

ABI RESEARCH COMPETITIVE RANKING

DAS/DRS VENDORS

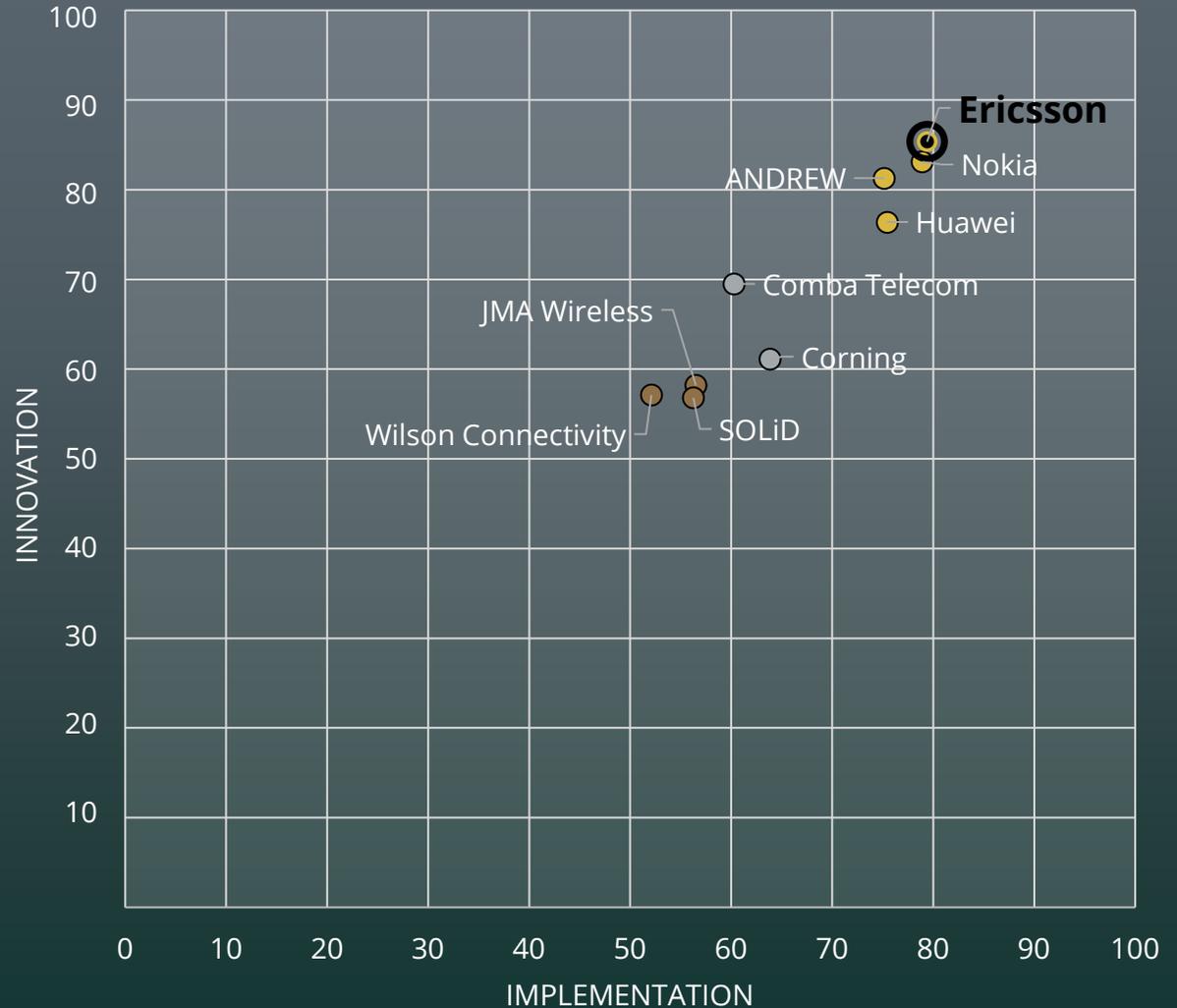
ERICSSON 



OVERALL: 82.4 | INNOVATION: 85.4 | IMPLEMENTATION: 79.4 | RANK: 1

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INNOVATION
VERSUS
IMPLEMENTATION
MATRIX



INNOVATION

ERICSSON



**INNOVATION
SCORE: 85.4**



Ericsson is a Swedish multinational networking and telecommunication company that provides infrastructure, software, and services for telecommunication service providers and enterprises, including 3G, 4G, and 5G equipment, Internet Protocol (IP), and optical transport systems. The company employs more than 100,000 people globally and operates in more than 180 countries

