

# Indian Geospatial and Space Industry Trade Mission and Bilateral Business Summit Between

**INDIA**  
**FRANCE**



**Embassy of India**

13-15 rue Alfred Dehodencq  
75016 - Paris, France



11-12 December, 2023

**INDIA**  
**SWEDEN**



**Embassy of India**

Kornhamnstorg 4, 111 27  
Stockholm, Sweden



13-15 December 2023

## GWCC Trade Mission Report

Organiser



Embassy of India  
France & Principality of Monaco

Co-Organisers



Embassy of India  
Sweden & Latvia



GEOSPATIAL  
WORLD  
ADVANCING KNOWLEDGE FOR SUSTAINABILITY

Supporting Partners



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## OVERVIEW

Geospatial World Chamber of Commerce (GWCC) organised and took an Indian Geospatial and Space Industry Trade Mission to France and Sweden from 11th – 16th December 2023. While trade missions are prevalent in mainstream industries, this effort distinguished itself by focusing exclusively on the geospatial and space (downstream, midstream & upstream) segments. The primary aim of these trade missions was to showcase the capabilities and offerings of Indian geospatial and space companies and also to facilitate potential business collaborations between Indian, French & Swedish companies.

As the global geospatial and space industry surges forward, India, playing a prominent role, is keeping pace. Projections indicate that the Indian geospatial market is set to surpass INR 63,000 crore (\$8 billion) by 2025, while the Indian space industry has already reached \$9 billion. With a robust Compound Annual Growth Rate (CAGR) of 4%, India is positioned to outperform the global CAGR of 2%. By 2030, the Indian geospatial market is expected to soar to \$77 billion, and by 2040, an impressive \$100 billion. This notable growth momentum is attributed to the introduction of India's National Geospatial Policy in 2022 and the Space Policy in 2023, alongside the National Drone Policy. These policies have not only strengthened India's geospatial industries but also accelerated growth within the Indian space sector.

## RATIONALE

There is an immense potential for a strategic business partnership between India - France and India - Sweden pertaining to the space and geospatial business markets. India showcases cutting-edge capabilities in space infrastructure, as well as geospatial solutions and services. France boasts advanced geospatial technology, products, and a robust space industry. Sweden, too, possesses advanced geospatial technology and products, along with an emerging space industry. This collective expertise presents a promising opportunity for an enhanced collaboration between India – France and India – Sweden.

The key lies in establishing and reinforcing bilateral business forums that offer mechanisms to promote and strengthen trade and commerce in these cutting-edge sectors between the countries. Geo-Political alliance and bilateral agreements does provide an excellent atmosphere wherein we could leverage friendly and cultural ties to grow trade and commerce significantly. As space infrastructure and geospatial services serve as the foundation of digital eco-system, such an engaging collaboration may also help adding new dimensions to overall business relations in the field of Climate Change, Smart Cities, IT and Engineering industry.





# EXECUTIVE SUMMARY

## INDIA FRANCE

There is tremendous potential of business partnership between India and France in the field of space and geospatial technologies. What we need is to create and strengthen bilateral business forums that provides mechanisms to promote and strengthen trade and commerce in the field of geospatial and space technology between the two countries. While India does have cutting edge capabilities in the field of space infrastructure and geospatial solutions and services, France does have advanced geospatial technology and products and robust space industry, thereby offering potential of enhanced collaboration between the two countries.

The Trade Mission witnessed the 1st India France Bilateral Business Summit (11th -12th December) jointly organised by GWCC and Indian Embassy in Paris, France and Geospatial World (GW) followed by an Industrial tour for the Indian Industry stakeholders at European Space Agency (ESA) and IGN France. EuroConsult joined the bilateral summit as supporting partner. The summit took place at the Indian Embassy in Paris, France.

The bilateral business summit was attended by the industry leaders from Geospatial and Space companies from both the countries. Honourable Jawed Ashraf, Indian Ambassador to France encouraged the Indian and French companies to build great relationships between the two nations. Echoing the spirit of collaboration, Sanjay Kumar, CEO, GWCC and GW and Shri Tushar Phadnis, Counsellor (Space) and ISRO Technical Liaison Officer at the Embassy of India emphasised on the need for an enhanced Indo-French collaboration in the geospatial domain alongside Space collaboration. The Business

Summit and the Trade Mission witnessed Industry leaders sharing their valuable insights.

