ISSN: 2755-8339

Journal of Business Research and Reports

SCIENTIFIC Research and Community

Review Article

Open Access

Indra in the Global High-Tech Economy: Anatomy of A Strategic Transformation (2005–2025)

Ángel Calvo

University de Barcelona, Spain

ABSTRACT

This article analyses Indra's trajectory as a Spanish high-tech company in the defence, transport and information technology sectors, from one of its turning points in 2005 to its consolidation as a multinational company present in more than 140 countries in 2025. The aim of the study is to examine how the interaction between the state, markets and private actors determined its evolution, highlighting the phases of birth, restructuring, growth and internationalisation. The methodology combines the analysis of corporate reports, sustainability reports, investor presentations and secondary sources, which are certainly scarce, allowing us to reconstruct a detailed picture of the business and institutional dynamics.

***Corresponding author**

Ángel Calvo, University de Barcelona, Spain.

Received: March 16, 2026; **Accepted:** March 20, 2026; **Published:** March 30, 2026

Keywords: Indra, High-Tech Industry, Internationalisation, Innovation, Joint ventures

Introduction

Over the last three decades, Information and Communication Technologies (ICT) have transformed the logic of productive sectors in the global economy. ICT has placed companies operating in strategic areas such as defence, security, transport and digital management at the centre of academic and political debates. Reports indicate that the digital economy, driven by ICTs such as AI, Big Data and IoT, has transformed commerce, finance, health and labour, among other sectors, with 15% of global GDP growth attributable to digital technologies and productivity rates up to 25% higher [1-2].

Observatories analyse ICT trends in transport for efficiency and sustainability, while digital management drives debates on productivity and economic growth, with an emphasis on innovation and policy [3].

Government plans and research centers highlight the role of ICT in defense and security, with investments in cyber defense, AI, and integrated systems, generating debates on innovation and risks in international contexts.

According to a high credibility and consensus assessment, primary sources (governmental and OECD) and secondary sources (specialised reports) show consensus on ICT transformation and its relevance in debates, with consistent data from the last 18 months; no significant discrepancies were detected.

There is a theoretical discussion about the nature of these companies, which is articulated around two opposing poles.

Recent European reports and academic analyses highlight the debate on the role of the state in sectors such as defence, energy and technology, with polarised positions between public intervention and the free market [4].

One side argues that state support undermines the efficient allocation of resources. Various critics point out that state intervention introduces political bias, distorts competition and creates inefficiencies in the distribution of limited resources, prioritising partisan interests over objective criteria.

The opposite view holds that, in strategic sectors, public action constitutes a necessary condition for consolidating national industrial champions capable of competing in international markets. Adherents emphasise that state support corrects market failures, promotes strategic autonomy and enables national companies to compete globally, as in defence and technology.

Indra offers a paradigmatic example of how a company born at the crossroads of public and private capital can become a global player in knowledge-intensive industries. The debate about Indra fits into this framework, showing how the company's evolution can be explained by the interaction between the state, the market and private alliances.

The methodology employed is descriptive in nature and draws on a variety of sources: Indra's annual reports, sustainability reports, corporate presentations to investors and academic studies. This corpus allows for a diachronic analysis using statistical data, institutional testimonials and comparative references with other players in the European technology sector.

Indra's origins lie in the transformation of the publicly owned National Institute of Industry (INI) at the end of the 20th century

and the restructuring of CESELSA, a private company with experience in electronics and defence. The operation responded to the Spanish State's need to consolidate a national high-tech group capable of competing in a European scenario marked by community integration and the end of the Cold War.

The process of establishing Indra was not linear, but rather the result of complex negotiations between the public and private sectors. The INI, Telefónica and CESELSA played key roles in the formation of the new conglomerate. Successive mergers and capital contributions gave rise to a group with an initial capital of an estimated 10 billion pesetas and a workforce of 5,300 employees, of whom more than 60% were highly qualified technicians.

The government acted as the main driving force, establishing alliances with foreign companies such as Thomson-CSF, which acquired 24.9% of the initial capital. The banks played a balancing role, ensuring the financial viability of the operation. Within this framework, the new Indra emerged in 1993 as a mixed company, with a state majority but significant private participation.

The second phase of Indra was characterised by a process of internal restructuring and market consolidation. After its incorporation, the company had to undergo financial and labour adjustments to ensure its viability. Between 1993 and 1997, redundancy plans were implemented and rationalisation measures were put in place, which enabled the company to stabilise its accounts.

The turning point came with the partial privatisation in 1999, when the State Industrial Holdings Company (SEPI) reduced its stake, allowing two financial institutions – Caja Madrid and Banco Zaragozano – and Thomson-CSF to enter into a shareholder agreement. This operation reflected Indra's transition from a model of state control to shared governance with private actors, in line with the economic liberalisation policy of the time.

At the same time, Indra made selective acquisitions, such as the integration of Tecnología Informática Avanzada (TIASA) and the purchase of companies specialising in electronic documentation and e-commerce security. These transactions strengthened its capabilities in emerging sectors, consolidating its position in the Spanish ICT market, where by 1999 it ranked second in terms of turnover, behind only Andersen Consulting. The acquisition of TIASA was carried out in two phases: half in December 1997 and the other half in May 1999 for 2.9 billion pesetas, strengthening its position in computer systems and services.

Growth, the Zenith and the Crisis of Protected Growth (2005-2014)

The period prior to 2008 was one of widespread economic optimism. Spain was experiencing an expansionary cycle that drove public investment, directly benefiting Indra. In this context, Indra's strategy of using its secure domestic revenue base to finance geographical expansion seemed sound and was well received by the market. This model fit the 'national champion' paradigm: a company that, with the implicit or explicit backing of the state, uses a protected domestic market to gain the scale necessary to compete internationally. Its shares reached an all-time high in 2007 (€20.73), a level that would not be surpassed again for more than 15 years.