Ericsson's Radio Dot System (RDS) incorporates the Combined Cell feature, combining multiple RUs into a single cell. This design provides scalability, allowing the system to easily increase capacity when needed. A simple remote software configuration can "uncombine" the radios into separate cells, greatly expanding capacity without requiring a site visit. This scalability advantage is key for operators looking to quickly expand network capacity. Ericsson scored 8.4/10 in the scalability category.

Ericsson has focused its R&D efforts on several key innovations, particularly in 2024, with the release of products like the IRU 8850, Indoor Fusion 8818 and 8828, and the first 400 Megahertz (MHz) at 4x4 MIMO Dot model. These products bring several advantages over traditional active DASs, such as a 70% to 80% reduction in equipment footprint and energy consumption. The company has also introduced Indoor Advanced Positioning, which allows 5G devices to be located within a 1-meter radius without the need for specialized devices. The Combined Cell feature helps further increase capacity through remote software updates, offering a more cost-effective and flexible solution for operators. Ericsson earned 8.9/10 in the R&D category.

Ericsson has made significant progress in the sustainability category. By using recycled raw materials and green energy sources in production, the company has reduced the embodied carbon per unit by 16%. Additionally, Ericsson's energy-efficient operational features, like the Indoor Energy Saver, leverage Artificial Intelligence (AI)-driven algorithms to optimize energy consumption. These improvements have resulted in a 31% average reduction in energy usage during operation and up to 82% less power consumed at low traffic loads. Ericsson's commitment to sustainability is evident through these advancements, earning the company a score of 9.0/10 in the sustainability category.

Ericsson's Radio Dot System offers great flexibility in deployment, supporting both CAT6A and fiber infrastructure. This enables easy integration into existing networks and reduces the need for specialized equipment and telecoms rooms. The system also supports fiber distances of up to 10 Kilometers (km) between Radio Dots and Baseband Units (BBUs,) with Dense Wavelength Division Multiplexing (DWDM) support, reducing overall cabling infrastructure requirements. Furthermore, existing CAT6A infrastructure can be reused for both power and data transmission, further simplifying the deployment process. For these reasons, Ericsson received an 8.0/10 in the deployability and integration category.

Ericsson's Radio Dot System supports a wide range of technologies, including 2G, 3G, 4G, and 5G. This allows operators to migrate to newer technologies without the need for hardware upgrades. All DRS equipment, including the IRU 8850 and Radio Dots, are designed to support multi-technology networks, providing a smooth transition to next-generation services. Ericsson also ensures forward compatibility, meaning that once 6G standards are defined, its system will be able to support the new technology. Ericsson scored 8.6/10 in this criterion.

IMPLEMENTATION



**IMPLEMENTATION
SCORE: 79.4**



Ericsson's indoor business saw substantial growth in 2024, particularly driven by multi-operator and neutral host applications using its RDS. This growth was largely spurred by the increasing market demand for 5G connectivity indoors, as users, enterprises, and venue owners expect the same level of experience indoors as they do outdoors, especially in urban areas. North America, with its high 5G device penetration, became a key region for significant investments in bringing 5G indoors. Additionally, enterprises increasingly view 5G as a monetization opportunity, investing in dedicated solutions such as private 5G networks. The solution is also cost-effective, with lower Total Cost of Ownership (TCO) compared to traditional active DAS, saving up to 50% on equipment costs and 70% to 80% on power consumption. Ericsson's focus on these areas helped boost the company's commercial performance, with significant revenue growth in North America and the Middle East & Africa. Thus, Ericsson scored 8.2/10 in the commercial activity category.