The impetus was to facilitate a holistic partnership that transcends mere business transactions to a sustainable business relationship at the country level. India's evolving geospatial and space arena, enriched by a liberalized policy framework, presents an unprecedented opportunity for French companies to join hands with Indian counterparts in driving innovation and growth. Today, emerging technologies like AI/ML are integral parts of the geospatial and space industries. The relationship between geospatial, space, and emerging technologies is increasingly intertwined.

The summit saw various presentations and deliberations. Nicolas Paparoditis, Deputy Director General of IGN – France addressed major challenges including Urbanization and Biodiversity conservation. He emphasised that Reliable datasets are crucial leading to the integration of space technology, such as yearly ortho-images and land cover maps using a blend of space and aerial imagery. Pacome Revillon, CEO, Euroconsult, highlighted the current robust market dynamics in the global space economy, propelled by new supply and demand drivers, innovations, and transformations in business models.

French geospatial and space companies have shown their keen interest on expanding their businesses in India, viewing it as a promising market. However, there is a pressing need for clearer policies, Double Taxation Avoidance Agreements (DTAA), and an understanding of taxation benefits to facilitate business expansion.



## INDIA SWEDEN

As has been highlighted at the onset itself, there is a tremendous potential of business partnership between India and Sweden in the field of space and geospatial technologies. While India does have cutting edge capabilities in the field of space infrastructure and geospatial solutions and services, Sweden does have advanced geospatial technology and products and emerging space industry, thereby offering potential of enhanced collaboration between the two countries in terms of transfer of technology, solutions/services, and joint ventures and investments across the entire value chain of this industry.

The Trade Mission joined the 1st India Sweden Space and Geospatial Business Summit (13th -15th December) in Stockholm jointly organised by GWCC, GW, Indian Embassy in Stockholm and Sweden India Business Council (SIBC) followed by an Industrial tour to Esrange, Kiruna (Northern Sweden). Business Sweden joined the Summit as Supporting Partner.

GWCC entered into an MoU with SIBC with a focus on increasing collaboration on space and geospatial trade, commerce, and related policy between the two countries. The MoU was signed in the August presence of Honourable Tanmaya Lal, Ambassador of India in Sweden, Shri Tushar Phadnis, Charlotta Sund, CEO, Swedish Space Corporation (SSC).

The Summit took place on the visit of the India space and geospatial delegation to Sweden and the discussion between stakeholders continued on December 14th and 15th at Kiruna Kommun and Esrange. This was

the first of many delegations and exchanges planned between the two countries on this very important and rapidly growing area of trade. Delivering opening address Ambassador Tanmaya Lal highlighted the 75 years of diplomatic relations with Sweden and growing partnerships between the two countries across different sectors. He also emphasised that space and geospatial sector offers huge potential of trade and collaboration.

The State Secretary for Foreign Trade, Government of Sweden Håkan Jevrell addressed the summit amongst many prominent Guest speakers and Industry leaders.

He emphasised on growing partnership between Indian space and geospatial sectors and hoped for early conclusion of EU-India Free Trade Agreement that would give boost for enhanced trade partnerships between the two nations. Charlotta Sund presented overview of Swedish space infrastructure and its high level partnerships with ISRO - Indian Space Research Organization in several areas including Chandrayan3. She did call for greater engagement of commercial sector of the two countries. Tushar Phadnis shared updates on National Space Policy that has enabled opening of space sector for commercial companies. Host of entrepreneurs leading range of space and geospatial companies participated in focused panel discussions and explored opportunities for partnerships. During networking sessions, it was overwhelming to note that few companies already made progress towards agreements and contracts.



# INDIA – FRANCE SPACE & GEOSPATIAL BUSINESS SUMMIT

11 – 12 December 2023, Paris, France

## 11 DECEMBER 2023

The discussion highlighted the exponential growth in the global geospatial market, with India playing a significant role. Projections indicate substantial growth in the Indian geospatial market and the already valued Indian space industry. The intersection of geospatial and emerging technologies, such as AI/ML, offers unprecedented opportunities. The recommendations emphasize the need for Indo-French collaboration, transcending business transactions, and addressing sector-specific challenges and opportunities.

The Discussion focused on key aspects of the French space and geospatial ecosystem, emphasizing innovation, diversified ecosystems, government priority, and international collaborations. French experts echoed the need for collaboration, ease of policies, and enhanced dialogue, aligning with Indian sentiments. The application areas of space and geospatial technologies in France include urban planning, agriculture, and environmental protection.

## KEY PANEL DISCUSSION

### Panel 1: The Indian Space and Geospatial Industry-Market Trends and Collaborative Opportunities.

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Experts highlight that the global geospatial market size was estimated to be around USD 450 billion in 2022, with an expected Compound Annual Growth Rate (CAGR) of 12.41%, projected to reach USD 647 billion by 2025. Following this, an accelerated growth rate of 14.09% CAGR is anticipated post-2025, potentially reaching USD 1.37 trillion by 2030.