The 2000s and early 2010s represented Indra's period of greatest expansion and international consolidation. The company was able to take advantage of the growing digitalisation of the economy, the role of the public sector in modernising infrastructure and the opening up of markets in Latin America and Asia. In the 2000s, Indra experienced a cycle of sustained growth based on sector diversification, technological innovation and expansion of its customer base. In terms of production, Indra developed infrastructure in Madrid, Barcelona and other Spanish cities. It invested in production centres and offices in Madrid (headquarters), Barcelona (innovation centres) and other cities such as San Fernando de Henares and Aranjuez, supporting growth in IT and defence during 2005-2015 [5].

In 2005, Indra was a defence specialist in the midst of diversification. Far from being a mere diversified technology conglomerate, Indra was already, at its core, a company specialising in defence and dual-use technologies. Its origins, the result, as we know, of the merger of public and private sector companies in the 1990s, gave it a technological DNA linked to military electronics and command and control systems. The company represented the consolidation of the high-tech defence sector in Spain, a role it never abandoned [6].

However, its strategy in 2005 was to capitalise on this position. It operated with a diversified model in two main areas: 'Solutions' and 'Services'. That year, the company laid the foundations for its expansion with a net profit of €104 million (+30%) on sales of €1.202 billion (+11.4%). Its business portfolio reflected its role as a leading government contractor: it developed electronics for key weapons systems, managed the information security of ministries and carried out vote counting in electoral processes. This dominant position extended to critical infrastructure (air traffic, motorways) and the private sector (telecommunications, finance).

Annual reports highlight growth in sales and order book between 2005 and 2015, driven by acquisitions, IT innovation and expansion in sectors such as defence, transport and energy, with a presence in 149 countries and subsidiaries in 46 by 2015.

Growth was supported by flagship contracts with the Spanish government, such as air traffic systems for AENA, the development of defence applications for the Ministry of Defence and international projects with NATO. At the same time, Indra established itself as a supplier of electoral systems, with high-impact contracts in Venezuela, Argentina and the Philippines.

The R&D strategy was key. The company allocated between 7% and 9% of its revenue to innovation, placing it above the industry average. The priority areas were simulation systems, traffic automation, cybersecurity and e-government solutions. In 2010, Indra presented itself as a leader in innovation in Spain, with more than 75% of its workforce holding university degrees.

In the decade prior to 2019, the percentage of sales devoted to R&D ranged between 5% and 8% (Indra, Sustainability Report 2019, p. 19). Since then, the upper and lower limits have widened considerably: 7% during the 2019 financial year (Indra Sistemas, S.A. and subsidiaries, Annual Accounts Report as of 31 December 2020, pp. 101-102) and 17.7% in the 2020 financial year (Annual Accounts Report as of 31 December 2021, p. 125).

In terms of revenue structure, Indra managed to diversify its portfolio: (a) defence and security (Ministry of Defence, NATO, Eurofighter); (b) transport and air traffic (AENA, Eurocontrol and international airports); (c) public administration and elections (Venezuela, Argentina, Philippines); (d) financial services (Spanish and Latin American banking); and (e) energy and telecommunications (automation and consulting).

From a production standpoint, Indra consolidated a model based on high human capital intensity. The workforce multiplied and productivity improved, while margins remained above the European ICT sector average. In 2010, it had nearly 28,000 employees, almost triple the workforce in 2000, and more than 75% were engineers, graduates or senior technicians. The company invested in technology clusters in Madrid and Barcelona, but also in international subsidiaries in Argentina, Brazil, Mexico, China and the Philippines.

Under the long-standing leadership of Javier Monzón, the era of peak performance and the crisis of protected growth was defined by a dual strategy: maintaining a dominant position in national public contracts whilst using that foundation to finance an ambitious international expansion, primarily in Latin America. This geographical expansion was designed to reduce dependence on the Spanish market and capitalise on growth in emerging economies, with an almost exclusive focus on Latin America. The sector portfolio was remarkably balanced: Security and Defence (23%), Transport and Traffic (22%), Public Administration and Healthcare (14%), and others.

However, the model contained the seeds of its own downfall. The sovereign debt crisis in Europe forced Spain to implement severe cuts in public spending, eroding Indra's business base. Diversification, which was supposed to mitigate risk, became a source of complexity and lack of control, with cost overruns on international projects and currency depreciation. In 2014, although revenues grew, the company reported a loss of €92 million, caused by massive provisions (€313 million) resulting from poor project management. The perfect storm was completed by reputational damage due to the company's involvement in corruption cases. In January 2015, Javier Monzón stepped down as chairman after 22 years.

Survival, Restructuring and Reorganization: 2015-2025

The tenure of Fernando Abril-Martorell (2015-2021) – who was close to Telefónica chairman César Alierta and enjoyed strong backing from the government, SEPI and Corporación Financiera Alba – coincided with a period of survival and restructuring, based on rigorous reorganisation. The 2015-2018 Strategic Plan shifted the focus from growth to profitability, efficiency and cash generation. A tough workforce restructuring programme was launched, functions were centralised and rigorous project control was imposed [7].

In his attempt to turn the company around, Abril-Martorell soon stumbled upon the "necessary operations" of the Spanish political and business environment. In 2016, Indra launched a takeover bid for Tecnocom, a technology company whose main shareholders are Abanca (formerly Caixa Galicia), journalist Lalo Azcona and Getronics, with 20%, 18.7% and 11% respectively. Tecnocom, which had cost £300 million, lost £10.6 million in 2016. Indra admitted that the costs of restructuring Tecnocom's workforce meant that net operating profit fell from £32 million to £26 million in the first quarter of 2018.

Other attempts by Abril-Martorell to grow failed. Such was the case in 2019 with ITP, a Basque aircraft engine company whose acquisition was considered 'transformational' for Indra as it was seen as 'one of the world leaders in the aerospace and defence sector'. The clash of conflicting business interests – involving various investment funds and Airbus – caused the deal to run aground, despite the approval of the Spanish government and the dominant party in the Basque Country, the PNV.

The most significant decision of this period was the creation of Minsait in 2016, with the aim of boosting competitiveness, achieving profitable and sustainable growth, and capitalising on the opportunities offered by digitalisation. All consulting and digital transformation businesses were grouped together. This manoeuvre created a 'strategic wall' between two very different business models: IT (higher volumes, lower margins) and the high-tech core of Defence and Traffic. This separation not only provided transparency for investors but, crucially, created strategic flexibility (bringing in partners, partial sale) which is being actively explored in the current plan.

