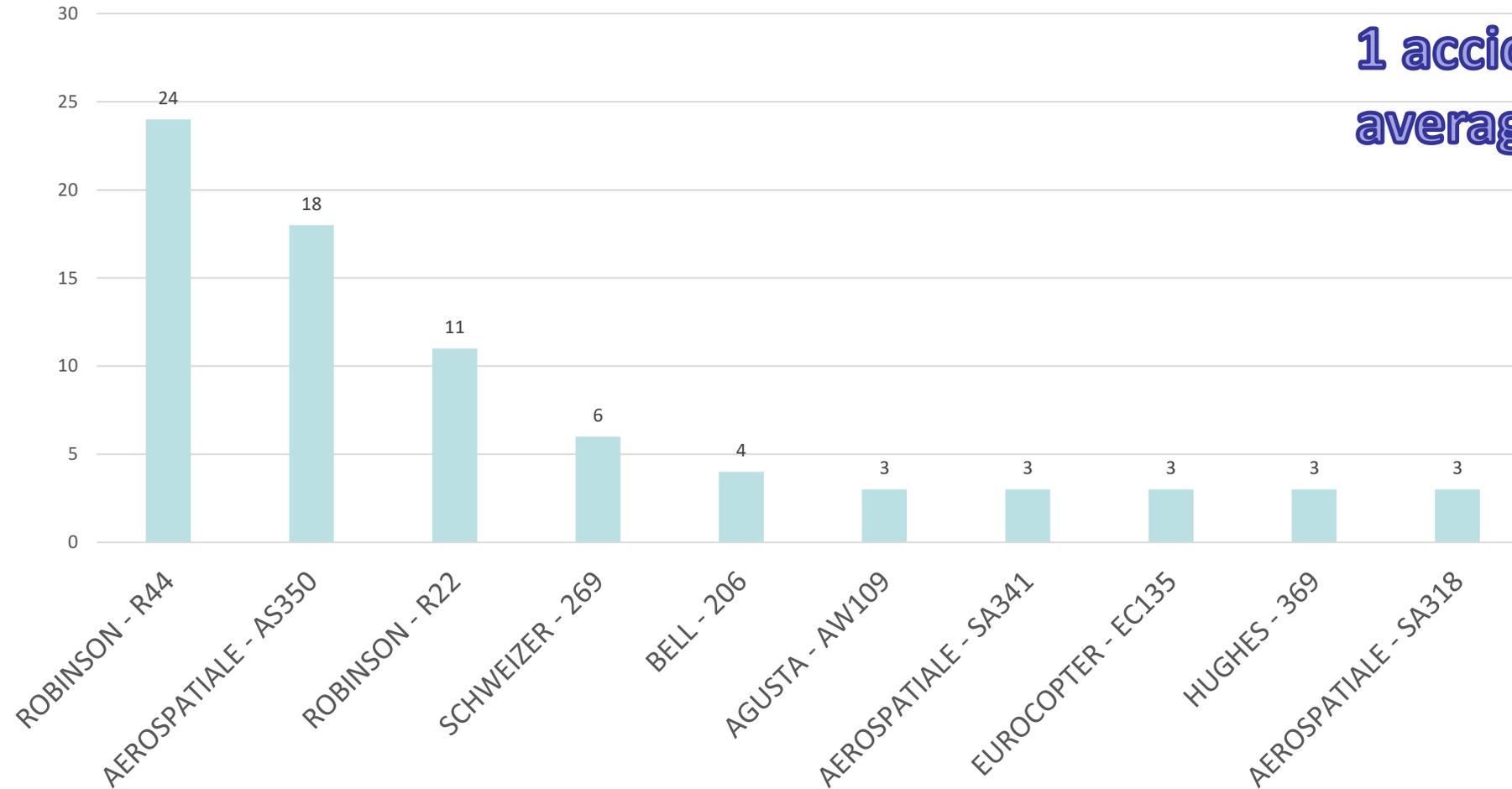
R44	1,014
H125 / AS350	670
R22	611
H135 / EC135	379
Bell 206	357
Hughes 269	283
AW109	280
AS355	200
H120	200
H145 / EC145	136

