

## Newsletter

Jan 2025

Issue 2

Working Together Winning Together

#### In This Edition

- + Message from the President Welcome 2025
- + In Focus
  India's Space Odyssey
- + Industry Focus
  Semiconductor
- + Announcements
  New IBCL Board
  Members
- + Embassy News
- + IBCL Events
  Upcoming events
  Past events
- + **IBCL Member News** Members Corner
- + **Infographics**India visualized
- + **Learning**Luxembourgish
  Language
- Luxembourg, India
   Tourist Attractions
   Winter wonderland
   Maha Kumbh
- + Become a member
- + Useful Links

# India's Space Odyssey: A Triumph in Satellite Docking and a Legacy of Innovation



## **Message from the President**

## Reflecting on 2024 and Embracing Opportunities in 2025 with IBCL



Dear Members of IBCL,

As we step into 2025, I want to take a moment to express my heartfelt gratitude for your unwavering support and active participation over the past year. It has been a true honor to serve as your president during a year marked by meaningful dialogues, collaboration, and growth. Together, we have strengthened IBCL as a dynamic platform that empowers and connects our members.

In 2024, we celebrated significant milestones through impactful events, workshops, and networking opportunities, fostering innovation and addressing key challenges. These achievements are a testament to the dedication and vibrancy of our remarkable community.

Looking ahead, we are excited to build on this momentum in 2025. Our focus will be on deepening engagement with you and strengthening collaborations with other chambers in Luxembourg to tackle critical issues and advocate for positive change in the face of global challenges. IBCL remains steadfast in its commitment to supporting the business community and contributing to Luxembourg's growth.

Thank you for your trust, contributions, and partnership. Wishing you and your loved ones a successful and fulfilling New Year.

Yours sincerely,

#### **Himanshu UPADHYAY**

President & Member of the Board

Know more about IBCL: www.ibcl.lu

Become a member: Members

## In Focus

#### India's Space Odyssey: A Triumph in Satellite Docking and a Legacy of Innovation



India's space program, once a fledgling endeavor, has emerged as a global leader in space exploration and technology. The recent achievement of successfully docking satellites in space marks another milestone in the nation's journey. This accomplishment not only highlights India's growing technological prowess but also cements its position as a major player in the global space industry.

#### A Brief Look at India's Space History

India's space journey began humbly in 1962 with the establishment of the Indian National Committee for Space Research (INCOSPAR) under the visionary leadership of Dr. Vikram Sarabhai, often referred to as the father of India's space program. In 1969, the Indian Space Research Organisation (ISRO) was formed, laying the groundwork for a legacy of scientific excellence. The early days were modest. The first satellite, **Aryabhata**, was launched in 1975 using a Soviet rocket. It wasn't until the 1980s that India launched its first indigenously developed satellite, **Rohini**, into orbit using its own **SLV-3** rocket. These humble beginnings were driven by a vision of leveraging space technology to address societal needs such as communication, education, and disaster management.

#### The Last Two Decades: A Leap Forward

Over the past 20 years, India has made remarkable strides in space technology, innovation, and exploration. Here are some key milestones:

#### 1. Chandrayaan-1 (2008):

India's first lunar mission, which confirmed the presence of water molecules on the Moon, a discovery of immense scientific importance.

#### 2. Mangalyaan (2014):

The Mars Orbiter Mission made India the first country to successfully reach Mars orbit on its

maiden attempt and at a fraction of the cost of similar missions, showcasing India's cost-effective approach to space exploration.

#### 3. Record-Breaking PSLV Launch (2017):

ISRO launched 104 satellites in a single mission, demonstrating India's capability to handle complex satellite payloads and solidifying its reputation as a reliable satellite launch provider.

#### 4. Chandrayaan-2 (2019):

While the lander mission faced challenges, the orbiter continues to provide valuable data, advancing India's lunar exploration goals.