Indra took part in some of the leading national and international R&D&I initiatives that are shaping the next generation of technologies for various sectors. It conducts research in areas such as big data, analytics, the Internet of Things and cybersecurity; and develops digital solutions for smart cities, transport, air traffic, energy, e-Health, financial services, industry, security, defence, space and simulation.

The current phase (2022–present) marks the culmination of the strategic pivot. Driven by a new geopolitical landscape and an explicit mandate from its main shareholder (SEPI), Indra has repositioned itself as a national champion in defence and aerospace. This vision is articulated through the "Leading the Future" plan, devised in 2023 and presented in 2024, with the initial goal of achieving revenues of €10 billion by 2030 (Expansión, 9 September 2025). The plan is part of the drive to re-establish Europe as a technological powerhouse. Europe is suffering from a historic capability shortfall: budget cuts between 1990 and 2010 resulted in an investment deficit of over $80 billion compared to pre-1992 levels, and $16 billion in relation to the minimum threshold of 2% of GDP set by NATO alone. This lag now translates into a worrying level of obsolescence in land-based systems, air defences, and combat ships and aircraft. The conflict in Ukraine in 2022 acted as a definitive catalyst, validating and accelerating a strategic pivot towards defence and security that was already in the making. The new geopolitical paradigm, with a historic increase in defence spending in Europe and an urgent demand for strategic autonomy, became the main driver of the new strategy. The current challenges posed by hybrid warfare include widespread disinformation, the cutting of undersea telecommunications cables, and drones appearing at airports, all of which necessitate a cyber-resilient response to these risks.

Indra's repositioning as a leader in defence and aerospace is taking shape through a number of transformative moves. The first of these - the acquisition of Hispasat from Redeia for €725 million, which is nearing completion - represents a key step towards gaining control of critical secure and government communications infrastructure, positioning Indra as a key player in the European space sector. Secondly, the government's appointment of Indra as the national coordinator for the Future Air Combat System establishes the company as the driving force behind Spain's defence industrial ecosystem for the coming decades. Under a new corporate structure, the group has been organised into four divisions (Defence, Space, Air Traffic and Minsait), with each given a clear mandate and Minsait granted greater operational autonomy to seek strategic partners.

Over the last six years, Indra has invested more than €1.6 billion in R&D&I, equivalent to 8.8% of sales. Expenditure on R&D projects carried out during the 2024 financial year, including capitalised projects, accounted for 2.3% of the Group's total sales for that financial year [8].

Indra's development is inextricably linked to its complex relationship with the Spanish state, its main shareholder through SEPI. Far from being a passive investor, SEPI's role has evolved into that of an active strategic anchor. In 2022, SEPI announced its intention to increase its stake to 28%, a clear sign of Indra's importance to national strategic interests.

This symbiosis aligns the company with national industrial and defence policy, providing stability and political backing. However, it introduces governance risks and tensions between market interests and the state's strategic objectives. The controversial replacement of several independent directors in 2022 highlighted this inherent tension. Recent appointments to the senior management team, featuring individuals with extensive experience in industry and defence, underscore the company's full commitment to the new strategic direction driven by the state.

Indra has thus prevailed in previous tenders under the PEM programme, having been awarded loans totalling €270 million for the NGWS national technical contract programme and a further €80 million, in partnership with Airbus, for the study of the European FCAS fighter jet (Expansión, 16 October 2025). Whether acting alone or in partnership with others, it has secured the full €4.7 billion in new interest-free state loans, intended to modernise the capabilities of the Armed Forces. By securing these loans, the company demonstrates the government's interest in creating a national champion in defence, capable of competing with other foreign giants. This aid package encompasses a dozen new programmes running until 2031. Telefónica, Escribano Mechanical and Engineering (EM&E), GMV, Epicom and Cipherbit complete the group of beneficiaries [9].

That said, it is worth noting that Spain has slipped down the rankings of the world's leading economies by GDP. However, the investments that are set to be made open up the possibility of several Spanish companies joining the ranks of major players with international standing.

Table 1: Ranking of the Leading Defence Companies

Rank 2023	Rank 2022	Company	Country	Total revenues millions $ (2023)	Empleados	Ingresos / empleado
1	1	Lockheed Martin Corp.	United States	67.570	122.000	553.852
2	2	RTX	United States	68.920	180.000	382.889
3	3	Northrop Grumman Cor	United States	39.290	100.000	392.900
4	4	Boeing	United States	77.790	170.000	457.588
5	5	General Dynamics Corp.	United States	42.270	100.000	422.700
6	6	BAE Systems	United Kingdom	30.350	99.800	304.108
7	9	Rostec	Russia	33.430	600.000	55.717
8	8	AVIC	China	83.430	400.000	208.575
9	7	NORINCO	China	76.600	216.000	354.630
10	10	CETC	China	55.990	150.000	373.267
11	13	L3Harris Technologies	United States	19.420	50.000	388.400
12	14	Airbus	Trans-European	70.710	147.893	478.116
13	12	Leonardo	Italy	16.520	53.566	308.405
14	11	CASC	China	41.170	174.000	236.609
15	16	CSSC	China	48.950	196.000	249.745
16	17	Thales	France	19.910	81.000	245.802
26	29	Rheinmetall	Germany	7.750	23.108	335.382
42	44	Rafael	Israel	3.810	10.000	381.000
46	25	Dassault Aviation Group	France	5.190	13.533	383.507
51	50	Fincantieri	Italy	8.270	21.215	389.819
88	94	Navantia	Spain	1.550	9.900	156.566
89	107	Czechoslovak Group	Czechia	1.870	10.000	187.000