As the global geospatial and space industry advances, India plays a prominent role in keeping pace. Projections indicate that the Indian geospatial market is poised to exceed INR 63,000 crores (approximately \$8 billion) by 2025, while the Indian space industry has already achieved a value of \$9 billion.

The emerging technologies like AI/ML are integral parts of the geospatial industry. Geospatial organizations are utilizing emerging technologies, and conversely, emerging technologies are leveraging geospatial technology. The relationship between geospatial and emerging technologies is increasingly intertwined. India's evolving geospatial arena, enriched by a liberalized policy framework, presents an unprecedented opportunity for French companies to join hands with Indian counterparts in driving innovation and growth.

The bridge between French and Indian enterprises isn't just about business; it's about crafting an alliance that fuels innovation and mutual growth in unison, emphasizing the significance for the industry.

Recommendations arising from this discussion include the need for enhanced Indo-French collaboration in the geospatial domain and the necessity of facilitating a holistic partnership between Indian and French companies that transcends mere business transactions. These recommendations are aimed at addressing identified challenges or opportunities in the sector.

### Panel 2: French Space and Geospatial Industry-Market Trends and Collaborative Opportunities

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The second session delved into the French Space and Geospatial Industry: Market Trends and Collaborative Opportunities, where the panellists explored key aspects and shared valuable insights on the French space and geospatial ecosystem. The experts highlighted that French space activities are based on the four pillars of Innovation, a Diversified Ecosystem, Priority by the Government, and Openness for International Collaborations & Partnerships. They also emphasized that innovation and partnerships are key solutions for new opportunities in the French space and geospatial sectors. Additionally, experts mentioned the growing use of geospatial technologies in France, driven by factors such as obtaining a clear picture, improved project monitoring, the possibility for comparison, cost and time savings, enhanced efficiency and quality, and, most importantly, adopting geographic intelligence for a quick and better response to upcoming challenges and needs. The target areas where space & geospatial technologies are mainly focused include Urban Planning, Agriculture, National Digital Twin for green transition, mapping coastlines, and understanding & mapping forestry & biodiversity for protection.



The French experts echoed the sentiments of Indian experts regarding the need for greater collaboration, ease of policies for smooth business, and enhanced dialogue between Indian and French stakeholders at both the government and industry levels.

### Panel 3: Ease of Doing Business and Facilitation of Trade and Commerce by Government and Industry

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The third discussion centred on Ease of Doing Business and Facilitation of Trade and Commerce by Government and Industry, where participants engaged in a robust conversation about the space and geospatial industries as domains of growing innovations offering significant opportunities for both nations. The cooperation between India and France in the space sector has supported the development of the downstream space sector through science and innovation. India and France have successfully completed 50 years of successful cooperation with a joint development of innovative Earth Observation (EO) missions.

However, the ease of doing business for French and Indian private space and geospatial companies remains a pressing challenge that needs to be addressed. There is significant enthusiasm between both French and Indian private space and geospatial players to facilitate exchanges, strengthen bilateral relations, and contribute to the global advancement of innovations. However, complex procedures, laws, and regulations are becoming the main barriers.

## KEY RECOMMENDATIONS

- French space and geospatial companies are interested in expanding their businesses in India, viewing its promising market. However, these companies are actively seeking a trusted partner in India, presenting an excellent collaboration opportunity for Indian companies.  
**Recommendation:**  
Strategic partnerships should be encouraged at the government level within Indian and French space and geospatial companies to foster innovation, share resources, and enhance overall competitiveness.
- Larger involvement of embassies is expressed by both Indian and French companies to fast-track collaboration and increase opportunities to leverage connections and strengths for mutually beneficial partnerships.  
**Recommendation:**  
Include a body/representative from the local French embassy in India to strengthen trust and add value to engagements between French stakeholders and the Indian market.
- There was visible enthusiasm among French companies for collaboration with the Indian space sector, especially post the success of Chandrayaan-3. While the geospatial market is mature, there remains interest in understanding its nuances and potential business opportunities.  
**Recommendation:**  
Indian geospatial and especially space companies should act proactively and take advantage of the momentum and goodwill created by successful Chandrayaan-3 missions.
- For Indian companies, recognizing the complexity, it was clear that establishing a direct business foothold in France or Europe is challenging and requires the setting up of a dedicated French/European entity. The process for Indian companies is also complex and challenging.  
**Recommendation:**  
A strategic partnership between Indian and French companies can greatly help both countries. Additionally, embassies should also treat the space and geospatial sector as one of the most important sectors and help companies accordingly.
- There is a huge demand from both Indian and French space and geospatial industries to evaluate the feasibility of expanding their market presence in French and Indian markets, respectively. There is a huge need for understanding the market and gaining better insights into the European and Indian space and geospatial market. In addition to that, there is also a huge demand for connecting with the right partners within India and France.  
**Recommendation:**  
Organizations like GWCC, along with other relevant stakeholders, should organize bilateral and multilateral business summits quite often. Organizations like Geospatial World should work on researching the current scenario, future potential, and business feasibility studies.

