

**International Symposium**  
on  
**Precision Approach**  
and  
**Performance Based Navigation**

# **ISPA 2017**

**Munich, Germany**

**8 – 9 November 2017**

**Call for Papers**



**organised by the**  
**German Institute of Navigation**  
Deutsche Gesellschaft für Ortung und  
Navigation e. V. (DGON)

**In cooperation with**



**German Aerospace Center**  
Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR)

## **Introduction**

Growth of air traffic density and new emerging technologies require air navigation modernization and increased airspace efficiency. Most demanding is the last phase of flight where aircraft operate close to the ground on approach and landing. Here, guidance needs to be precise enough to guarantee safety while minimizing environmental impact especially with respect to noise. Performance Based Navigation (PBN) approach types such as APV, LP, LNAV/VNAV have been recently complemented by LPV-200. Enhanced and synthetic vision systems are being demonstrated to improve current approach procedure minima and GBAS is heading towards CAT-III capability. Helicopter operators seek for low level IFR applications with low visibility approach procedures to helipads on demanding surroundings. Legacy systems like ILS and MLS are still being improved to cope with environment issues.

Since last ISPA in 2013, a new area of interest has emerged. An exponential increase of Unmanned Aircrafts (UA), Remotely Piloted Aircraft Systems (RPAS), Personal Air Vehicles (PAV), etc. is currently experienced worldwide. The expectations on these new systems are going to be far beyond today's utilizations. Unmanned and manned automated vehicles are being developed in parallel. Pilotage beyond Line of Sight are the goal to unpredictable new service opportunities. Clash of interests between today's settled airspace users and new UA based services is inevitable. Highly accurate and integer positioning and navigation systems play a key role in order to pave the way for the coexistence of both communities. PBN knowledge and experience transfer to the UA community is imperative in order to minimize development costs and risks.

The International Symposium on Precision Approach and Performance Based Navigation (ISPA) seeks contributions in all these related fields. Information on latest achievements are welcome. Papers may contain, but are not limited to investigate procedures, ground operations, ATC procedures, helicopter operations, noise abatement efforts, environmental impacts, human factors as well as rules and regulations. Moreover, submissions related to technological aspects such as GNSS, augmentation systems, radio navigation, new and emerging navigation services, signals of opportunity as well as guidance and control aspects are awaited as well.

## **Main Topics**

The Symposium will focus on:

- **Instrument/Microwave Landing System (ILS/MLS)**
- **Global Navigation Satellite System (GNSS)**
- **Augmentation Systems: SBAS/GBAS**
- **Required Navigation Performance and Area Navigation (RNP, RNAV)**
- **Enhanced and Synthetic Vision Systems (EVS, SVS)**
- **Alternative Positioning, Navigation and Timing (APNT)**
- **Operator Views**
- **Airport Views**
- **Unmanned Aerial (UA), Remotely Piloted Aircraft Systems (RPAS), Personal Air Vehicles (PAV) Views**
- **Industry Views**
- **Regulator Views**
- **Advanced Procedures**
- **Avionics**
- **Guidance and Control**
- **Environmental Impact**
- **Human Factors**
- **Rules and Regulations**
- **Certification**
- **Automatic Landings**

## **Language**

The Symposium language will be **English**.

## **Contributions**

Authors are invited to submit papers on any of the main topics for consideration by the Programme Committee.

1. **Abstracts** containing not more than 500 words (File size < 3 MB) are to be submitted electronically by

**31<sup>st</sup> July 2017**

Please use our “**Online Abstract Submission Form**” via:

[www.dgon-ispa.org](http://www.dgon-ispa.org)

**The cover page of submitted abstracts shall include:**

- Title of paper / contribution
- Name(s) of author(s)
- Identification of presenting author
- Organisation / company (if applicable)
- Mailing address
- Phone and fax numbers
- E-mail address



Authors will be notified of accepted / rejected papers by **31<sup>st</sup> August 2017**.

2. **Full Papers (Symposium proceedings / Full Paper Review)**

- a. Submission of full Papers for Symposium proceedings:

20<sup>th</sup> October 2017

via E-mail to: [dgon.bonn@t-online.de](mailto:dgon.bonn@t-online.de)

- b. Submission of full Papers for a “**Full Paper Review**”

The Programme Committee offers for authors of ISPA 2017 a full paper review. If you like to take advantage of this offer, please send your full paper not later than:

15<sup>th</sup> September 2017

via E-mail to: [dgon.bonn@t-online.de](mailto:dgon.bonn@t-online.de)

Please mark this E-Mail with “**Full Paper Review**”

## **Deadlines**

Submission of abstracts:	31 <sup>st</sup> July 2017
Notification of authors:	31 <sup>st</sup> August 2017
Distribution of programme:	October 2017

Submission of full papers for	
a: “ <b>Symposium proceedings</b> ”:	20 <sup>th</sup> October 2017
b: “ <b>Full Paper Review</b> ”:	15 <sup>th</sup> September 2017

## **Conference Location:**

MARITIM Hotel München  
Goethestraße 7  
80336 Munich, Germany

## **Technical Exhibition**

Manufacturers and developers of equipment and components complementing the topics of the Symposium are invited to display state-of-the-art hardware and software. The exhibition will be held in the conference area.

Potential exhibitors are requested to contact DGON via E-mail: [dgon.bonn@t-online.de](mailto:dgon.bonn@t-online.de)

## **Programme Committee**

D. Kügler (Chairman)	DLR	Braunschweig, Germany
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## **For further questions please contact:**

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