



## Engineers Conclave (EC2017)



### Theme-I : Regional Air Connectivity Theme-II : Digital Economy

Jointly Organized by Indian National Academy of Engineering  
(INAE) and  
Council of Scientific and Industrial Research (CSIR)

### PROGRAMME

Venue: S R Valluri Auditorium, CSIR-NAL

#### 14<sup>TH</sup> SEPTEMBER, 2017 - DAY 1

**0900– 1000 hrs. Registration**

**1000 – 1130 hrs. Inaugural Session**

1000 – 1005 hrs. Lamp lighting / Invocation

1005 – 1015 hrs. Welcome Address by Dr. Girish Sahni, Chair EC2017 and DG,  
CSIR, New Delhi

1015 – 1025 hrs. Address by Dr. B N Suresh, President, INAE highlighting the Aim  
of the Conclave

1025– 1045 hrs. Address by the Chief Guest Dr V K Saraswat, Member, NITI Ayog

1045–1115hrs. Keynote address by Prof Roddam Narasimha

1115 – 1120 hrs. Vote of thanks by Mr Jitendra J Jadhav, Director, CSIR-NAL

**1130 – 1200 hrs. HIGH TEA**

**1200 – 1300 hrs. Plenary Talk-1 Mr. V. V. R Sastry, Ex Director, C-DOT**

**1300 – 1330 hrs. LUNCH**

**1330 – 1430 hrs. Inauguration and Visit to Techno Exhibition**

1430 – 1630 hrs

## Parallel Technical Sessions

### Theme 1

#### Technical Session-I :

#### Regional Air Connectivity: Policy/Regulatory

#### issues/operators view points

**Chairman: Dr V K Saraswat  
Member, NITI Ayog**

*Topic 1:* Regional Air Connectivity Policy & operational issues.

**Speaker: Ms Vandana Aggarwal,  
Economic Advisor, Ministry of  
Civil Aviation**

*Topic 2:* Operators viewpoints –

**Speaker: Mr Pradeep Kumar,  
Director (Engg), Simm-Samm  
Airways**

*Topic 3:* Cost benefit analysis of air connectivity vs high speed rail connectivity

**Speaker: Prof Asim Tewari, IIT,  
Bombay**

*Topic 4:* Operator View Points

**Speaker: Mr CS Subbiah, CEO,  
Alliance Air**

### Theme 2

#### Technical Session-I :

#### Infrastructure and Integration

**Chairman: Ms Anandi  
Ramalingam, Director,  
Marketing, BEL**

*Topic 1:* Technologies for back bone communication & Network Connectivity: telecommunication, computer networks.

**Speaker: Dr Prakash, CDOT**

*Topic 2:* Technologies for Identity: Registration, storage, Retrieval, Verification.

**Speaker: Mr Pramod Varma, UIDAI**

*Topic 3:* Manufacturing and Maintenance Systems.

**Speaker: Mr R Manoharan,  
Reliance Jio**

*Topic 4:* Technologies for Devices : Iris, Fingerprints, QR codes, Smart-cards, RFID

**Speaker: Mr Srini Rajam, Ittiam**

1630 – 1700 hrs. TEA

1700 – 1830 hrs.

#### Technical Session-II :

#### Airports/No frill Airports

**Chairman: TBD**

*Topic 1:* Building & Operation of no frill airports

**Speaker: Mr S Bhaduri, ED, Engg  
ER, AAI**

*Topic 2:* Making no frill airports commercially viable.

**Speaker: Mr P S Nair, GMR  
Group, CEO, (Airports).**

*Topic 3:* Autonomous Air Traffic Control systems at no frill airports.

#### Technical Session-II :

#### Financial Technologies

**Chairman: Prof. Narahari, IISc**

*Topic 1:* Smart-cards, Wallets and PoS Terminals

**Speaker: Prof. Rajat Moona, IIT,  
Bhilai**

*Topic 2:* Blockchains and Cryptocurrencies.

**Speaker: Prof Veni Madhavan, IISc**

*Topic 3:* Signatures, Privacy protection  
**Speaker: Mr Sanjay Deshpande,  
Forty Two 42 labs**

**Speaker:Mr Ritu Raj Tyagi,  
Director, SAAB India  
Technologies, Pvt. Ltd.**

**1830 – 1900 hrs. Plenary Talk-2 on IAF's requirements for transport Aircraft  
Speaker : AVM B R Krishna, ACAS(Plans)**

**1900 – 2000 hrs Cultural Programme**

**2000 – 2100 hrs Dinner**

## **15<sup>TH</sup> SEPTEMBER, 2017 - DAY 2**

**1000 – 1100 hrs. Plenary Talk-3 : Dr Gulshan Rai, DG – CERT-In & National  
Cyber Security Coordinator**

**1100 – 1130 hrs. TEA**

**1130 – 1330 hrs. Technical Session-III:  
Market and Top Level Technical Session-III:  
Requirements for new Gen User Interfaces and Services  
Regional Aircraft Chairman: TBD**

**Chairman: Dr A R Upadhya,  
Former Director, CSIR-NAL**

*Topic 1:* Market analysis  
**Speaker: PWC**

*Topic 2:* Market study  
**Speaker: Mr Nirmal Kumar  
Chandramouli, Pratt & Whitney,  
Canada**