## More Recommendations

- Encourage strategic partnerships at the government level to foster innovation and competitiveness in both Indian and French space and geospatial companies.
- Involve local French embassy representatives in India to strengthen trust and facilitate collaborations between French stakeholders and the Indian market.
- Proactively capitalize on the success of Chandrayaan-3 missions to enhance collaboration between Indian and French space sectors.
- Facilitate the creation of dedicated entities for Indian companies looking to establish a direct business foothold in France or Europe.
- Organize bilateral and multilateral business summits, led by organizations like GWCC and Geospatial World, to connect Indian and French space and geospatial companies and provide market insights.
- There should be a focus on the FDI and ease of procedure within Space and Geospatial sector.
- There is a need of comprehensive industry framework and dialogue on the technology transfer.

## CONCLUSION

The discussions and insights shared during the event underscore the immense potential and collaborative opportunities between the Indian and French space and geospatial industries. With the global geospatial market poised for significant growth, both nations recognize the need to forge stronger ties and leverage each other's strengths for mutual benefit.

The evolving landscape of emerging technologies, particularly the integration of AI/ML into geospatial endeavours, presents a promising frontier for innovation and collaboration. India's burgeoning geospatial market, coupled with a liberalized policy framework, provides an unprecedented opening for French companies to join hands with Indian counterparts.

The sentiments echoed by both Indian and French experts emphasize the importance of transcending traditional business relationships. Instead, there is a call for crafting alliances that fuel innovation and mutual growth in unison. The recommendations emphasize strategic partnerships, eased regulatory processes, and active involvement of embassies to facilitate smoother collaborations.

As India and France celebrate 50 years of successful cooperation in the space sector, it is evident that the challenges of ease of doing business need to be addressed. The enthusiasm expressed by French companies to tap into the promising Indian market, coupled with the proactive steps recommended for both nations, reflects a commitment to fostering a robust collaboration.

In conclusion, the discussions and recommendations set the stage for an era of increased collaboration, innovation, and growth in the space and geospatial industries between India and France. The shared vision for a future alliance not only in business but also in crafting an ecosystem of innovation underscores the significance of the ongoing dialogue. The success of this collaboration will not only strengthen bilateral ties but also contribute to the global advancement of space exploration and geospatial technologies.





# 12 DECEMBER 2023, INDIAN INDUSTRY DELEGATION VISIT TO AGENCIES IN FRANCE

## Visit to European Space Agency (ESA)

- The ESA budget for the year 2022 was 7.13 billion Euros and it implements 60% of the total European space budget.
- The outcome of the ESA ministerial council 2022 records budget subscribed of 16.9 billion Euros including 1.3 billion Euros for commercialisation and competitiveness. Out of this budget the highest allocation was for science and research (20%) and for Earth Observation & Climate (16%).
- The human and robotic exploration, presence of Europeans on the Moon by 2030 and on Mars by 2040, competitive growth via innovation and research, civil security from space, communication and navigation services in space & on Earth and innovative collaboration & partnerships are among the top priorities for ESA.

**To learn more about ESA visit: <https://www.esa.int/>**

## Visit to Institut Géographique National (IGN), France

- IGN France has identified 8 major challenges: Urbanization, Forest management, Agriculture, Risks assessment, Biodiversity conservation, Coastline monitoring, Water resource management, and Energy sustainability, for which it is undertaking ambitious projects.
- To address these and other recurring challenges effectively, the availability of reliable and high-quality datasets is crucial. Therefore, there is a pressing need to harness all available data sources.
- Space technology is increasingly integrated into IGN's technological framework. This involves producing yearly orthoimages at 20-30 cm Ground Sampling Distance (GSD) by combining space and aerial imagery. Additionally, IGN generates a land cover and land use map every two years, utilizing a blend of space and aerial imagery, including Pleiades Neo © AIRBUS DS 2022 © IGN, and soon, high definition lidar data.
- The utilization of AI and collaborative methods is imminent. IGN firmly believes that leveraging innovations and emerging technologies is vital to meet Earth Observation (EO) and monitoring requirements.

