

Geoint: Accelerating Decision Advantage for Security

Decision Support System for Armed Forces

Air Vice Mshl Sanjay Bhatnagar VM VSM (Veteran)

Disclaimer

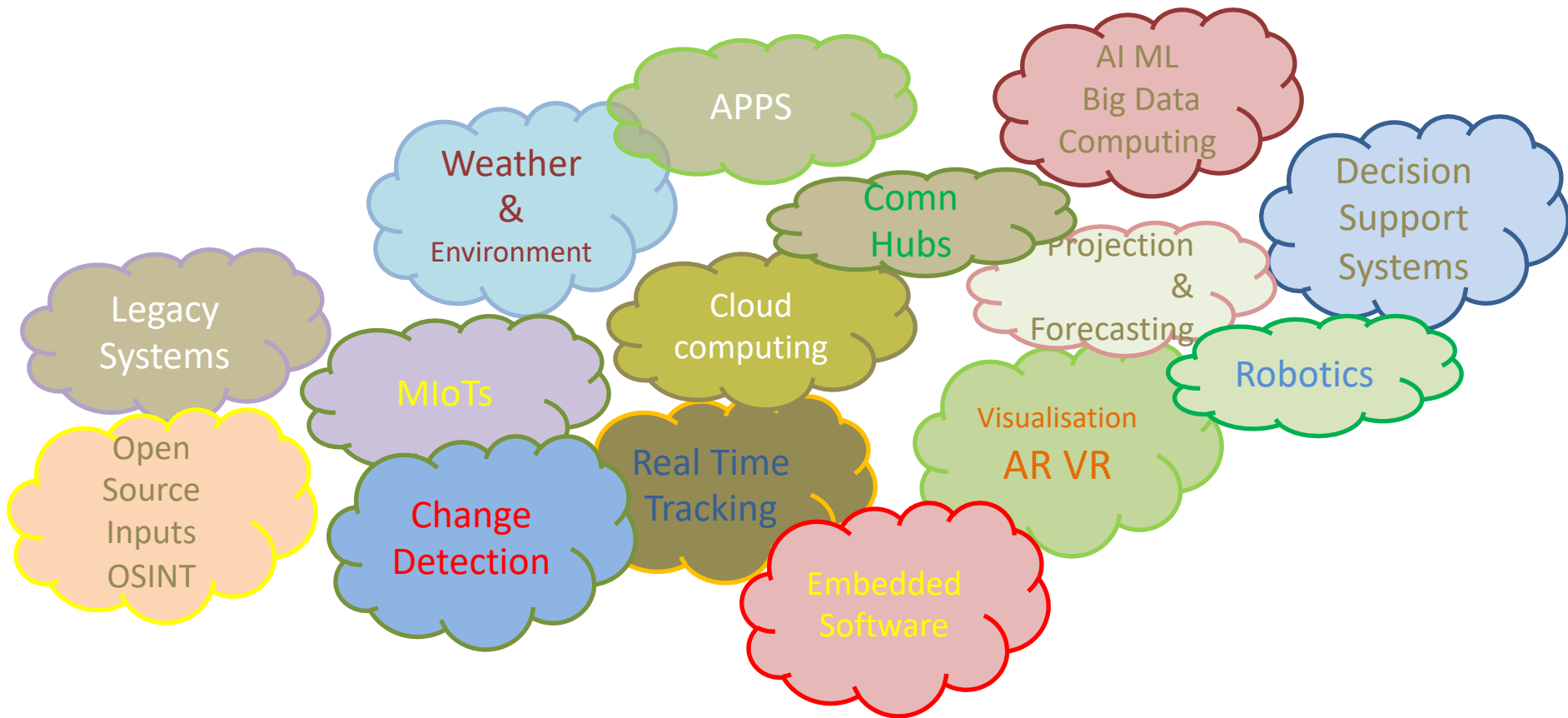
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GeoSpatial Building Blocks: Military System



GeoSpatial Building Blocks: Military System

- Synchronise humungous data from myriad of sources in different formats.
- Deliver a CoP.



Decision Support System (DSS).

Cranking Up Combat Capabilities: Net Centric Capabilities

- Integrated Air Command and Control System (IACCS) by BEL.
- Integrated Perimeter Security System (IPSS) by BEL.
- Strike Planning & Weapon Delivery System.
- Information Management and Analysis Centre (IMAC) for IN.
- Integrated Battlefield Surveillance Centres. Project 'Sanjay'
- Arty Combat Comd Control & Comn System. Project 'Shakti'
- Situational Awareness Module for Army (SAMA)- (op, lgs & managerial).
- Weather Forecasting Software for Indian Army (NCMRWF).
- IAF's Centre of Excellence (CoE) for AI under the UDAAN.
- A robust communication backbone – NFS & AFNET.

Key Enabler: Armed Forces GeoSpatial Capabilities

- Creation of Defence Space Agency (DSA).
- Space Sector Reforms: 2020
- Creation of IN-SPACE & NSIL.
- Sharing Space related testing & certification facilities for pvt agencies.
- Creation of ISpA.
- National GeoSpatial Policy 2022.
- Indian Space Policy 2023.
- Throbbing Indian Private Spacotech companies.
- Policy level encouragement.
- Academia proactively involved.

Armed Forces: Wishlist

- Arrest the Geoint and Space technology gap vis-à-vis China.
- A National Geoint framework.
- Reliable data integration for a CoP (multi spectral sensors).
- Robust and resilient 'change detection' capability.
- Dynamic & Persistent Decision Support Systems in various domains.
- Analysis, modeling, simulation & visualisation tools for DSS.
- Virtual Area Network (VAN) over various tools.

Way Forward

- Close Interaction between the Indian Industry, Academia & Users.
- Collaboration with Friendly Foreign Countries, within the framework of being a major defence partner (MDP).

Thank you
&
Jai Hind.

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<u>Time</u>	<u>Speaker</u>	<u>Appointment</u>	<u>Topic</u>
0900	Air Vice Mshl Sanjay Bhatnagar VM VSM (Veteran)	Advisor, BEL, India	Decision Support System for Armed Forces & Opening Remarks.
0915	Madhav Ragam,	Vice President - Public Sector, Maxar Technologies, Singapore	
0925	Col Milan Patnaik	DGMI	Advances in Generative AI for SAR to EO Translation
0935	Royston Ong	Business Development Manager (Defense & Intelligence), Asia Pacific, Esri, Singapore	
0945	Dr. Rao Ramayanam	Senior Sales Executive – International, HawkEye 360, US	Space-based Radio Frequency (RF) Monitoring: Equipping: Analysts with a Powerful Tool for Geospatial Intelligence
0955	Arpan Sahoo	Co-founder and COO at KaleidEO	
1005	Lt Col Piyush Shukla	Corps of Engrs, Indian Army	Leveraging Advanced Geospatial Technologies for Defence
1015	Paolo Pasquali	Technical Director & President, sarmap sa, Switzerland	Wide-area, Hierarchical and Activity-based Structured Obsn with satellite SAR technologies
1015	Q&A		