Rank[a]		Company[b]	Country[c]	Arms revenues, 2023	Arms revenues, 2022[d]	Change in arms revenues, 2022–23 (%)	Total revenues, 2023	Arms revenues as a % of total revenues, 2023
2023	2022							
86	115	ViaSat[j]	United States	1 230	1 210	1.7	4 280	29
87	105	Hyundai Rotem	South Korea	1 210	840	44	2 750	44
88	94	Navantia	Spain	1 190	1 050	13	1 550	77
89	107	Czechoslovak Group	Czechia	1 190	950	25	1 870	64
90	90	Melrose Industries	United Kingdom	1 190	1 150	3.5	4 160	29
91	117	NEC Corp.	Japan	1 140	620	84	24 800	4.6
92	92	Fluor Corp.	United States	1 110	1 070	3.7	15 470	7.2
93	93	Mitre Corp.[e]	United States	1 100	1 060	3.8	2 360	47
94	96	Mazagon Dock Shipbuilders	India	1 090	970	12	1 150	95
95	91	The Aerospace Corp.	United States	1 060	1 080	–1.9	1 290	82
96	118	Mitsubishi Electric Corp.	Japan	1 050	620	69	37 500	2.8
97	103	HEICO Corp.	United States	1 040	900	16	2 970	35
98	89	United Launch Alliance[e]	United States	1 030	1 110	–7.2	..	..
99	101	Howmet Aerospace	United States	1 020	960	6.3	6 640	15
100	102	TTM Technologies	United States	1 010	900	12	2 230	45

In the ranking of the leading defence companies, 61 are based in non-European countries. The US tops the list with 41 companies, whilst China has 9, Japan 5, and India and Israel 3 each, all of which also feature in the top 50.

The United Kingdom leads the way in Europe in terms of the number of companies, with 7, followed by France and Germany with 5 each in the top 50 and 4 – only one in the top 50, the arms giant Rheinmetall in 26th place, respectively.

It is interesting to note that many countries considerably smaller than Spain, with economies amounting to considerably less than half of Spain's GDP, have companies on that list.

Indra is not currently, and has not been for many years, among the top 100 companies in the ranking, list and statistics compiled by SIPRI – the Stockholm International Peace Research Institute. One has to go back to 2009, when it was ranked 70th in that ranking (down from 65th in 2008) [10].

Internationalisation (2005–2025)

Going to focus on the key drivers of expansion, Indra's internationalization-characterised by global expansion through subsidiaries and strategic alliances-is one of the most distinctive features of its history and the key to its consolidation as a technology multinational (Appendix 1). Although its origins date back to the mid-1990s with the creation of Indra América in Argentina (1994), it was from the 2000s onwards that the process took on a structural dimension.

Indra established subsidiaries in Latin America between 2005 and 2015. The list includes Indra Brasil LTDA (Brazil), Indra Colombia Ltda. (Colombia), Indra Company LTDA (Brazil, formerly Indra Brasil LTDA), Indra México, Indra Argentina, Indra Chile, Indra Perú, Indra Panamá, with operations in 11 countries and centres of excellence across the region.

The case of Brazil holds great significance. Indra's operations in Brazil follow a distinctive sequence: projects and technology export - offices - production and sales - export to neighbouring countries - design and production in Brazil - sales in Brazil, neighbouring countries and the rest of the world [11].

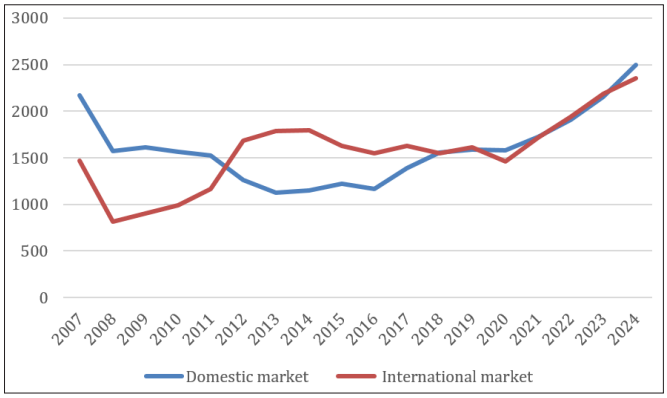
Indra entered Brazil in 1996, supporting Spanish multinationals in their expansion. At that time, it only had offices outside Spain in Buenos Aires, but saw Brazil as a place of opportunity. Brazil is a strategic target for Indra on a global scale. It has more than 7,000 professionals, continuous growth in sales - which have risen by 25% in recent years- and, all this, with extensive geographical coverage; 18 offices -in Brasília, Belo Horizonte, Rio de Janeiro, São Paulo, Barueri, Curitiba, Salvador de Bahía, Fortaleza, Maceió, Florianópolis and Recife-, as well as two Software Labs -in Goiânia and Campinas- and an R&D Centre at the Tecnocentro in Salvador de Bahía.

Subsidiaries in Asia include Indra Philippines (the first in Asia, established in the 1990s but consolidated in the 2000s), Indra Technology Solutions Malaysia SBN DHB (2011), PT. Indra Indonesia (2011), Indra Kazakhstan Engineering LLP (2011), with a presence in the Philippines, Malaysia, Indonesia and the Middle East [12].

The process of this internationalisation was not primarily organic, but rather based on large-scale acquisitions designed to rapidly gain scale and local presence. The prime example was the purchase of the Brazilian consultancy firm Politec in 2011, a transaction aimed at consolidating Indra as a leading player in the region. These acquired companies were generally large IT services firms with a broad client portfolio, but they also introduced considerable operational complexity, potentially tighter margins and high exposure to the volatility of local currencies-risks that would materialise severely by the end of the decade.

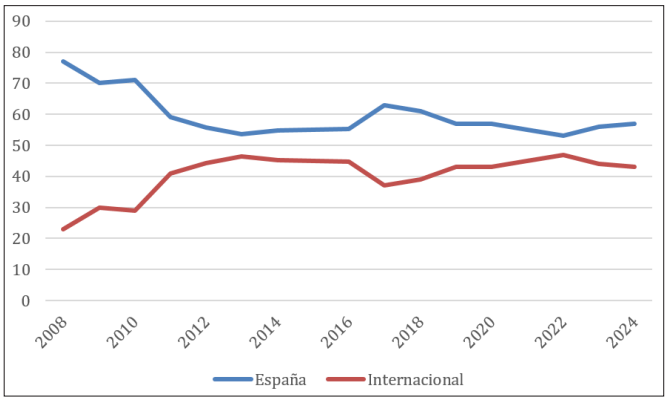
In addition to increasing its volume, Indra has diversified its international operations. It has recently strengthened its presence in the US with an investment of over 50 million dollars in a new manufacturing plant that will expand its industrial and technological capacity to produce radars, ground-to-air communication radios and other airspace navigation and surveillance systems in the country. The new facility, located in the Kansas City area, will be operational in early 2026 and will create more than 200 new jobs over the next three years.

