

# EGHD

Expert Group on the  
Human Dimension of the  
Single European Sky

---

# ANNUAL REPORT //2018





# INTRODUCTION

The Expert Group on the Human Dimension (EGHD) of the Single European Sky (SES) was formally established by the European Commission in 2017 to advise on the implementation and development of SES from a human dimension perspective. It represents the opinion of all frontline operators and support staff who are impacted by the latest regulatory, operational and technological changes resulting from SES.

2018 was a highly successful year for the EGHD, learning from the challenges it faced in previous years and continuing to provide added value for the Commission and wider SES institutions. Members worked closely to progress the aims of the Group and to form highly valued position papers on relevant topics, namely:

- Proposed changes to the Performance and Charging Schemes for RP3;
- Remotely Piloted Aircraft Systems (RPAS); and,
- ATM staff working stations.

The impact of the EGHD's work was particularly recognisable throughout 2018, with some recommendations from the Group's RP3 position paper being implemented into the new RP3 Regulation, through to joint meetings between the EGHD Chairs and wider SES institutions to discuss how the EGHD may best respond to the ongoing developments in SESAR.

As the role of the human becomes ever more important in SES, the EGHD looks forward to continuing to proactively advise and assist the Commission in 2019 on key topics. The recommendations stemming from the European Court of Auditors (ECA), the SES Wise Persons Group (WPG) and the SES Airspace Architecture Study (AAS) are likely to be key points for the EGHD, as well as the future role of the human in the digitalisation and automation of ATM more generally.

# MOMENTUM TRANSPARENCY ENTHUSIASM

---

---

---

---





# CHAIRS' MESSAGE

2018 has been an excellent year for the EGHD. Following several learnings in 2017, the method for producing a paper has been significantly refined and improved. This ensured that all members' views were taken into account and leading to a valuable output in the end. This led to the successful delivery of three position papers to the Commission in 2018.

The RP3 position paper was delivered to the Commission in April, the Remotely Piloted Aircraft Systems (RPAS) paper in June, and the ATM staff working stations paper in December. This represented the most productive year for the EGHD and highlights the hard work done by all involved to keep the Group moving forward and improving its support to the Commission.

As Chairs, we look forward to leading the group through 2019, with 2019 marking exactly 15 years since the SES initiative was conceived.

PAUL  
NEERING



JEAN-DENIS  
LARRERE





# THE EGHD IN 2018

## EGHD LEADERSHIP

Paul Neering (Chair) and Jean-Denis Larrere (Vice-Chair) continued in post in 2018. They have guided the Group to ensure the EGHD continues to produce clear and valued work, and have attended bilateral meetings with wider SES institutions to assess how the EGHD can best respond to the ongoing developments in SES.

The EGHD Chairs continue to be supported by a team of consultants from Helios, from secretariat support in the preparation and running of meetings, to technical support during the drafting of position papers.





## WORK PROGRAMME

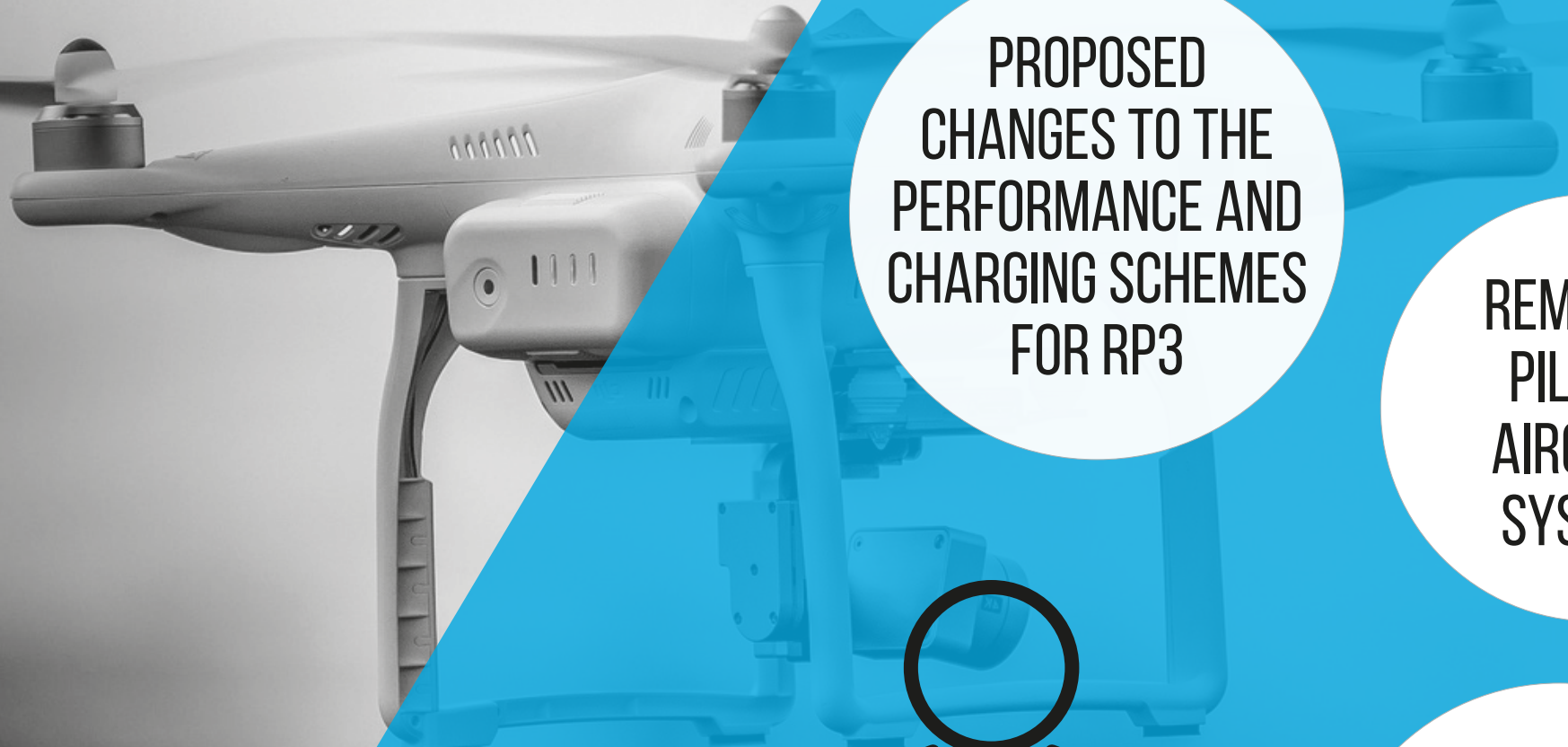
The Work Programme identified several themes for the EGHD to focus on in 2018. These were:

- Proposed changes to the Performance and Charging Schemes for RP3;
- Remotely Piloted Aircraft Systems;
- ATM staff working stations;
- Airborne Separation Assurance System (ASAS); and,
- Multi-Sector Planner (MSP).

With the revision of the Performance and Charging Schemes taking place throughout 2018, February and March 2018 were dedicated to developing an EGHD position on the proposed changes to the Schemes for RP3. This was followed by a position paper on the impact of RPAS on the human dimension, published in July 2018. This paper was released in parallel to the new EASA Basic Regulation which outlined the provision for a new Implementing Regulation on drones – the EGHD welcomes the incorporation of its recommendations in this new legislative initiative. Finally, the latter part of 2018 saw the submission of the Group's position on the optimisation of ATM staff working stations.

Due to the re-prioritisation of topics for the 2018 Work Programme, it was agreed that papers on ASAS and MSP would be postponed and re-considered as part of the 2019 Work Programme.

## PRIORITY TOPICS



PROPOSED  
CHANGES TO THE  
PERFORMANCE AND  
CHARGING SCHEMES  
FOR RP3

REMOTELY  
PILOTED  
AIRCRAFT  
SYSTEMS

AIRBORNE  
SEPARATION  
ASSURANCE  
SYSTEM

MULTI-SECTOR  
PLANNER

ATM STAFF  
WORKING  
STATIONS





## RP3 PERFORMANCE AND CHARGING REGULATION

This paper reviewed the impact of the proposed changes to the Performance and Charging Schemes for RP3 on the human dimension. The EGHD's recommendations addressed some of the existing challenges that have already arisen in RP1 and RP2, including the organisation of staffing, change management, increasing capacity demand and performance requirements in light of pressures associated with ongoing cost reduction.

The paper informed the consultation processes prior to the vote on the draft RP3 Performance and Charging Regulation, which ultimately took place at an ad-hoc meeting of the Single Sky Committee in December 2018. The paper provided 11 recommendations in the context of the following:

1. Target setting and performance-planning processes;
2. Flexibility and predictability during RP3; and,
3. Financial incentives and sanctions.

The EGHD was pleased that some of the Group's recommendations were considered during the development of the RP3 Regulation. Over the course of 2019, the EGHD Chairs will also commence discussions with the Performance Review Body as to the potential for a change management indicator in RP4.





# RPAS

The introduction of RPAS into the traditional aviation system presents unprecedented and unique human challenges, impacting different stakeholders in different operational environments. The EGHD provided 10 recommendations in the context of the following:

1. RPAS operations in uncontrolled airspace;
2. RPAS operations in controlled airspace;
3. Ergonomics;
4. Workload management; and,
5. Education, training and licensing.

This paper was developed with the understanding that RPAS technologies and associated concepts such as U-space are rapidly evolving, and therefore the principles and recommendations proposed only reflected the views of the Group at the time of writing.

