



Confederation of Indian Industry



DEFCOM INDIA 2018

India's International Conference & Exposition on Military Communication

15 – 16 March 2018 | India Habitat Centre, Lodhi Road, New Delhi

Corps of Signals, in association with the Confederation of Indian Industry (CII), is organising DEFCOM INDIA 2018 on 15-16 March 2018. The seminar will enable informed interaction of Indian Industry, Academia, R&D Organisations and Defence Forces on critical aspects for development of Information and Communications Technology (ICT) infrastructure for forward edges of the Tactical Battle Area (TBA).

THEME: INFORMATION AND COMMUNICATION TECHNOLOGIES FOR IMPROVED COMMUNICATION SUPPORT TO FORWARD EDGES OF TACTICAL BATTLE AREA

The digitised Tactical Battle Area will require an ubiquitous Information Grid with robust security and converged voice, video and data services for all fixed and mobile users. At the forward edges, ease of configuration, operation and fault finding/ field repairs as well spectrum efficiency, enhanced indigenous operational security, power efficiency, Size, Weight and Power (SWaP) are all critical aspects. The increasingly digitised battlefield will require support for higher data capacity and user mobility including integration with backhaul networks. Solutions based on indigenous adaptation of rapidly evolving commercial ICT technologies need to take into account these military concerns.

TECHNICAL SESSION 1

COMMERCIAL ICT DEVELOPMENTS: EMERGING TECHNOLOGIES FOR BATTALION AND BELOW COMMUNICATION

The faster pace of technology evolution and emerging trends need to be harnessed for ICT infrastructure for the forward edges of the TBA.

- ▶ Military Adaptation of 4G LTE.
- ▶ Adopting Internet of Things (IoT) for Integration of Sensor, Shooter and Decision Maker in the TBA.
- ▶ Improved Power Efficiency : Fuel Cell and Micro Grid Systems for TBA.
- ▶ Improvements in Software Defined Radios : Spectrum Efficiency and SWaP.
- ▶ Wideband HF Solutions for the TBA.
- ▶ Review of Ruggedisation Requirements for Commercial Off The Shelf (COTS) Equipment : Cost Performance Analysis.
- ▶ Satellite Terminals : Man Portable and Vehicle Mounted.
- ▶ Communications On The Move (COTM) for Mechanised Operations.

TECHNICAL SESSION 2

NETWORK TECHNOLOGIES AND TOOLS FOR CAPABILITY ENHANCEMENT AT FORWARD EDGES OF TACTICAL BATTLE AREA

The evolving network technologies need to be leveraged for transforming Information Superiority into Combat Power at the forward edges of the TBA.

- ▶ Data Diode Solutions for Secure Integration of Networks.
- ▶ Enhancing Efficiency of IP Networks for the TBA.
- ▶ Distributed Cloud Computing Architecture for the TBA.
- ▶ Network Level Operational Security.
- ▶ Enterprise Wide Collaboration Tools for Military Decision Making.
- ▶ Big Data Analytics Solutions at Tactical Level.
- ▶ Artificial Intelligence (AI) Solutions for Improved Intelligence, Surveillance and Reconnaissance (ISR).
- ▶ Communication Solutions for TBA in Pre-Tactical Communication System Era.
- ▶ Security Solutions for HF Radio.

TECHNICAL SESSION 3

OVERCOMING CHALLENGES IN COMMERCIAL TECHNOLOGY ADAPTATION FOR FORWARD EDGES OF THE BATTLEFIELD

Challenges in adaptation of commercial technologies at the forward edges of TBA need to be identified and suitable measures evolved for overcoming them.

- ▶ Ensuring Operational Security with Software based Crypto Solutions and Capture Resilience for Handheld Communication Equipment.
- ▶ Global Best Practices in Adaptation of COTS Equipment in Light of Rapid Technology Obsolescence.
- ▶ Improvements for Reliable Power Systems and Longer Battery Lives for
- ▶ Communication Solutions for Special Forces.
- ▶ Crypto Evaluation Policies : Factors Limiting Development of Crypto Solutions in line with User Requirements and Suggested Mitigation.
- ▶ Defence Procurement Policies : Limitation of Project Based Approach in Ensuring Seamless Integration with Military

DEFCON INDIA 2018

INFORMATION AND COMMUNICATION TECHNOLOGIES FOR IMPROVED COMMUNICATION SUPPORT TO FORWARD EDGES OF TACTICAL BATTLE AREA

DATE	TIME (Hr)	EVENT
15 MARCH 2018	0900	Inauguration of Exhibition
	1000-1030	Tea
	1100-1230	Inaugural Session
	1230-1330	Exhibition Round
	1330-1430	Lunch
	1500-1700	Technical Session 1: Commercial ICT Developments- Emerging Technologies for Battalion and Below Communication
16 MARCH 2018	0900-1100	Technical Session 2: Network Technologies and Tools for Capability Enhancement at Forward Edges of Tactical Battle Area
	1100-1130	Tea
	1130-1330	Technical Session 3: Overcoming Challenges in Commercial Technology Adaptation for Forward Edges of the Battlefield
	1330-1430	Lunch
	1500	Valedictory Session

EXHIBITION

An exhibition will be held concurrently in which participants from the industry are invited to showcase their products.

PARTICIPANT PROFILE

Following are invited to participate

- ▶ Experts from the industry
- ▶ Academia and Professionals from R&D Organisations
- ▶ Serving and Retired Officers from the Three Services
- ▶ Executives from PSUs and Private Industry

FOR MORE INFORMATION PLEASE CONTACT



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FORMAT OF ARTICLE

1. Use single side of A4 size paper.
2. Layout: Service Paper.
3. Line spacing of 1.5.
4. Title: bold, in capital letters, underlined and centered.
5. Font: Arial.
 - (a) Title Size: 16.
 - (b) Centre and Side headings: 14.
 - (c) Main text: 12.
6. Author's name and e-mail ID should be given right below the title. This should be in bold and centre aligned.
7. Military abbreviation will not be used.
8. The centre and group headings should be bold and underlined.
9. Italics may be used for highlighting any part of the text.
10. Diagram:-
 - (a) Neat and clear.
 - (b) Colored wherever applicable.
11. The paper should be covered under the following broad headings:-
 - (a) Introduction
 - (b) Abstract
 - (c) Keywords
 - (d) Main topic in detail
 - (e) Conclusion
 - (f) References
12. References should be all encompassing.
13. Use of references to military document, policies and info is prohibited.

Appendix C
(Refer Para 5 (a))

AUTHOR CERTIFICATE

1. I certify that :-

(a) I have not used any official information and or material / information held with me in my official capacity.

(b) The paper titled "**Title of Paper**" is my original work and nothing has been copied from any published material including internet.

2. The paper is unclassified and does not contain any classified information / data and has complied with the instruction contained in India Official Secret Act 1923.

Date :

(Name of the Author)

Appendix D
(Refer Para 5 (b))

NO OBJECTION CERTIFICATE

I have perused the write up "**Title of the Paper**" submitted by Rank / Appt: _____ Name: _____ and I have no objection to it being presented during DEFCOM 2018.

Station :

Dated :

(Next Superior Officer)