A basic way of measuring internationalisation is through market analysis by geography. Graph 1 clearly shows the enormous importance of Indra's global market, with a peak period during which it was predominant (2012–2018).



Graph 1: Indra's Sales by Region (€ million)

The trend in the workforce shows a high degree of internationalisation, as illustrated in Graph 2.



Graph 2: Trend in Indra's workforce, 2008–2024

For its part, Indra's listing on the continuous market since 1999 is an indicator of its openness to global markets.

From an organisational perspective, Indra has established an international structure organised into regional clusters, with specific managers appointed to each one. The multinational aims in this way to strengthen its international strategy.

Table 2: Detailed Internationalisation Processes

Periods	Years	Characteristics
Phase 1	1994–2000	Initial international expansion through subsidiaries in Argentina (Indra América, Indra SI) and outsourcing contracts (Aerolíneas Argentinas)
Phase 2	2000–2010	Regional expansion in Latin America (Brazil, Mexico, Chile, Colombia), combining technology exports with wholly-owned subsidiaries
Phase 3	2010–2020	Diversified globalisation, with a presence in Asia (China, the Philippines), the Middle East (Saudi Arabia, Kuwait) and Africa (Morocco, Algeria, South Africa)
Phase 4	2020–2025	Sustainable and digital internationalisation, aligned with the SDGs, with projects in smart mobility, clean energy and sustainable cities

Source: Compiled by the Author.

Finally, internationalisation is also measured by the transfer of knowledge generated in the host country to other countries. The Indra Group has established a team of radar operators at a Centre of Excellence in Peru. After seven years of uninterrupted work, a group of Peruvian engineers specialising in Air Traffic Radar Systems has developed capabilities that enable them to export engineering expertise and train specialists for other hubs in the United Arab Emirates, China and South Korea (Indra, Press release, 18 December 2025).The Indra Group's team of Peruvian radar engineers has taken its expertise to more than three continents, participating in projects and deployments in Brazil, Paraguay, Argentina, Uruguay, Ecuador, Colombia, Panama, Belize, Guatemala, El Salvador and the Bahamas in the Americas; in Ghana and Uganda in Africa; and in Iraq, Jordan, Bahrain, Indonesia, and China in Asia, in addition to their ongoing activity in Peru itself and technical stays in Spain.

A central pillar of Indra's expansion lies in alliances and joint ventures, a field in which it has accumulated extensive experience. Collaborations and alliances are formed with the most important technology leaders in the market, but also with others of lesser importance.

Table 3 : Indra : Alliances and Joint-Ventures

Partner/Alliance	Year	Area of cooperation	Key result
Raytheon (EEUU)	1997	Air traffic management	Creation of Indra ATM, export of systems
Thomson-CSF/ Thales	1993	Simulation, defence	Access to European programmes (Eurofighter, SESAR)
Hughes (EEUU)	1994	Weapons and radar systems	Maintenance in Aranjuez, technology transfer
Eurofighter GmbH	1999	Simulation and avionics	EF-2000 simulators, European contracts
Partners in LatinAmerica	2000–	Transport, banking and energy	Regional presence and electoral agreements
Alianza iTEC	2007	Air traffic	
Atexis	2020	Atexis: specialising in support solutions and the optimisation of operations and system maintenance	
Escribano, General Dynamics (former Santa Bárbara) and Sapa Placencia	2020	State-of-the-art military vehicles	Creation of Tess Defence
Leonardo	2026	Cybersecurity and cyber defence	Joint venture
Edge	2024	engineering, development, manufacture, integration, marketing and maintenance of existing and future radar systems and their components	joint venture Pulse Nova (Abu Dhabi)
Ficosa	2025	Industrial and technological capabilities	Reinforcing the concept of a flagship company
Sirt	2025	Advanced solutions in cybersecurity and cyber defence	Strengthening cyber capabilities and establishing multidisciplinary teams
Rheinmetall	2025	New car schemes in Spain	
Multiverse	2025	Development of highly optimised AI models for defence systems	
Bittium	2025	To compete in the tactical radio communications systems programme	

Piedrafita Systems	2025	Development of electrical and suspension systems for military vehicles	
Lecitrailer	2025	Manufacture of shelters and radome covers for your radars and command and control systems	
S2Grupo	2025	Joint development of advanced cyber defence capabilities and capabilities for combat in cyberspace	
Egatel S.L.U.	2025	Development and manufacture of cutting-edge solutions in electronic defence, command and control, radar, simulation, space and communications	
GMV	2025	to collaborate on the development of defence systems and services	
Arquimea	2025	Advanced solutions for new operational environments	
F1 BWT Alpine Formula 1 Team	2025	Technological collaboration	
Aicox	2025	Multi-domain; military modernisation programmes	
Axiscades (India)	2025	Solutions for the aerospace and defence market in India	
Development Bank of Latin America and the Caribbean	2025	Technological collaboration	
ELT (Italy)	2026	Multi-domain defence	
Leonardo	2026	Cyber defence of critical institutions and infrastructure	
INMAPA	2026	Engineering for military vehicles and defence systems	
Diehl Defence	2026	Development of multi-layered ground-based air defence (GBAD) systems	
Almacenes Delca	2026	to comprehensively transform and optimise the management of industrial supplies and MRO (maintenance, repair and operations) services at its production facilities in the industrial hub of the Northern Corridor	
EM&E and Intersoft Electronics Services	2026	Offer anti-drone capabilities to the defence market in Belgium	
GMV, Nord Motorreductores, Teyde 2010 and AC Precision	2026	Spanish counterbattery programme	
Ghenova	2026	Engineering for the Armed Forces	
Tresca Ingeniería	2026	Launch of the new drone factory in León	
SPARC Foundry, Televes Corporación and RBZ Robot Design	2026	High-capacity electronic circuits (gallium nitride)	

Source: Own Elaboration.