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

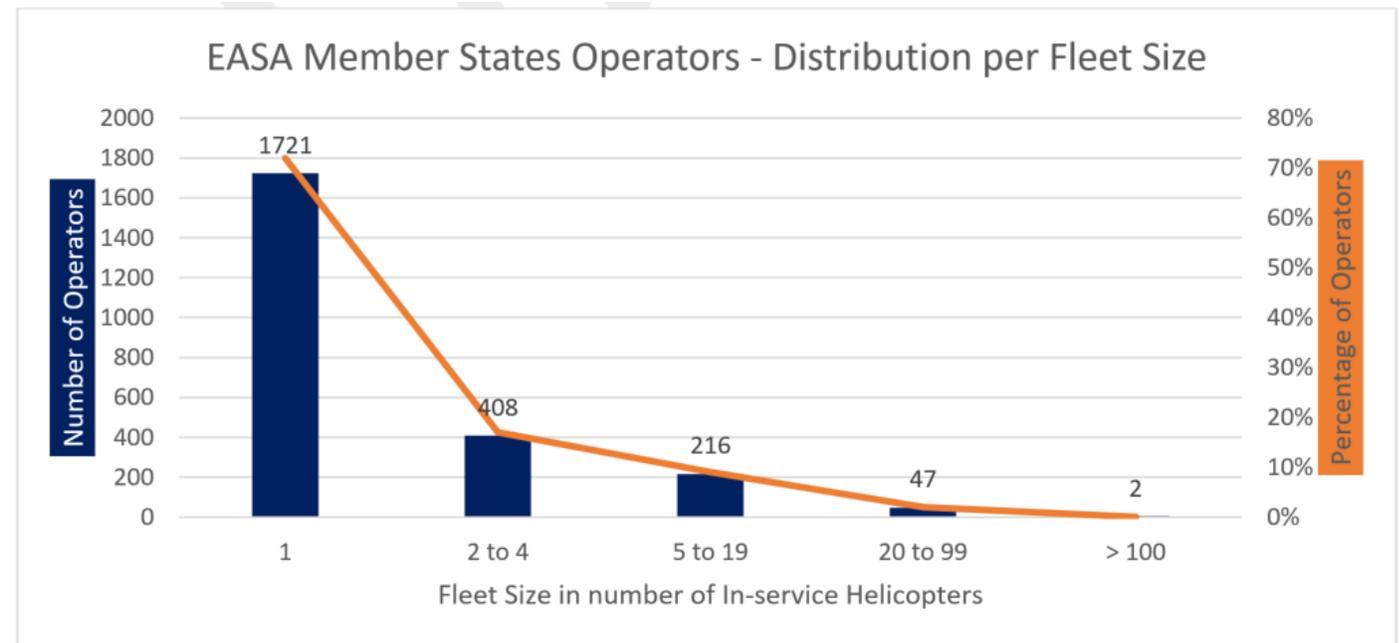
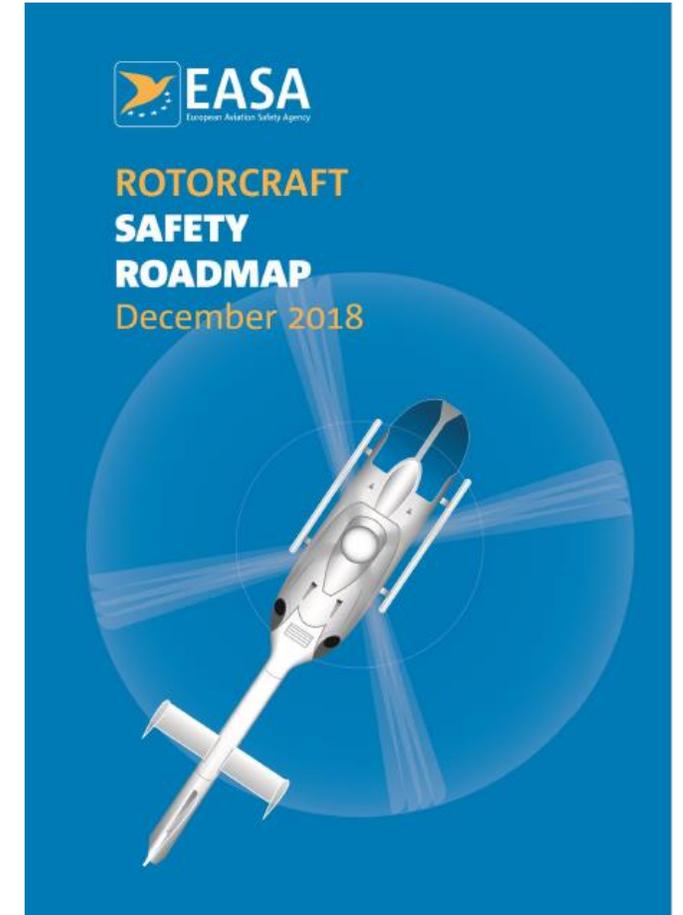