**To learn more about IGN France, visit: <https://www.ign.fr/>**



# INDIA – SWEDEN SPACE & GEOSPATIAL BUSINESS SUMMIT

13 – 15 December 2023, Stockholm & Kiruna

**13 DECEMBER 2023**

## EXECUTIVE SUMMARY

**Discussion on Investing in Robust Ecosystems:** The initial discussion highlighted the mutual interest between Swedish and Indian companies in the space and geospatial sectors. Challenges in establishing direct business footholds were acknowledged, prompting the need for dedicated entities. Recommendations include fostering Market Insights Sharing platforms to enhance mutual understanding.

**Discussion on Space Collaboration:** This session addressed the advanced capabilities of Swedish space companies and their interest in collaboration with Indian counterparts. A skilled labor shortage in Sweden was identified, and recommendations include collaborative skill development programs. Indian companies seek insights into the Swedish and European space market, emphasizing the need for proactive engagement.

**Discussion on Geospatial Solutions and Services:** Experts discussed significant growth potential for Indian businesses in the Swedish market, especially in defense, mining, and location-based services. Recommendations include promoting collaborative ventures in the geospatial domain to maximize mutual benefits.

**Discussion on Ease of Doing Business:** While governmental collaborations between India and Sweden are strong, challenges for small Indian startups and complexities for Indian companies in Sweden were noted. Recommendations include simplifying regulatory requirements and visa sponsorship for skilled professionals.

### Other Key Points:

- **Successful Collaborations:** Notable partnerships, such as the one between Dhruva and a Swedish university, exemplify the potential for fruitful collaborations between Indian and Swedish space companies.
- **MOUs and Collaborations:** Several Memorandums of Understanding reflect a commitment to collaboration, leaving a favorable impression on the Indian delegation.
- **Ambassador Tanmay Lal's Perspective:** Celebrating 75 years of diplomatic relations, Ambassador Tanmay Lal highlights significant prospects for trade and collaboration in the Space and Geospatial domains.
- **State Secretary Håkan Jevrell's Views:** State Secretary Håkan Jevrell sees promise in the growing collaboration between India's space and geospatial sectors, expressing optimism about the EU-India Free Trade Agreement.
- **SSC President & CEO Charlotta Sund's Insights:** Charlotta Sund emphasizes Sweden's space infrastructure and collaborations with ISRO, highlighting the potential for joint endeavors in space exploration.
- **Founder and CEO of GWCC Sanjay Kumar's Insights:** Sanjay Kumar underscores the growing importance of cooperation in space and geospatial technologies, emphasizing potential collaboration areas and the need for proactive engagement of key stakeholders.

## KEY PANEL DISCUSSION

### Panel 1: Importance of Investing in Solid Eco-systems

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The initial major discussion centered around the significance of investing in robust ecosystems. Experts emphasized the keen interest and enthusiasm of Swedish companies in exploring the Indian market, particularly focusing on the space and geospatial sectors. Conversely, Indian companies also express a keen interest in expanding their businesses in Sweden and seek collaborations with Swedish counterparts. Nevertheless, Indian companies acknowledge the intricacies involved in establishing a direct business presence in Sweden or Europe, prompting the need for the creation of dedicated entities.

Recommendations include fostering Market Insights Sharing platforms to facilitate the exchange of market insights between Swedish and Indian entities, thereby enhancing mutual understanding.

## Panel 2: Space Collaboration

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The following panel discussion focused on Space Collaboration, where experts noted that Swedish companies boast advanced technology, infrastructure, and funding. However, they face a shortage of skilled labor.

Swedish space companies express interest in collaborating with Indian counterparts, but a lack of trusted connections and a common platform hinders this. While the Swedish embassy and SIBC have strong connections in India, their expertise in space and geospatial businesses is limited, creating collaboration opportunities for Indian entities.

On the other hand Indian companies express a significant demand for better insights into the Swedish and European space market. They are pleased with the positive engagement experiences and gaining knowledge about the Swedish space market.

Recommendations include addressing the potential skilled labor shortage through collaborative skill development programs. Additionally, there is a suggestion for policy advocacy, promoting favorable policies for Indian students seeking education in Sweden to encourage educational collaboration, ultimately helping bridge the skilled labor gap in Sweden.