Indra has built up a network of industrial and technology partners to underpin its role as a leader in the Spanish defence sector. Indra has more than 1,000 partners, including 225 SMEs, but has identified more than 321 potential new collaborators. Since January 2025, the company has signed around 140 partnerships with national and international firms with the aim of strengthening capabilities and driving strategic projects. If we narrow the timeframe even further, in the last ten days alone the company had signed 22 MoUs (Memoranda of Understanding).

This global partner ecosystem constitutes an open and collaborative innovation model, enabling the development of joint strategic initiatives and their integration into the company's solutions and services. This ecosystem of partners and alliances is a key element in achieving a twofold objective: to continue offering cutting-edge solutions to its customers and to provide them with efficient support on a global scale (Table 3).

Growth through acquisitions is not limited to a single stage or to processes such as internationalisation.In 2011, Indra acquired the Italian IT services company Visiant Galyleo to strengthen its position in Italy and Europe. It was a phased acquisition, beginning with the purchase of 77.5% of its shares and subsequently the remainder, integrating the company as part of its global strategy, particularly in sectors such as defence, energy and telecommunications Several years later, in January 2021, Minsait acted as a vehicle for Indra to acquire a 70% stake in SmartPaper, an Italian company specialising in digital document management and document processing solutions.

As for companies specialising in e-commerce security, Indra acquired SIA in January 2020, a company specialising in digital identity, electronic signature and cybersecurity solutions applicable to the security of e-commerce transactions.

In late 2022, Indra acquired Selex, the air traffic management division of the Italian giant Leonardo - a competitor of Indra - for €44 million.

In 2024, Indra carried out as many as seven transactions. By the middle of the year, the increase in its stake in the Tess Defence consortium – responsible for manufacturing the 8x8 Dragon armoured vehicle, a contract worth over €2 billion for the Ministry of Defence - made it the consortium's largest shareholder. Indra also purchased Duro Felguera's plant in Gijón for €3.65 million to turn it "into one of the most modern factories for military vehicles and tanks in Europe", as well as Aertec's drone subsidiary; this year it has also acquired a 37% stake in SPARC, a start-up specialising in chips, of which it has become the largest shareholder. In 2024, purchases were made of the Malaga-based company Clue for around €40 million, Deimos Space (formerly a subsidiary of Elecnor), for 25 million, and the British firm Park Air Systems, a leader in ground-to-air radio systems which designs, manufactures, supplies and supports radios for air traffic management in the civil and military markets, for 12 million. Indra has strengthened its position in the drone sector by integrating Aertec Defence & Aerial Systems and the Wake Engineering division of the Spanish group CPS into its structure; the latter specialises in the design, development and production of unmanned aerial systems.

The company's growth strategy has been reflected in the acquisition of leading Andalusian firms such as the aforementioned Clue, which focuses on the development of advanced electronic technologies for the aeronautical sector, and Deuser, which specialises in industrial digitalisation.

Indra Group has acquired a 24.8% stake in FYLA, the Valencian deep-tech start-up founded in 2014 as a spin-off from the University of Valencia's Optical Fibres Group, which specialises in ultra-fast lasers and is the only company in Spain operating in this sector. FYLA, which has received financial and strategic support since 2018 from Bullnet Capital, a Spanish venture capital fund, has utilised its newly created venture capital fund Indraventures.

Indra has created a new business unit, called IndraMind, which brings together its dual-use capabilities in cybersecurity, cyber defence, electronic warfare, AI, cyber, cloud, data, and drones and anti-drones. IndraMind, which is on a par with other units such as Minsait, Defence and Air Traffic, is launching its operations with a turnover of more than €300 million, although Indra's ambition is to exceed the €1 billion mark by 2030, for which it does not rule out potential acquisitions.

As a demonstration of its commitment as a leading company, drawing on the Special Modernisation Programmes as a lever to boost the sector's competitiveness and establish it as a benchmark in European defence, Indra has shown the initiative to bring together the national defence ecosystem at events such as the 2nd National Innovation Ecosystem Summit (Madrid). In this context, the government representative stated that they were asking "Indra to exercise open, responsible leadership that drives the sector forward, incorporating the entire ecosystem [13].

The fact that Indra plays the 'pretty girl' in Spain does not excuse its glaring shortcomings. Indra Space, a subsidiary of Indra, is positioning itself to become one of 'the continent's leading companies in the space sector', with the capacity to cover the entire value chain of space projects. This does not alter the fact that Indra has been sidelined and left with no hope of joining the major alliance for the European aerospace industry to create a satellite giant in the EU, forged by the three leading figures in the EU space industry - the industrial corporation Airbus , the Italian multinational Leonardo and the French technology firm Thales - with the challenge of tackling the new era unfolding for the space sector, which demands lower prices and an end to competition amongst them [14].

The showcase of the capabilities of the subsidiary Indra Space has fallen on deaf ears, including those acquired through the purchase of Deimos, a company specialising in the manufacture and integration of small satellites, such as DRACO for the European Space Agency (ESA), and the development of flight subsystems and control software. Organisational and corporate moves, such as the change in leadership and the imminent acquisition of the Spanish commercial satellite communications operator Hispasat and control over Hisdesat, have met with the same lack of response, as has the potential of Startical, a joint venture with ENAIRE, in the development of a constellation of more than 200 low-Earth orbit satellites to improve global air traffic management and become a pioneer in global aeronautical communication and surveillance services [15-20].

Conclusion

The case of Indra illustrates the complexity of transforming a high-tech company into a global player in just over three decades. Its genesis was marked by the convergence of public and private interests; restructuring allowed for adjustments to its financial and labour structure; growth was supported by innovation, sectoral diversification and the loyalty of strategic customers; and internationalisation expanded its global reach, positioning Indra as a leader in defence, transport and ICT [20-25].

The relevance of the Indra case lies in the fact that it serves as a laboratory for understanding the tensions between public and private capital in the high-tech industry, the importance of industrial and defence policies in shaping markets, and how a company can transform itself from a national player to a globalised multinational in just over three decades.