#### 5. Gaganyaan (Ongoing):

India's ambitious human spaceflight program aims to send astronauts to space, marking its entry into an elite group of nations with manned space capabilities.

#### 6. Chandrayaan-3 (2023):

India became the first country to achieve a soft landing near the Moon's south pole, a region of high scientific interest due to its potential water ice deposits.

#### 7. Satellite Docking (2025):

The recent achievement of docking satellites in orbit is a technological milestone. This capability opens the door to in-orbit satellite servicing, refueling, and the construction of larger space structures, crucial for future deep-space missions and space station projects.

#### Significance of Satellite Docking for the Global Space Industry

#### 1. In-Orbit Servicing and Repairs:

With docking capabilities, satellites can now be serviced, repaired, or upgraded, extending their operational lifetimes and reducing the cost of replacing defunct satellites.

#### 2. Space Debris Mitigation:

Docking technology allows for the controlled de-orbiting of non-functional satellites, addressing the growing problem of space debris.

#### 3. Advancing International Collaboration:

India's achievements inspire and facilitate international partnerships, offering affordable and efficient solutions for countries with emerging space programs.

#### 4. Support for Future Missions:

The docking capability is critical for assembling modular space stations, enabling deeper space exploration, and supporting human missions to the Moon, Mars, and beyond.

#### Why India's Achievements Matter Globally

India's cost-efficient approach to space technology has democratized access to space, enabling even smaller nations to launch satellites and participate in space exploration. Its advancements in satellite docking also position it as a key player in the emerging field of space logistics and infrastructure.

Furthermore, India's success demonstrates the value of collaboration, as ISRO has worked closely with agencies like NASA, ESA, and JAXA. By continuing to innovate, India not only advances its own capabilities but also contributes to the collective progress of humanity in exploring and utilizing space.

The potential collaboration between ISRO and Luxembourg's space industry offers a unique synergy that could benefit both nations. ISRO's expertise in cost-effective satellite launches, planetary exploration, and technological innovation aligns perfectly with Luxembourg's strategic focus on space mining, satellite communications, and in-orbit servicing. Luxembourg, as a hub for space finance and the home to cutting-edge companies like SES and Spire Global, can provide ISRO access to advanced technologies and investment opportunities. Conversely, ISRO's proven track record in developing low-cost, high-efficiency space missions can support Luxembourg's goal of

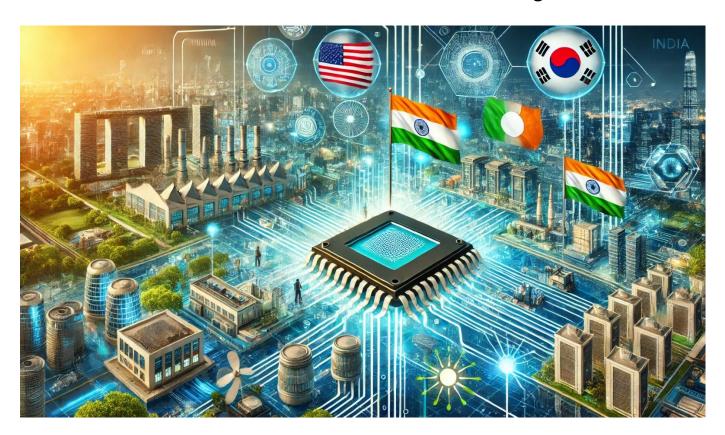
expanding its presence in the global space economy. Together, they can lead initiatives in sustainable space exploration, space resource utilization, and innovative satellite applications, fostering global cooperation and advancing the frontiers of human progress in space.

#### A Vision for the Future

As India sets its sights on future missions such as **Aditya-L1** for solar research, interplanetary exploration, and developing reusable launch vehicles, the nation is poised to play a pivotal role in shaping the future of space exploration. Its recent success in satellite docking is not just a technological achievement but a testament to the country's ingenuity and determination. India's journey from launching sounding rockets in the 1960s to achieving complex space missions is a story of resilience, vision, and innovation. As it continues to push the boundaries of what is possible, India is inspiring a new generation of dreamers and doers to reach for the stars.