## Panel 3: Geospatial Solutions and Services

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The 3rd panel discussion focused on the Geospatial Solutions and Services where experts discussed that the Swedish market holds significant growth potential for Indian businesses, especially in defense, mining, and location-based services sectors. Furthermore, the adoption of 3D technology in Sweden presents a promising area for collaboration between Indian and Swedish entities. While Swedish companies show clear interest in the Indian space sector, collaboration in the geospatial domain is less frequently mentioned.

Recommendations include promoting more collaborative ventures between Swedish and Indian companies, with a focus on the geospatial domain. This aims to enhance understanding & awareness of potential markets, explore opportunities, and maximize mutual benefits.

## Panel 4: Dialogue - Ease of Doing Business

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The last panel discussion focused on the Dialogue - Ease of Doing Business where experts discussed that India and Sweden have initiated stronger collaborations at the governmental level, taking advantage of a favorable geopolitical situation.

However, the experts also pointed out that the small Indian startups encounter significant difficulties in establishing entire Swedish or European entities due to complexities and regulatory requirements. Additionally, Indian companies also find it challenging to secure business in Sweden compared to the relatively easier access for Swedish companies in the Indian market.

Experts also discussed that the Swedish universities aim to attract Indian students to bridge the skilled labour gap, but obstacles arise due to limitations in job search visa policies and visa sponsorship being major challenges.

Recommendations include engaging in discussions with policymakers to simplify the regulatory requirements as well as the visa sponsorship for skilled professionals.



## Other Key Points

- **Successful Collaborations:** A notable collaboration took place between Dhruva and a Swedish university, showcasing the potential for fruitful partnerships between Indian and Swedish space companies.
- **MOUs and Collaborations:** Several Memorandums of Understanding (MOUs) were signed, involving entities such as GWCC, SIBC, and others, reflecting a strong commitment to collaboration. Positive interactions with the embassy, foreign delegations, visits to ESA, spaceports, and related discussions left a favorable and lasting impression on the majority of the Indian delegation.
- **Ambassador Tanmay Lal's Perspective:** Ambassador Tanmay Lal highlights the celebration of 75 years of diplomatic relations with Sweden and the remarkable expansion of partnerships across diverse sectors. The Space and Geospatial domains, in particular, offer tremendous prospects for trade and collaboration.
- **State Secretary Håkan Jevrell's Views:** According to Håkan Jevrell, the State Secretary, the growing collaboration between India's space and geospatial sectors presents a promising avenue. There is optimism about expediting the EU-India Free Trade Agreement, a crucial step to propel and strengthen trade partnerships between the nations.
- **SSC President & CEO Charlotta Sund's Insights:** Charlotta Sund, head of SSC, emphasizes Sweden's space infrastructure and strong partnerships with ISRO, notably in initiatives like #Chandrayan3. These collaborations underscore the strides made in cooperation. The focus now is on rallying the commercial sectors of both nations for heightened engagement and joint endeavours in space exploration. SSC looks forward to building a robust bond with the Indian commercial space sector.
- **Founder and CEO of GWCC Sanjay Kumar's Insights:** Sanjay Kumar, Founder and CEO of GWCC, emphasized the growing importance of cooperation between space and geospatial technologies, stating that it is the need of the hour and is now gaining momentum. He highlighted the crucial role played by geospatial and space technologies in areas such as green sustainability, mining, and resilient supply chains, especially in the aftermath of the COVID-19 pandemic. Sanjay Kumar also provided a brief overview of potential collaboration areas between Indian and Swedish space and geospatial companies giving these companies an idea about the potential partnership & collaboration opportunities.

## CONCLUSION

The comprehensive discussions and insights from the panel discussions underscore the immense potential for collaboration and growth between the Indian and Swedish space and geospatial industries. The mutual interest and enthusiasm expressed by both Swedish and Indian companies create a fertile ground for innovative partnerships.

The challenges highlighted, such as the skilled labor shortage in Sweden and the complexities for Indian companies in establishing a direct business foothold, call for strategic interventions. Recommendations focusing on skill development, simplified regulatory processes, and enhanced collaboration platforms demonstrate a commitment to overcoming these challenges.

The success stories of collaborations, exemplified by Dhruva's partnership with a Swedish university, serve as inspiring examples for the potential fruitful alliances between Indian and Swedish entities. Memorandums of Understanding (MOUs) reflect a tangible commitment to collaboration, laying a foundation for future partnerships.

Noteworthy perspectives from key figures, including Ambassador Tanmay Lal, State Secretary Håkan Jevrell, and SSC President & CEO Charlotta Sund, highlight the diplomatic and strategic significance of the collaborations. The celebration of 75 years of diplomatic relations emphasizes the enduring nature of the partnership.

