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## Heliports Webinar for the SAM Region

### S2 –WORK OF THE HDWG: WHAT HAS BEEN DONE AND WHAT'S UPCOMING

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MADRID – JUNE 2022

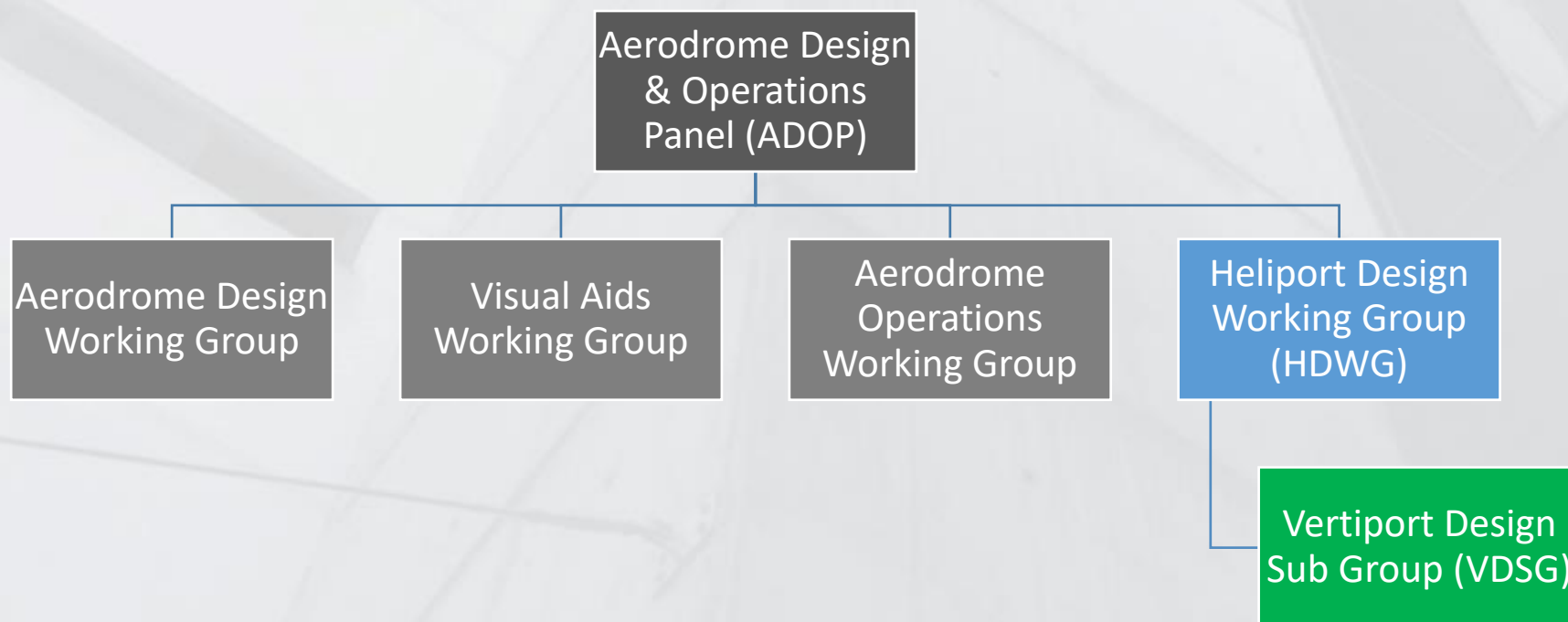


- 1** Presentation of the HDWG
- 2** The Job Card of the HDWG
- 3** Evolution of Annex 14 Vol II and the HM
- 4** New requirements for certification and SMS
- 5** The future of the HDWG
- 6** The Vertiport Design Sub-Group



## HDWG

- HDWG formed as a study group in 2005.
- Mission: comprehensive update of Annex 14 Vol II and the Heliport Manual.
- Currently: 20+ members and 6 advisors – NAAs and industry bodies.





## HDWG JOB CARD

HDWG work based on ANC Job Card ADOP.010 Heliport Design & Operations:

- Initial issue 17 June 2015
- Last approved by the ANC 4 October 2018 Session 209-3.
- Job Card is now 95% completed.

Job Card: significant evolution since 2015:

- Periodic addition of new work package items.
- Extension to applicability dates of between two and four years (COVID pandemic/ same applicability dates for annexes 14 and 19).