## **Industry Focus**

#### India's Semiconductor Revolution: A Global Hub in the Making



India's semiconductor industry is experiencing a remarkable boom, fueled by strategic government initiatives such as the **Semicon India Program** and a \$10 billion incentive package for manufacturing and design. Global giants like Intel, **Micron Technology**, and **TSMC** have shown interest, with Micron committing over **\$800 million** to set up an assembly and testing plant in Gujarat. Partnerships with countries like the **USA**, **Taiwan, Japan,** and **South Korea** are fostering knowledge exchange and investment. This surge positions India as a global hub for semiconductor innovation, driving technological self-reliance and economic growth.

Central to India's semiconductor boom is the **India Semiconductor Mission (ISM)**, a government initiative designed to establish the country as a global hub for semiconductor and display manufacturing. Launched under the **Ministry of Electronics and Information Technology**, ISM aims to provide policy support, facilitate infrastructure development, and foster collaboration with global companies to strengthen India's semiconductor ecosystem. The mission also emphasizes skill development, innovation, and research in chip design and manufacturing. By aligning with the broader vision of "Make in India" and "Digital India," ISM is paving the way for India's emergence as a leader in the global electronics value chain.

## **Announcements**

#### IBCL has a new board member

IBCL is delighted to announce the appointment of Prash CHANDRASEKHAR as our new board member. As a dedicated advocate for Luxembourg as a business hub, Prash draws on over 15 years of experience in consulting and banking to connect with business leaders, entrepreneurs, investors, and key stakeholders.

Through his efforts, he showcases Luxembourg's exceptional talent, visionary leadership, and immense potential for high business growth to a global audience.

1. **Prash CHANDRASEKHAR** 

**Board and Associate Member** 



## **Embassy News**

Union Minister of Commerce & Industry Mr. Piyush GOYAL held an engaging interaction with Indian students at the Catholic University of Leuven in Belgium, which also saw participation of senior faculty members. Hon'ble Minister Goyal spoke about the remarkable growth of India in the last decade driven by structural reforms, innovation, decisive leadership and urged the Indian students to be part of this success story during the Amrit Kaal.

The Hon'ble Minister also interacted with IBCL board member Aditya Sharma during a separate engagement organized with investors and leaders from Belgium and Luxembourg.



## **IBCL Events**

### **Upcoming Events Q1-Q2 2025**

Date	Event	Location
Feb-25	Empowering Student Wellbeing: Innovating Education with Technology for a Healthier Tomorrow	Luxembourg University
Mar-25	IBCL Global Investment Forum: Bridging Opportunities Across India and Luxembourg	The Luxembourg Chamber of Commerce
Apr-25	Navigating Global Business Challenges: Legal Insights and	Webinar, DSM Avocats, Luxembourg

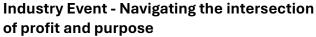
	Strategic Opportunities in a Changing World	
	From Ideas to Impact: Fueling the	
May 2025	Entrepreneurial Spirit in	LHoFT
	Luxembourg's Next Generation	
	<b>Exploring New Frontiers:</b> A Global	
June 2025	Dialogue on Space Innovation and	EY
	Collaboration	

#### **Past Events**

## 15<sup>th</sup> Anniversary Event – IBCL 15<sup>th</sup> Anniversary



Fintech - Campus event @ LHOFT, LFF & Solvay Brussels School of Economics and Management





Space Ecosystems Event - Bridging Space Ecosystems: India & Luxembourg



Taxation and Investment Policies of India and Luxembourg for cross-border financing



Knowledge & Technology Capability evolution and partnership





Members get free access to all the events organized by IBCL. To become a member, visit the IBCL website.