The paper was positively received by the Commission and experts within EASA and the SESAR Joint Undertaking, with the Commission noting that 'it is highly valuable to receive a position from the EGHD on the impact of RPAS development on the human dimension at such an early, yet critical, stage in the legislative and, to a certain extent, industrial development of drones'.<sup>1</sup>

---

<sup>1</sup>Commission response to EGHD position paper on the impact of RPAS development on the human dimension (September 2018).



# ATM STAFF WORKING STATIONS

The design of ATM staff working stations plays a pivotal role in contributing to optimal human and technological performance. The EGHD identified existing good practices relating to the design of ATM staff working stations, and developed 13 recommendations in the context of the following:

1. Strategic management of working station design;
2. Design of operating and technical control rooms;
3. Design of working station furniture; and,
4. Design of the Human-Machine Interface (HMI).

The EGHD's primary recommendation concerned the introduction of a transversal SESAR Work Package that coordinates the development and validation of concepts which have an impact on working station design. In particular, this recommendation stated that such a Work Package should consider the design of operating and technical control rooms, working station furniture, and the HMI, including how future HMIs can support both existing and emerging concepts and technologies.

The EGHD looks forward to continuing to exchange with the Commission on this position and to add value to the work of wider SES institutions during the research and development phases of SESAR.



*From left to right:  
Christine Berg (Head of Single European Sky Unit, DG MOVE),  
Paul Neering (EGHD Chair) and Jean-Denis Larrere (EGHD Vice-Chair).*





# THE YEAR AHEAD

2019 is looking to be an important year for the EGHD. With it being 15 years since the SES initiative was introduced, it is a great opportunity to highlight the benefits a human-centric approach to the design and implementation of ATM and SES could provide.

One notable recommendation stemming from the European Court of Auditors' (ECA) Special Report on SES was that there needs to be an in-depth analysis into 'other policy options to target defragmentation'. This resulted in the launch of an Airspace Architecture Study by the SESAR Joint Undertaking in July 2018 to consider 'the need for a new airspace architecture'.<sup>2</sup> The SJU's report is due for publication in Q1 2019. In parallel, the Commission has recently launched a Wise Persons Group to discuss the future of ATM and SES.

An additional recommendation from the ECA audit was that the Commission should review (Key) Performance Indicators for the upcoming reference period<sup>3</sup>. In the upcoming year, the EGHD Chairs will meet with SES institutions including PRB to discuss feasibility of a change management indicator for RP4. This topic could also form part of the 2019 Work Programme.

As such, 2019 will see a revamp of the Work Programme to ensure that topics align with the most significant and recent developments from SES, as well as other pressing issues currently facing member organisations of the EGHD. The overall purpose of the EGHD remains to advise and assist the European Commission in driving changes in SES from a human dimension perspective.

---

<sup>2</sup>Recommendation 2 from European Court of Auditors' Special Report on SES (November 2017)

<sup>3</sup>Recommendation 6 from European Court of Auditors' Special Report on SES (November 2017)





# ANNEX A: EGHD IN 2018

## MEETINGS

During 2018, the EGHD held the following meetings and teleconferences:

- |                  |                   |
|------------------|-------------------|
| • EGHD/17        | 05 February 2018  |
| • Teleconference | 14 February 2018  |
| • Teleconference | 27 March 2018     |
| • EGHD/18        | 06 June 2018      |
| • Teleconference | 17 September 2018 |
| • EGHD/19        | 15 November 2018  |
| • Teleconference | 14 December 2018  |

# ANNEX B: EGHD MEMBERS

## LEADERSHIP

- |                    |            |
|--------------------|------------|
| Paul Neering       | Chair      |
| Jean-Denis Larrere | Vice-Chair |

## MEMBERS

The EGHD consists of 14 members. Each organisation is represented by one or more members:

- |                       |         |
|-----------------------|---------|
| Giancarlo Saviantoni  | ATCEUC  |
| Volker Dick           | ATCEUC  |
| Danilo Pisciotto      | CANSO   |
| Billy Josefsson       | CANSO   |
| Loïc Michel           | ECA     |
| Johan Glantz          | ECA     |
| Charles-André Quesnel | ETF     |
| Aaron Curtis          | ETF     |
| Oliver Wessollek      | IFAIMA  |
| Barbara Fröhlich      | IFAIMA  |
| Tom Laursen           | IFATCA  |
| Anders Liebl          | IFATCA  |
| Costas Christoforou   | IFATSEA |
| Theodore Kiritsis     | IFATSEA |



A black and white photograph of an airplane wing, seen from a low angle, flying over a vast expanse of white, fluffy clouds. The wing is dark and sleek, with several small, dark, rectangular protrusions along its upper surface. The background is a bright, hazy sky with a layer of clouds below the wing.

# EGHD

Expert Group on the  
Human Dimension of the  
Single European Sky

ANNUAL REPORT 2018