## HDWG JOB CARD

Work packages of the Job Card:

- Developing of provisions for heliport certification and SMS
- Annex 14 Vol II Sec 5.4 Lights – review needed in view of technological advances
- Need of revision of FATO surface characteristics arising from AP/2
- Review ARFF categorization and provisions
- Improving of FATO and TLOF markings
- Updating of Doc 9261 Heliport manual (previous edition 3rd, 1995).



## Annex 14 Volume II – Heliports

Scope of Annex 14 Voll II:

- Onshore heliports: surface level or elevated
- Offshore heliports: helidecks, shipboard heliports or winching areas

SARPS include:

- heliport data
- physical characteristics,
- obstacle environment,
- visual aids
- emergency response and RFFS

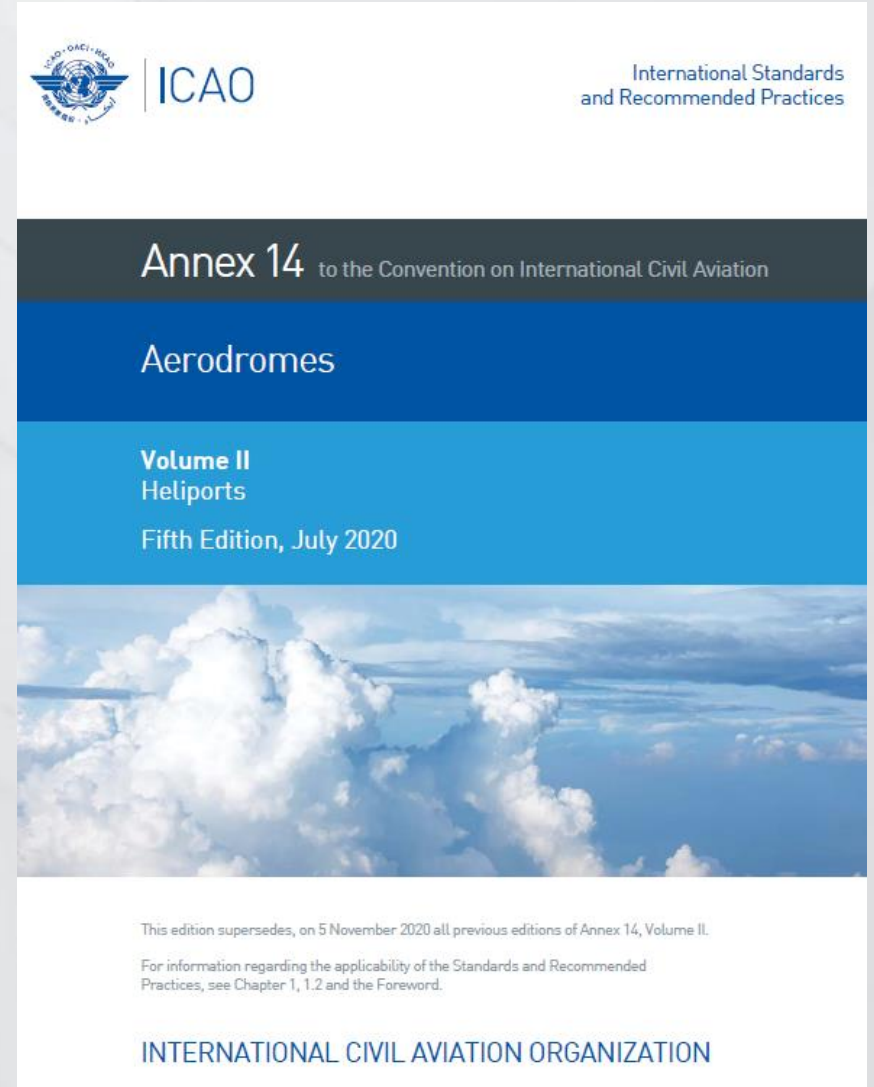




## Annex 14 Volume II – Heliports

Updating of Annex 14 Vol II since creation of the HDWG:

- 3rd Edition 2009 – Amendment 4  
Nov 2009
- 4th Edition 2013 – Amendment 5  
Nov 2013
- 5th Edition 2020 – Amendment 9  
Nov 2020





## Annex 14 Volume II – Heliports

Updating covered all chapters of Annex 14 Volume II

- Applicability and definitions. Design helicopter, D value.
- Physical char.: building blocks principle: performance based.
- Obstacle environment: new surfaces based in performance.
- Visual aids: new and improved markings and lights
- Introduction of emergency planning and new RFFS requirements.