Figure 4 – Distribution of EASA MS Operators by fleet size of In-service Helicopters. Source: [FlightGlobal](#) (aka Ascend)



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



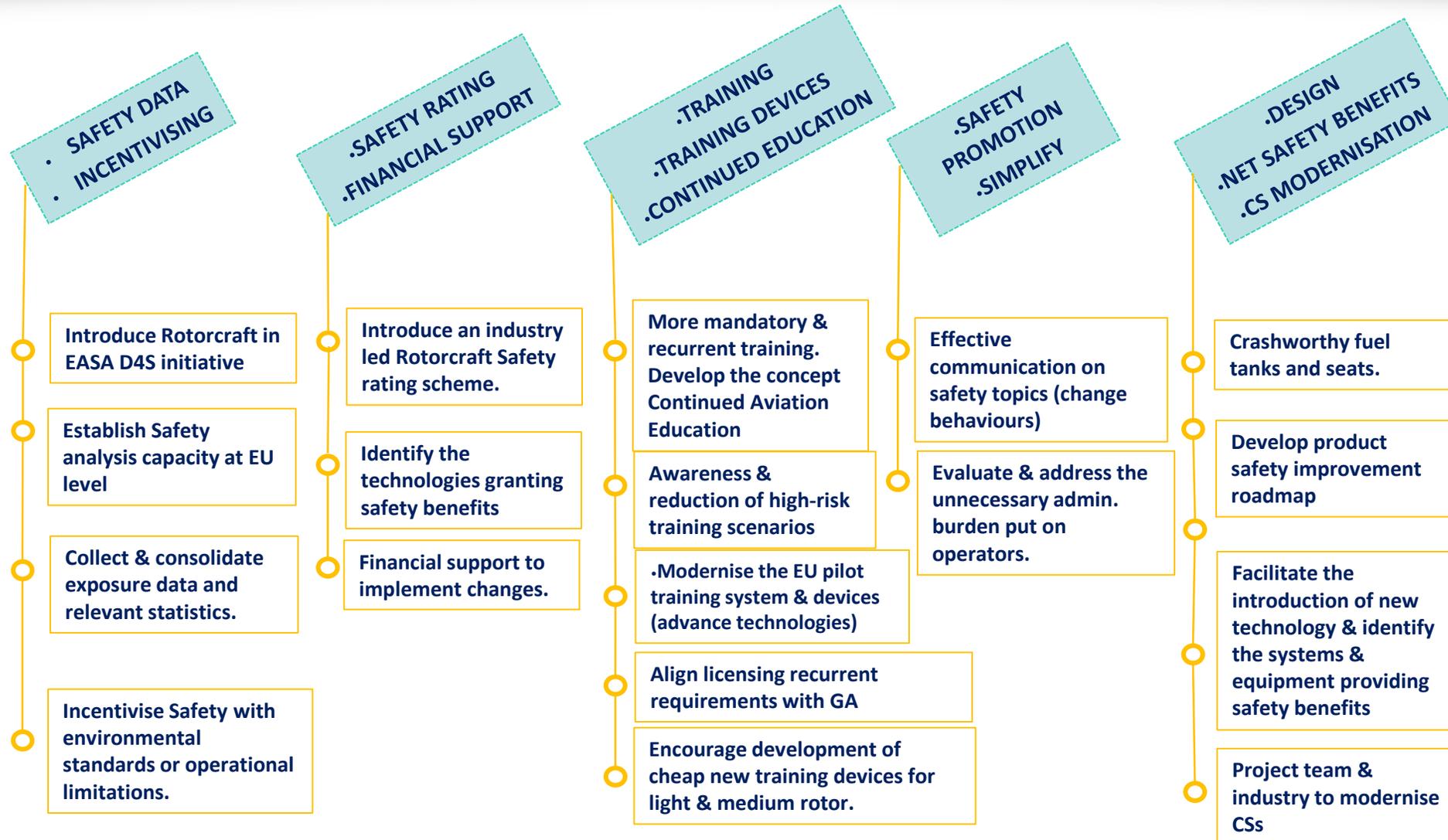


Rotorcraft Safety - Roadmap 2019 - 2029





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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 