Founder and CEO of GWCC, Sanjay Kumar's insights bring attention to the urgent need for cooperation in space and geospatial technologies, especially in the context of sustainability, mining, and resilient supply chains post-COVID-19.

In conclusion, the discussions and recommendations encapsulate a shared vision for a strengthened partnership, emphasizing innovation, mutual growth, and strategic alliances between Indian and Swedish companies. The collective efforts to address challenges and capitalize on opportunities signify a positive trajectory for the collaborative future of the space and geospatial industries between India and Sweden.

## 14 DECEMBER 2023, VISIT TO KIRUNA

The Indian delegation arrived in Kiruna, located in the North of Sweden, home to the Swedish spaceport. Mr. Mats Tavenikku, the Mayor of Kiruna Municipality, extended a warm welcome to the Indian delegation. Subsequently, presentations were delivered, beginning with Mr. Fredrik Gisle representing SSC, providing insights into SSC and the Kiruna spaceport. This was followed by a presentation on LKAB's Digital Transformation by their representative. Further presentations included one about the IRF Swedish Institute of Space Physics and ISRO-IRF Cooperation by Olle Norberg, Director General.

HE Tanmay Lal, the Indian ambassador, addressed the gathering, highlighting the potential and opportunities for space cooperation between India and Sweden. Mr. Tushar Phadnis, the technical liaison officer of ISRO based in the Indian embassy in Paris, shared insights into the Indian space program and Indian space ecosystem. Additionally, Mr. Sanjay Kumar, Founder and CEO of GWCC, provided critical insights into the Indian geospatial and space ecosystem, outlining potential areas of collaboration between Indian and Swedish companies.

## 15 DECEMBER 2023, VISIT TO KIRUNA SPACE PORT

The Indian delegation along with the ambassador HE Tanmay Lal and SIBC Secretary General & President Robin Sukhia visited the Space Port in Kiruna, where representatives provided a brief presentation on how the space port operates. Following this, the delegation toured the space port, posing questions about infrastructure, supply chain management, and other relevant aspects. The purpose was to gain a comprehensive understanding of the port and explore potential collaboration opportunities in the future.



# HIGHLIGHTS OF THE TRADE MISSION

## INDIA – FRANCE SPACE AND GEOSPATIAL BUSINESS SUMMIT

11 – 12 December 2023, Paris

### Overall Theme:

- The collaborative opportunities between Indian and French space and geospatial industries are significant, driven by market trends, technological integration, and shared challenges.
- The recommendations emphasize the need for strategic partnerships, enhanced dialogue, and proactive collaboration beyond business transactions.

### Discussion on Indian Space and Geospatial Industry: Market Trends and Collaborative Opportunities:

- Global geospatial market size: USD 450 billion in 2022, expected to reach USD 647 billion by 2025.
- India's role: Poised to exceed INR 63,000 crores in geospatial market and \$9 billion in space industry by 2025.
- Emerging technologies: AI/ML integral to the geospatial industry, creating opportunities for Indo-French collaboration.
- Recommendations: Enhanced Indo-French collaboration in geospatial domain, fostering holistic partnerships beyond business transactions.

### Discussion on French Space and Geospatial Industry: Market Trends and Collaborative Opportunities:

- French space activities based on innovation, diversified ecosystem, government priority, and international collaborations.
- Growing use of geospatial technologies in France, focusing on urban planning, agriculture, digital twin, coastline mapping, and biodiversity protection.
- Common sentiments: French experts echo Indian experts on the need for greater collaboration, ease of policies, and enhanced dialogue.

### Discussion on Ease of Doing Business and Facilitation of Trade and Commerce:

- Successful 50-year cooperation between India and France in space sector.

### Challenges: Pressing issues in ease of doing business for private space and geospatial companies

- Enthusiasm for collaboration: Both French and Indian companies seek partnerships, facing barriers due to complex procedures and regulations.

### Key Recommendations from Discussions:

- Encourage strategic partnerships at the government level within Indian and French space and geospatial companies.
- Involve representatives from the local French embassy in India to strengthen trust and facilitate collaborations.
- Proactively leverage the success of Chandrayaan-3 missions for collaboration.
- Establish dedicated entities for Indian companies looking to establish a direct business foothold in France or Europe.
- Organize frequent bilateral and multilateral business summits for better market understanding and partner connections.