## Certification and SMS

Certification applicability mirrors aerodromes:

- Standard to certify heliports for international operations
- Recommendation to certify heliports open to public use
- Certification through a heliport operations manual and
- Certification includes heliport SMS

Certification and SMS requires amendments of:

- Annex 14 Vol II, endorse by ADOP (ADOP/4 Feb 2022)
- Annex 19, endorsed by SMP (SMP/5 Dec 2021)



## Need for certification and SMS

- Heliports open to public use and/or receiving CAT operations not covered by certification/SMS (as aerodromes are)
- Number of heliports is increasing
- Expansion of eVTOL operations from public use vertipors will benefit from heliport certification/SMS experience
- Causal factors in accidents and incidents at heliports:
  - Non-compliance with SARPs
  - Lack of adherence to procedures and industry best practices
  - 10% of helicopter accidents in Europe and the USA involve potential deficiencies at the heliport



## The future of the HDWG

Future HDWG activities:

- ICAO heliport safety advisory group
- Analysis of safety data.
- Evolution of Annex 14 Volume II and Heliport Manual (doc 9261).
- Support ICAO in spreading the knowledge of HDWG advances (this webinar).
- Support ICAO in heliport certification USOAP audits.
- Creation of the Vertiport Design Sub.Group (VDSG)



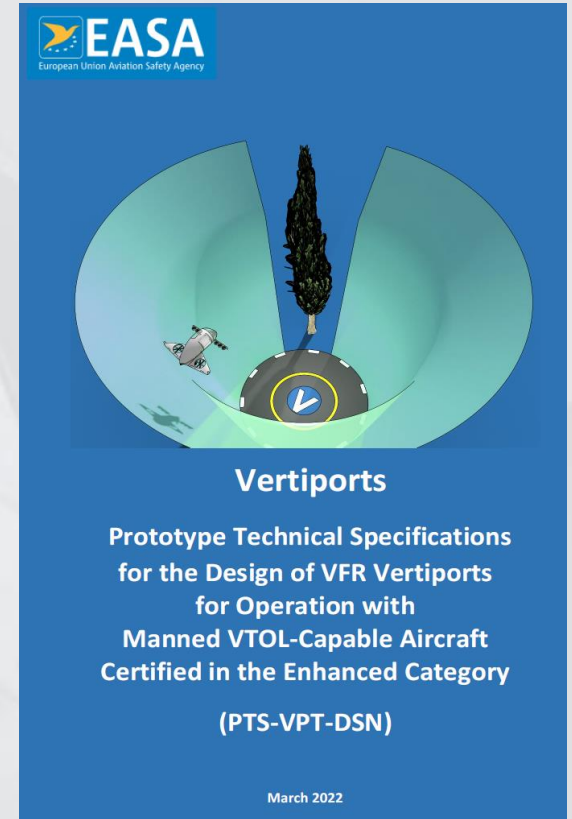
## VDSG - eVTOL aviation

- VTOL aviation rapidly evolving
- Aircraft manufactures commenced certification of aircraft with EASA and FAA
- Expect to complete certification and commence operations in 2024-2025.
- Operations will be initially manned and VFR.
- Commercial operations: intracity, intercity and city-airport communications
- Operations will evolve to remotely piloted and autonomous
- Operations can use heliports, aerodromes and vertiports



## VDSG - Vertiport regulation

- EASA has a Drone Team tasked with the production of a complete set of drone regulation.
- EASA Vertiport Team has produced Prototype Technical Specifications published in March 2022.
- FAA has produced Engineering Brief EB n. 105 Vertiport Design
- EASA and FAA had begun cooperation to develop harmonized regulation for vertiports



**Federal Aviation  
Administration**

Engineering Brief No. 105, Vertiport Design



## Creation of the VDSG

- Draft Job Card for the creation of a Vertiport Design Sub-Group presented by the HDWG at ADOP/4 (Feb 2022) and endorsed.
- Approval of Job Card by ANC expected by the end of the year.
- VDSG presented at HDWG/16 meeting (May 2022), with participation of the industry and the NAAs.
- Objective to develop SARPs and guidance material for VTOL operations at vertiports, heliports, aerodromes.
- Horizon: 2024/25.
- Coordination with FAA/EASA and other ICAO groups and participation of the industry and industry associations is essential



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**THANK YOU**

JUNE 2022