Acknowledgements

This research falls under the auspices of the Observatori Centre d'Estudis Jordi Nadal d'Història Econòmica of the Departament d'Història Econòmica, Institucions, Política i Economia Mundial, Facultat d'Economia i Empresa (Universitat de Barcelona). I would like to thank those responsible for their support for my work. I express my gratitude to the editors and reviewers of the manuscript. Last but not least, I would like to thank telecommunications engineer and former senior RTVE executive Pere Vila for his generous and invaluable collaboration.

Annex: 1
Companies Belonging to the Indra Sistemas Group

Country	Companies
Spain	Indra Sistemas de Comunicaciones Seguras, S.L.U. Teknatrans Consultores, S.L.U. Inmize Capital, S.L. Prointec, S.A.U. Indra Business Consulting, S.L.U. Indra BPO, S.L.U. Indra BPO Servicios, S.L.U. Indra Advanced Technology, S.L.U. Indra Corporate Services, S.L.U. Indra BPO Hipotecario, S.L.U. Paradigma Digital, S.L.U. Indra Soluciones Tecnologías de la Información, S.L.U. Indra Holding Tecnologías de la Información, S.L.U. Indra Sistemas de Seguridad, S.A.U. Indra Producción Software, S.L.U. Indra Factoría Tecnológica, S.L.U. Minsait Payment Systems, S.L.U. Morpheus Aiolos, S.L.U. Sistemas Informáticos Abiertos, S.A. ALG Global Infrastructure Advisors, S.L.U. Flat 101 S.L. The Overview Effect S.L (TOE) Indra Gestión de Usuarios, S.L Mobbeel Innovations Labs S.L (Cáceres) Aplicaciones de Simulación Simtec, S.L. (SIMUMAK) Deuser Tech Group, S.L.U. (Cáceres) Arcopay, S. de R.L. de C.V. ICA informática y Comunicaciones Avanzadas, S.L. Antexia Technologies, S.L. (Vigo) Tramasierras 2021, S. L. Pecunia Cards E.D.E, S.L. Soluciones Tecnológicas Normax (Soltex), S.L. Nae Comunicacions, S.L, Unipersonal (Barcelona) Global Training Aviation, S.L.U. Indra Espacio, S.L.U. Indra Mobility, S.L. Orbitude S.L.U.
Germany	Indra II Business Outsourcing Portugal, Unipessoal, Limitada Indra Sistemas Portugal, S.A. Indra III Soluções de Tecnologia da informação Portugal, Unipessoal lda Minsait Payment Systems Portugal Unipessoal, Ltd MSS Managed Security Services GMBH Indra Avitech GmbH
Poland	Indra Sistemas Polska S.p.z.o.o.
Moldavia	Indra Sisteme S.R.L.
Romania	Indra Soluciones Tecnologías de la Información Romania, S.A. Consis Proiect S.R.L.
UK	Afterbanks, LTD Park Air Systems Limited
Norway	Indra Navia A.S Normeka, AS
Italy	Indra Italia, S.P.A. Smart Paper S.p.a. Soft Fobia, S.r.l. (Cagliari) Riganera, S.r.l. (Cagliari) Unclick, S.r.l. (Cagliari) Net Studio, S.P.A. (Prato)
Turkey	Indra Turkey Teknolojileri Çözümleri Anonim Şirketi
Latvia	Sabiedrība ar ierobežotu atbildību "Baltik IT"
Latin America	
Mexico	Ingenieria de Proyectos e Infraestructuras mexicanas S.A. de C.V. Indra Business Consulting ALG México S.A. de C.V. Indra BPO México, S.A. de C. V. Indra Sistemas México, S.A. de C.V. Indra Sistemas Transporte y Defensa, S.A. de C.V. Indra Corporate Services México, S.A. de C.V. Minsait Payment Systems México, S.A. de C.V.
Perou	Europraxis-ALG Consulting Andina, S.A.C Indra Perú S.A Minsait Payments Systems Perú S.A.C Tecnocom Perú S.A.C. Tecnocom Procesadora de Medios de Pagos, S.A. (Dominican Republic) Indra Servicios Perú, S.A.C. Indra T&D, S.A.C.
Brazil	Alg Global Infrastructure Advisors do Brasil Ltda. Prointec Engenharia Ltda. Indra Brasil Soluçoes e Serviços Tecnologicos S/A. Indra Tecnología Brasil Ltda. Minsait Brasil Ltda. Minsait Payments Systems

Argentina	IFOS, S.A. Indra SI, S.A. Azertia Tecnologías de la Información Argentina, S.A. Computación Ceicom S.A. Politec Argentina S.A. Euroinsta Argentina, S.A.
Guatemala	Soluziona Guatemala, S.A.
Chili	Indra Sistemas Chile, S.A. Minsait Payment Systems Chile, S.A. Tecnocom Chile, S.A. Nexus Payment Systems SpA
Colombia	Global Training Aviation Tecnocom Colombia S.A.S. Nae Colombia, S.A.S Indra Colombia Ltda. Minsait Payment Systems Colombia SAS Consultoría Organizacional S.A.S.
Ecuador	CREDIMATIC, S.A.
Panama	Prointec Panamá, S.A. Indra Panamá S.A.
Venezuela	Azertia Gestión de Centros Venezuela, SA
El Salvador	ACS America Latina, S.A. de C.V. Euroinsta El Salvador, S.A.
Uruguay	Soluciones y Servicios Indra Company Uruguay S.A.
North America	
USA	Prointec USA LLC Indra USA, Inc. North America T&D Group, Inc Indra Air TRAFFIC, Inc.
África	
Morocco	Europraxis ALG Consulting Maroc S.A Ouakha Services Sarl AU Euroinsta Marruecos, S.A.R.L. Indra Maroc S.A.R.L. D´Associé Unique
Kenya	Indra Ltda.
Angola	Indra - Soluções De Tecnologia Da Informação Angola, Lda.
Zimbawe	Soluziona Professional Services (Private) Ltd.
South Africa	Indra Technology Southafrica PTY LTD
Far East	
China	Jinan IB-Mei, Ltd. Indra Beijing Information Technology Systems Indra Radar Technology (Tianjin) Co., Ltd.
India	Indra Sistemas India Private Limited
Australia	Indra Australia PTY Ltd.
Philippines	Indra Philippines Inc. Indra Corporate Services Philippines, Inc.
Malaysia	Indra Technology Solutions Malaysia Sdn. Bhd
Indonesia	Pt Indra Indonesia Global Training Aviation Indonesia, S.A.S
Kazkhstan	Indra Kazkhstan Engineering LLP
Near East	
Bahrain	Indra Bahrain Consultancy SPC
Oman	Indra LLC
Saudi Arabia	Indra Arabia Company Ltd Indra Technology Solutions Company, Ltd
Other	Indra Regional Headquarters Llc

