## 2ND INDIA FRANCE SPACE AND GEOSPATIAL BUSINESS MEET

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#### Detailed Analysis of the Key Takeaways from the 2nd India-France Space & Geospatial Business Meet

The 2nd India-France Space & Geospatial Business Meet, organized by the Geospatial World Chamber of Commerce (GWCC) in association with Geospatial World (GW), emerged as an essential platform for fostering collaboration between India and France in the rapidly growing sectors of space and geospatial technology. The discussions aimed at strengthening bilateral relations between the two countries, and focused on the intersection of government policies, business development, and technological advancements.

#### 1. Utilizing Developed Space Systems for Future Growth

- Focus on expanding beyond just launches to include satellite constellations, navigation, and Earth observation.
- India and France should collaborate on advanced space technologies to maximize investments and global impact

#### 2. Joint Collaboration on Viksit Bharat 2047 & France Mission 2030

- Both nations' long-term strategic goals align in space exploration and geospatial technology
- Joint programs can accelerate their national visions and strengthen bilateral relations

#### 3. Geospatial Needs in India

- High-quality base maps and data standardization are vital for urban planning and disaster management
- France's advanced mapping technologies can help meet these needs

#### 4. Private Sector Engagement and Innovation

- The private sector plays a key role in driving innovation and commercialization in space and geospatial sectors
- Public-private partnerships in satellite manufacturing, launch services, and applications will stimulate sector growth

#### 5. Space for Commerce and Defence

- Dual-use space technologies serve both commercial and defense applications
- Collaboration can advance systems that benefit national security and space commerce

#### 6. AI, Cyber Security, and Geospatial Analytics

- AI integration with geospatial data enhances decision-making, but cybersecurity is essential to protect sensitive information
- Collaboration on AI and cybersecurity is crucial for a secure geospatial ecosystem

#### 7. Collaboration on Small Use Cases:

• Start with small, manageable projects that can scale into larger ventures



• These small projects help build trust and provide practical applications for space and geospatial technologies

#### 8. India's Strong Technological and Human Resources

- India has a talented workforce and expertise in GIS, remote sensing, and AI
- Greater investment and partnerships with France can unlock the potential of India's geospatial and space sectors

#### 9. Market Growth Projections

- The global space market is set to grow to \$100 billion by 2030, with a focus on AI, cybersecurity, and autonomous vehicles
- Both countries must invest in emerging technologies to capture a share of the expanding market

#### 10. Investment and Funding Challenges

- Strategic investments are needed for satellite constellations and downstream technologies.
- Governments and investors must collaborate to create a funding-friendly environment

#### 11. Government Policy & Regulations:

- Simplifying policies, creating a single-window system, and accelerating approvals will drive sector growth.
- A collaborative approach to regulatory streamlining is crucial for business development

#### 12. Human Resource Development and Knowledge Exchange:

- Strong educational partnerships and student exchanges are essential to developing experts in space and geospatial fields.
- Joint research initiatives will build a skilled workforce for the future

#### 13. France 2030 Focusing on Low Earth Orbit (LEO):

- France's emphasis on LEO satellites offers opportunities for joint missions, satellite launches, and data sharing
- Collaboration between India's established LEO presence and France's innovation can dominate the LEO space mark

#### 14. Strengthening Student and Knowledge Exchange:

- Expanding student exchanges between India and France will cultivate a skilled workforce in space, geospatial technologies, and AI
- Joint degree programs and research initiatives will foster innovation and knowledge transfer

# 15. India-France Innovation Pathway and Collaboration Models - Replicating the BIRD Model (Binational Industrial Research & Development):

- Replicating the successful BIRD model can promote innovation and R&D collaborations. The BIRD model encourages joint R&D, helping address technological gaps and promote innovation
- India and France can replicate this to boost collaboration in space and geospatial technologies

#### 16. India-France Innovation Pathway:

- A joint innovation pathway could streamline development cycles in space exploration, AI, geospatial analytics, and cybersecurity
- This initiative can enhance collaboration, align priorities, and simplify regulations

#### 17. Industry-Related Use Cases and Problem Statements:

• Focus on practical use cases like urban planning, agriculture, and satellite-based services