### Key Points from Visits to ESA and IGN France:

- ESA budget for 2022: 7.13 billion Euros, with top priorities including human and robotic exploration, civil security, and communication services.
- IGN France's major challenges: Urbanization, agriculture, biodiversity conservation, and more, addressed through reliable datasets and integration of space technology.
- IGN's use of AI and collaborative methods to meet Earth Observation and monitoring requirements.



# INDIA – SWEDEN SPACE AND GEOSPATIAL BUSINESS SUMMIT

13 – 15 December 2023, Stockholm & Kiruna

## Overall Theme:

- Strong interest and collaborations between Indian and Swedish entities in the space and geospatial sectors.
- Emphasis on addressing challenges, enhancing collaboration, and exploring mutual growth opportunities.
- Commitment to fostering understanding, sharing insights, and simplifying processes for smoother collaborations.

## Discussion on Investing in Ecosystems:

- Swedish companies keen on Indian space and geospatial markets.
- Indian interest in Sweden, but acknowledgment of complexities.
- **Recommendation:** Foster Market Insights Sharing for mutual understanding.

## Discussion on Space Collaboration:

- Swedish companies with advanced tech, face labor shortage.
- Interest in collaboration hindered by lack of connections.
- Indian demand for insights into Swedish/European space market.
- **Recommendations:** Address labor shortage, advocate favorable policies.

## Discussion on Geospatial Solutions and Services:

- Swedish market growth potential for India in defense, mining, and location-based services.
- 3D technology adoption in Sweden offers collaboration prospects.
- Interest in Indian space, less in geospatial collaboration.
- **Recommendations:** Promote collaborative ventures, especially in the geospatial domain.

## Discussion on Ease of Doing Business:

- India-Sweden collaborations at governmental level.
- Challenges for small Indian startups in Sweden.
- Difficulty for Indian companies to secure business in Sweden.
- **Recommendations:** Simplify regulatory requirements, address visa sponsorship challenges.

## Other Key Points:

- Successful collaborations, MOUs signed, positive interactions.
- Perspectives from Ambassador Tanmay Lal, State Secretary Håkan Jevrell, and SSC President & CEO Charlotta Sund.
- Founder and CEO of GWCC, Sanjay Kumar's emphasis on the importance of cooperation.

## Key Points from Visit to Kiruna:

- Indian delegation welcomed by Mr. Mats Tavenikku, Mayor of Kiruna.
- Presentations by SSC, LKAB, and IRF on space-related aspects.
- Ambassador HE Tanmay Lal, Tushar Phadnis from ISRO, and Sanjay Kumar provided insights.

## Key Points from Visit to Kiruna Space Port:

- Delegation visited the Space Port in Kiruna.
- Presentation on space port operations.
- Tour to understand infrastructure and potential collaborations.

# LIST OF PARTICIPANTS

## India France Space And Geospatial Business Summit

11th December, 2023 | Paris

### Speakers And Panelists

- **Tushar R. Phadnis**  
Counsellor (Space) and ISRO Technical Liaison Officer, Embassy of India, Paris
- **Sanjay Kumar, CEO**  
Geospatial World & Geospatial World Chamber of Commerce
- **Pacôme Revillon**  
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- **Nicolas Paparoditis**  
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- **Félicien Roquet**  
Geospatial Strategy Coordinator, French Development Agency
- **Linda Tomasini**  
Space Applications and Co-Development Expert, CNES
- **Rupesh Kumar**  
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- **Akash Yalagach**  
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- **Soumya Misra**  
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- **Vinay Simha**  
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- **Francois Robida**  
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- **Wandel Da Rocha**  
VP Sales, Miratlas SAS

# India Sweden Space And Geospatial Business Summit

13<sup>th</sup> December, 2023 | Stockholm

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Indian Ambassador to Sweden, Embassy of India, Stockholm
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State Secretary to Minister for International Development Cooperation and Foreign Trade, Government of Sweden
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President and CEO, Swedish Space Corporation
- **Sanjay Kumar**  
CEO, Geospatial World Chamber of Commerce & Geospatial World
- **Robin Sukhia**  
Secretary General and President, Sweden-India Business Council (SIBC)
- **Pär Hedberg**  
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- **Ted Elvhade**  
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- **Jens Lundström**  
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- **Palash Jain**  
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- **Olof Björck**  
Head of Sales and Products, AAC Clyde
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- **Sethu Saveda Suvanam**  
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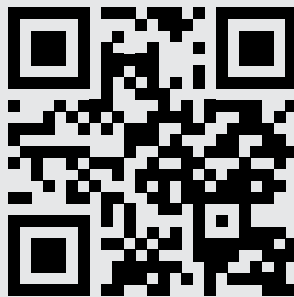
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