Source: Compiled from https://www.indracompany.com/en/companies-belonging-indra-sistemas-group

References

1. Ouakkal Noureddine, Khaled Redjem (2024) The impact of Information and Communication Technology (ICT) on economic growth. International Journal of Economic Perspectives 18: 2714-2726. https://ijeponline.org/index.php/journal/article/view/807.
2. (2025) Cerem International Business School https://www.cerem.es/blog/el-impacto-de-la-economia-digital-y-las-nuevas-tecnologias/.
3. (2025) Isdefe. Isdefe Innova: Especialistas en innovación y desarrollo https://isdefeinnova.es.
4. Pérez Emilio (2025) ¿Uno o varios campeones nacionales de Defensa? ¿Indra, Navantia…?,-Infodefensa.com https://www.infodefensa.com/texto-diario/mostrar/5300166/varios-campeones-nacionales-defensa-indra-navantia.
5. Álvarez Alejandra (2015) La internacionalización de la empresa: análisis del caso INDRA, TFG, Universidade da Coruña, Facultade de Economía e Empresa, La Coruña https://www.studocu.com/es/document/deutsche-schule-barcelona/matematicas-ii/tfg-indra/9312745.
6. Calvo Ángel (2019) The Emergence of Global Companies in the High-Tech Industry of Defense: The Case of Indra in Spain, 1993–2007. Eurasian Journal of Social Sciences 7: 29-47.
7. (2015) Indra, Informe Anual de Responsabilidad Social Corporativa 2015b. https://www.indracompany.com/sites/default/files/indra_informe_anual_rsc_2015_es_07062016_1.pdf
8. (2011) Indra, Indra Sistemas, S.A. y Sociedades Filiales https://www.cnmv.es/AUDITA/2011/13456.pdf.
9. Bonell Ramón Minicaso (2024) De Madrid al cielo: la expansión global de Indra, ESIC, Pozuelo de Alarcón. https://www.esic.edu/sites/default/files/2025-01/978-84-11921-31-2%20MiniCaso%20De%20Madrid%20al%20cielo...%20Indra.pdf.
10. Scarazzato, Lorenzo, Nan Tian, Diego Lopes da Silva, Xiao Liang, Katarina Djokic (2024) The SIPRI Top 100 Arms-producing and Military Services Companies, 2023, SIPRI, Stockholm https://www.sipri.org/publications/2024/sipri-fact-sheets/sipri-top-100-arms-producing-and-military-services-companies-2023.
11. Díaz Emilio (2013) Brasil: un gran mercado con futuro, en Solana, Gonzalo (coord.), Brasil: un gran mercado en

expansión sostenida, Universidad Antonio de Nebrija 143-146.
12. (2004) ONTSI. Productividad, crecimiento económico y TIC, https://www.ontsi.es/sites/ontsi/files/8_0_0.pdf.
13. (2025) Gobierno de España, Plan Industrial y Tecnológico para la Seguridad y la defensa, 23 de abril de. https://www.lamoncloa.gob.es/consejodeministros/resumenes/Documents/2025/230425-plan-industrial-y-tecnologico-para-la-seguridad-y-la-defensa.pdf.
14. Pons Juan (2025) The impact in Spain of the combined space capabilities of Airbus, Leonardo and Thales, Atalayar https://www.atalayar.com/en/articulo/politics/the-impact-in-spain-of-the-combined-space-capabilities-of-airbus-leonardo-and-thales/20251028131958219878.html.
15. Bilal Arsalan (2021) Hybrid Warfare - New Threats, Complexity, and 'Trust' as the Antidote. https://www.nato.int/content/dam/nato/webready/documents/deep/Hybrid-threats-and-hybrid-warfare-ENGLISH.pdf.
16. Indra, Informes anuales y de sostenibilidad 2008–2025. Madrid: Indra. https://www.indragroup.com/es/accionistas/memoria-cuentas-anuales.
17. CNMV. Hechos relevantes (1991–2005). Comisión Nacional del Mercado de Valores https://www.cnmv.es/DocPortal/Publicaciones/Informes/lanual2005.pdf
18. European Commission (1999) Merger Procedure Case No IV/M.1479 – Thomson/Indra. Brussels. https://ec.europa.eu/competition/mergers/cases/decisions/m1479_en.pdf.
19. (2015) Indra Informe de Gestión https://www.indracompany.com/sites/default/files/03_informedegestion-v6-20140427_1.pdf).
20. (2015) Indra, Informe Anual de Responsabilidad Social Corporativa 2015b. https://www.indracompany.com/sites/default/files/indra_informe_anual_rsc_2015_es_07062016_1.pdf.
21. (2009) Indra, Informe Anual https://ddd.uab.cat/pub/infanu/11406/iaSANTANDERa2009ispa.pdf.
22. (2019) Indra, Informe de Sostenibilidad https://www.indragroup.com/cms-content/importacion/informe_sostenibilidad_es_200420.pdf.
23. López Garrido Diego (2022) La defensa europea y la Europa de la defensa, Informe 2022 Fundación Alternativas, Madrid. https://fundacionalternativas.org/wp-content/uploads/2022/07/b66371307b630b4ad6ae23f7b184d10e.pdf.
24. Martín de Castro G, López Sáez Pedro, Murcia Rivera Cecilia (2007) El compromiso de Indra con la innovación. Economía Industrial 211-219.
25. Lozano Vicente (2025) El capitalismo de Estado vuelve sin filtros, Revista Haz https://hazrevista.org/opinion/2025/09/capitalismo-estado-vuelve-sin-filtros/.