- Clear problem statements will drive targeted innovations in research and development.
- 18. **More Roadshows for Industries**: More industry roadshows and startup opportunities will accelerate technological progress. Organizing roadshows and forums will facilitate networking, collaboration, and awareness among stakeholders in space and geospatial sectors.
- 19. **Streamlining Policies and Regulations**: Simplifying regulations and creating a predictable business environment will accelerate joint ventures, satellite launches, and technological deployments.
- 20. Addressing Startup Pain Points: India and France can support startups through incubators, accelerators, and funding mechanisms, addressing challenges in market access, funding, and regulations.
- 21. **Encouraging Private Sector Engagement in G2G Projects**: Private sector involvement in Government-to-Government (G2G) projects will foster innovation, commercialization, and technology transfer.
- 22. **Patent Development and Information Sharing**: Strengthening patent collaboration and information exchange will protect intellectual property and encourage further innovation in space and geospatial sectors.
- 23. **Visa Permissions for High-Priority Businesses**: Expedited visa processes for professionals involved in high-priority technology projects will support collaboration and talent exchange.
- 24. **Constituting Joint Working Groups**: Joint working groups between India and France will ensure ongoing collaboration, align national and industrial goals, and address technological challenges.
- 25. **Ease of Doing Business and Single Window System**: A single-window clearance system will simplify business processes, reduce delays, and encourage cross-border investment in space and geospatial sectors.
- 26. **Open Discussion Forums and Information Sharing by GWCC**: Open forums like GWCC can facilitate transparent communication and collaboration, keeping stakeholders informed on industry trends and opportunities.
- 27. **Data Extraction of Information for Application Development**: Enhanced data extraction, interoperability, and AI-driven processing will improve applications in geospatial analytics, AI, and space services.
- 28. Aeronautic Sector Space and Aeronautic G2G Collaboration: Collaboration between space and aeronautics can enhance satellite-based communication, air traffic management, and defense applications.
- 29. **54 Billion Euros Investment Towards France Future 2030**: France's investment in space and hightech industries offers India access to advanced technologies, satellite development, and geospatial applications.
- 30. **800 Billion Euros Investment in High Technologies**: Joint ventures and research partnerships will facilitate access to cutting-edge technologies in AI, cybersecurity, and space exploration.
- 31. **Space and Downstream Geospatial Naksha Land Records Modernization**: Collaboration on space technologies like satellite imagery, drones, and land records modernization can improve urban planning, property rights, and resource management.
- 32. **Government to Set Up a Joint Innovation Network**: A joint innovation network between India and France will support co-innovation in space, AI, and geospatial technologies, promoting research and development.
- 33. **Partnership in Training as an Important Area**: Joint training programs and capacity building initiatives will upskill professionals in space mission management, AI, and satellite technology.
- 34. **Quick, Liberal, and Easy Approvals for Launch Services**: Streamlined approvals and universal NDAs will facilitate quicker space missions, satellite launches, and technology deployments.
- 35. Adherence to Localization in Procurement: Localization in technology solutions will reduce product development cycles and ensure compatibility with both countries' needs.
- 36. **Water and Air Quality Projects in India**: Geospatial technologies will play a key role in monitoring air and water quality, and collaboration with France can enhance these initiatives using advanced technologies.



- 37. Align Geospatial with Larger Sectors: Integrate geospatial technologies into agriculture, urban planning, disaster management, and infrastructure development to address critical challenges like sustainable urbanization and climate change.
- 38. **2030: Space Market Growth**: The global space market will grow to \$100 billion by 2030. India and France can capitalize on this by advancing space-based services like satellite communication, earth observation, and AI-driven technologies.
- 39. **Asymmetries in Space, Cyber, AI & Unmanned Vehicles**: Bridging technology gaps between India and France in space, cybersecurity, AI, and unmanned vehicles will foster innovation and competitive advantages in these rapidly evolving sectors.
- 40. **Quick Collaboration in Launches, Slow in Constellations**: While both countries have collaborated well on launch activities, the development of satellite constellations is slower. Focus on accelerating constellations through joint efforts will enhance global space services.
- 41. **Sovereign Domains: Navigation, Exploration, and Observation**: Navigation, exploration, and observation are strategic sectors with vast growth potential. Collaboration in these areas can lead to new missions and technological innovations, advancing national security and space leadership.
- 42. **Funding Gaps for Constellations and Downstream Services**: Lack of funding for constellations and downstream services is a barrier. India and France should mobilize funds through partnerships and joint investment schemes to unlock the market potential of satellite data and geospatial products.
- 43. **Market Creation for Space Technologies**: India and France need to focus on creating demand-driven markets, especially in downstream industries like earth observation, satellite communication, and geospatial analytics. Supporting SMEs will foster market expansion and economic growth.
- 44. **Enhancing Earth Observation Capabilities**: Increasing the frequency of earth observation from 90 minutes to 120 minutes will improve the timeliness and accuracy of satellite data for applications like climate monitoring, crop forecasting, and disaster management. Collaboration between India and France will drive these capabilities forward.

#### **Recommendations for Moving Forward**

- 1. **Create a Joint Innovation Network:** Establish a framework for **public-private partnerships** in both countries to facilitate technological development and business collaboration.
- 2. **Expand Small-Scale Projects:** Begin with **small pilot projects** in geospatial and space applications, which can later scale to larger, more complex ventures.
- 3. **Streamline Regulations:** Governments should prioritize simplifying regulations and providing a **single-window clearance system** for businesses.
- 4. **Increase Investment in Downstream Applications:** Focus on attracting more **private sector investment** for downstream sectors like **satellite imagery, geospatial analytics**, and **AI applications**.
- 5. **Develop Human Resources:** Both India and France should focus on **educational exchange programs** and **joint research initiatives** to create a skilled workforce.

By acting on these recommendations, India and France can significantly enhance their cooperation in space and geospatial technologies, benefiting both nations' economic, technological, and strategic objectives in the coming decades.