## **IBCL Member Corner**

#### Some of our esteemed members



























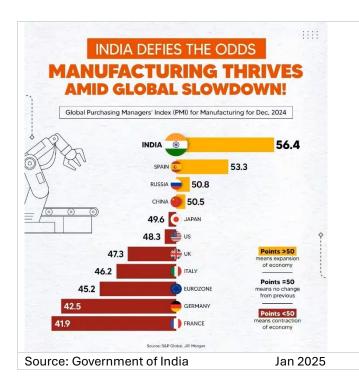








## Infographics





## Learning

**Luxembourgish:** Luxembourgish is a West Germanic language that is spoken mainly in Luxembourg. About 300,000 people speak Luxembourgish worldwide. The language is a standardized language and officially the national language of the Grand Duchy of Luxembourg.

#### Where to learn Luxembourgish?

Learning Luxembourgish is essential for residents as it fosters integration, cultural understanding, and community cohesion. The Luxembourg government supports language learning through courses provided by the National Institute of Languages (INL) and offers financial aid for language courses. More information can be found <a href="https://example.com/here">here</a>.

IBCL highly encourages the Indian diaspora in Luxembourg to learn this language, and there are plenty of places to learn Luxembourgish. Follow this link to learn more about the learning options available here.

## **Luxembourg Attractions**

#### Christmas Markets in Luxembourg City: A Magical Winter Wonderland

As the festive season approaches, Luxembourg City transforms into a winter wonderland, offering visitors an enchanting experience steeped in Christmas magic. The city's Christmas markets, locally known as "Winterlights," light up the streets with sparkling decorations, wooden chalets, and the irresistible aroma of festive treats. It's a magical world waiting to be discovered, offering an unforgettable experience for locals and tourists alike.



Image Credit: www.luxembourg-city.com

Scattered across key locations like **Place d'Armes**, **Place de la Constitution**, and **Place Guillaume II**, the markets showcase a blend of tradition and modernity. Visitors can browse handcrafted gifts,

Christmas ornaments, and unique souvenirs while savoring Luxembourgish specialties such as **Gromperekichelcher** (potato pancakes) and mulled wine. The iconic ferris wheel and ice-skating rinks provide entertainment for families, while live music and carolers create a festive atmosphere. For those seeking a deeper connection to the season's spirit, guided tours are available, offering insights into Luxembourg's rich history and its unique take on Christmas celebrations. From charming nativity scenes to twinkling lights adorning the streets, Luxembourg City encapsulates the essence of the holiday season.

Whether you're shopping for gifts, enjoying festive treats, or simply soaking in the ambiance, Luxembourg's Christmas markets are a celebration of joy, tradition, and togetherness.

For more information on Christmas Markets in Luxembourg City: click here

## **India Attractions**

The **Mahakumbh 2025**, the world's largest spiritual gathering, will take place in Prayagraj, India, from **January 13 to April 26, 2025**, drawing an estimated **150 million people** from across the globe. This ancient festival, deeply rooted in Vedic traditions, celebrates the sacred confluence of the Ganga, Yamuna, and mythical Saraswati rivers.

Pilgrims believe that bathing in these waters during the Mahakumbh cleanses the soul of sins and grants liberation (moksha). With origins in the cosmic legend of the churning of the ocean (Samudra Manthan), the Mahakumbh embodies humanity's timeless pursuit of spiritual awakening and global unity.



For more information about Mahakumbh 2025: click here

Subscribe Today!
Cancel anytime

Have any suggestions? Write to us at <a href="mailto:contact@ibcl.lu">contact@ibcl.lu</a>

Follow us









#### **IBCL - Indian Business Chamber of Luxembourg ASBL**

45 Route d' Arlon, L-8009 Strassen +352 445 905, +352 445 918 contact@ibcl.lu | www.ibcl.lu

I am informed that I can object to the processing of my personal data for marketing purposes at any time, either by e-mail addressed to <a href="mailto:contact@ibcl.lu">contact@ibcl.lu</a> or by clicking the link <a href="mailto:Unsubscribe">Unsubscribe</a>.