



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

14TH 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 on “ Digital Economy – Challenges,
opportunities, initiatives and way forward” by
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: Dr Prahlada,
Former VC, DIAT

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.

Speaker: Mr Ritu Raj Tyagi,

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: Block chains and Cryptocurrencies.

Speaker: Prof Veni Madhavan, IISc

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

Director, SAAB India
Technologies, Pvt. Ltd.

- 1830 – 1900 hrs. Plenary Talk-2 on “IAF’s requirements for transport Aircraft Speaker” by AVM B R Krishna, ACAS(Plans)
- 1900 – 2000 hrs Cultural Programme
- 2000 – 2100 hrs Dinner

15TH SEPTEMBER, 2017 - DAY 2

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

- 1100 – 1130 hrs. TEA

- 1130 – 1330 hrs.

**Technical Session-III:
Market and Top Level
Requirements for new Gen
Regional Aircraft**

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

Topic 1: Market study
Speaker: Mr Nirmal Kumar Chandramouli, Pratt & Whitney, Canada

Topic 2: Top Level Requirements
Speaker: Gp Capt (Retd) RS Makker, Spicejet

Topic 3: Top Level Requirements
Speaker : Dr Kota Harinarayana & Mr Bhaskar Chakravarty, CSIR-NAL

**Technical Session-III:
User Interfaces and Services
Chairman:**

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:

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 : Mr Bhaskar Chakravarty & Dr Kota Harinarayana, 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 : Pratt & Whitney, Canada

**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

1630 – 1700 hrs.

TEA

1700 – 1800 hrs.

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

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

Topic 1: Design for manufacture & Maintenance

Speaker: Mr Mohankrishnan K P, Mahindra Aerospace Pvt Ltd

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

Chairman:

Topic 1: Decision making in changing, uncertain, technology driven times

Speaker: Prof. N Viswanadham-IISc

Topic 2: Innovation, Entrepreneurship, Employment.

Speaker: Dr. Ramesh Sundararaman-IIT, Bangalore

Topic 3: Skills Development, Job Cadres.

Speaker:

Topic 4: Speaker: Mr C S Rao

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

16TH 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 Sanjiv Shukla
Mr Vineet Kumar

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 on “Air Transportation in India – Challenges” by 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