*Topic 3:* Top Level Requirements  
**Speaker: Gp Capt (Retd) RS  
Makker, Spicejet**

*Topic 4:* Top Level Requirements  
**Speaker : Dr Kota Harinarayana  
& Mr Bhaskar Chakravarty,  
CSIR-NAL**

*Topic 1: Language Technologies*  
**Speaker: Mr Mahesh Kulkarni,  
CDAC**

*Topic 2:* Financial Inclusion related  
Technologies.  
**Speaker: Dr Sandeep Oberoi, TCS**

*Topic 3:* Front-end, Back-end devices  
for citizen services.  
**Speaker: TBD**

*Topic 4:* Data and Cloud Services.  
**Speaker: SBI**

**1330 – 1430 hrs. LUNCH**

1430 – 1630 hrs.

**Technical Session-IV :  
Technologies for a New Gen  
Regional Aircraft**

**Chairman: Dr Girish Deodhare,  
PD & Director, ADA**

**Topic 1:** Configuration and System definition for 70+20 passenger aircraft

**Speaker : Dr Kota Harinarayana & Mr Bhaskar Chakravarty, CSIR-NAL**

**Topic 2:** Gagan Development to meet CAT1 and above requirements.

**Speaker : Mr Ramasubramaniam, Programme Director, Satellite Navigation, ISAC**

**Topic 3:** Enhanced Synthetic Vision.

**Speaker : Mr Shantha Kumar, CSIR-NAL**

**Topic 4:** New Generation Turbo Prop engine for Regional Aircraft.

**Speaker : Mr Frank Nel, General Manager, Business Development Pratt & Whitney, Canada**

1630 – 1700 hrs.

TEA

1700 – 1800 hrs.

**Technical Session-V:  
Design for Maintenance**

**Chairman: Mr Sanjeev Shukla,  
Executive Director, AR & DC,  
HAL**

**Topic 1:** Design for manufacture & Maintenance

**Speaker: Dr Karthik Krishnamurthy, Mahindra Aerospace**

**Topic 2:** Condition based maintenances

**Speaker: Mr Luigi celmi, CEO, Lufthansa Technik Services, India**

**Topic 3:** Structural Health Monitoring for Composites

**Speaker : Dr Ramesh Sundaram, Head, ACD, CSIR-NAL**

**Technical Session-IV :  
Cyber Security**

**Chairman:**

**Topic 1:** Civilian, military networks, dual use technologies.

**Speaker: Mr. Rakshit, CAIR, Bangalore**

**Topic 2:** Data Analytics & Forensics

**Speaker: Prof V Ravi, IDRBT**

**Topic 3:** Regulating Smart devices in restricted spaces.

**Speaker: Prof Vinod Ganapathy, IISc**

**Topic 4:** Communication systems and security.

**Speaker: Prof Uday Desai-IITH**

**Technical Session-V:**

**Human Resources:  
Development, Employment  
and Empowerment**

**Chairman: TBD**

**Topic 1:** Transparent Supply Chain Management

**Speaker: Prof. N Viswanadham-IISc**

**Topic 2:** Innovation, Entrepreneurship, Employment.

**Speaker: Dr. Ramesh Sundararaman-IIT, Bangalore**

**Topic 3:** Skills Development, Job Cadres.

**Speaker: TBD**

**Topic 4:** Speaker: Mr C S Rao

1800-1900 hrs. - **Plenary Talk-4 - Speaker: Mr Prakash Kumar, CEO, GST, New Delhi**

## **16<sup>TH</sup> SEPTEMBER, 2017 – DAY 3**

0930-1100 hrs. - **Parallel Panel Discussion Session on Way Foreword**

**Theme - 1**  
**Chair: Dr Kota Harinarayana**  
**Mr Jitendra J Jadhav**  
**Dr A R Upadhya**  
**Dr Girish Deodhare**  
**Mr Sanjeev Shukla**  
**Dr R K Tyagi**

**Theme – 2**  
**Chair: Prof Veni Madhavan**  
**Prof R K Shyamasundar,**  
**Dr V Tyagi**  
**Dr Ramesh Sundararaman**

- Top Level Requirements
  - Infrastructure issues.
  - Cost / Timeframe and Strategy for development.
  - Technology Challenges.
  - Strategy for development, production and product support.
  - Recommendations on proposed course of action.
- Infrastructures.
  - Financial Technologies.
  - User Interfaces.
  - Cyber Security.
  - Human Resources
  - Recommendations on proposed course of action.

1100–1130 hrs. **TEA**

1130-1215 hrs. - **Plenary Talk-5 : Multi Model Connectivity**  
**Speaker: Prof Raghuram, Director, IIM, Bangalore**

1215-1330 hrs. - **Valedictory Session**

**Chairman: Dr Kasturi Rangan, Chairman,**  
**Karnataka Knowledge Commission**

- Introductory Remarks by President, INAE
- Summing up of Technical Sessions of two Themes by respective Coordinators.
- Valedictory Address by Session Chairman

1330 hrs  
onwards

**Lunch and dispersal**