Ericsson's geographical penetration saw notable differences in 2024, with the largest share of shipments in the North America region, accounting for 40% of total shipments and showing a remarkable 350% year-on-year growth. Other regions like Europe/ Latin America and North East Asia experienced reductions in shipments, with a 40% and a 25% decrease respectively. However, Middle East and Africa showed a 10% growth, reflecting consistent demand in the region. Although the company faced challenges in some areas, overall global shipments grew by 6% year-on-year. Therefore, Ericsson scored 8.0/10 in this category.

Ericsson's RDS has successfully penetrated a broad range of verticals, with deployments in multiple sectors, including enterprise, venue, and service provider markets. However, the high capacity nature of the system is not well-suited for verticals like parking structures, which require different solutions. Ericsson's RDS is particularly well-suited for environments that demand high-density coverage, including stadiums, malls, office buildings, and large enterprises looking to deploy private 5G networks. This product's versatility has allowed Ericsson to serve a diverse range of customers across industries, despite certain limitations in specific use cases. Ericsson scored 8.0/10 in the vertical coverage category.

Ericsson has faced mixed results in its financial performance for 2024, with a notable decline in networks revenue, which dropped from US\$16.0 billion (171.4 billion SEK) to US\$14.8 billion (158.2 billion SEK), marking an 8% decrease. Despite this decline, the company saw strong sales growth in North America, with a 30% increase in networks revenue, helping to offset lower sales in other regions. In particular, investments in the Radio Dot System and mmWave small cell radios have been central to Ericsson's strategy for expanding its footprint in key markets. Networks accounted for 65% of the company's total net sales in 2024, but there were challenges in certain regions, such as Southeast Asia, Oceania, and India, where investment levels normalized after a record year in 2023. The overall organizational health remains stable, driven by strong market presence in North America and other strategic regions. Ericsson 6.7/10 in the financial and organizational health category.

IMPLEMENTATION



**IMPLEMENTATION
SCORE: 79.4**



Ericsson's portfolio has continued to evolve with a strong emphasis on its RDS, which is at the core of its DRS solutions. The Radio Dot System supports multiple operators on the same platform, offering significant advantages in terms of flexibility and cost savings compared to traditional active DAS systems. With up to four licensed bands supported on a single unit, Ericsson's portfolio is tailored for modern, multi-technology networks, including 5G, while also maintaining compatibility with 2G, 3G, and 4G. The company's portfolio is focused on providing comprehensive indoor coverage solutions, particularly for enterprise and venue owners seeking premium 5G experiences. With its continued development of mmWave small cell radios, Ericsson is positioning itself well for future growth in 5G and beyond. Ericsson scored 7.5/10 in the portfolio category.

CRITERIA AND METHODOLOGY



VENDOR MATRIX

Methodology: After individual scores are established for innovation and implementation, an overall company score is established using the Root Mean Square (RMS) method:

$$Score = \sqrt{\frac{innovation^2 + implementation^2}{2}}$$

The resulting overall scores are then ranked and used for percentile comparisons.

The RMS method, in comparison with a straight summation or average of individual innovation and implementation values, rewards companies for standout performances.

For example, using this method, a company with an innovation score of nine and an implementation score of one would score considerably higher than a company with a score of five in both areas, despite the mean score being the same. ABI Research believes that this is appropriate as the goal of these matrices is to highlight those companies that stand out from the others.

RANKING CRITERIA

Leader: A company that receives a score of **75 or above** for its overall ranking.

Mainstream: A company that receives scores **between 60 and 75** for its overall ranking.

Follower: A company that receives a score of **60 or below** for its overall ranking.

Innovation Leader: A company that receives a score of **75 or above** for its innovation ranking.

Implementation Leader: A company that receives a score of **75 or above** for its implementation ranking.



LEADERS, MAINSTREAM, AND FOLLOWERS

Leaders: Ericsson, Nokia, ANDREW, Huawei

The leaders group consists of companies that deliver highly innovative DAS/DRS solutions, while demonstrating high commercial success and extensive portfolios.

Mainstream: Comba Telecom, Corning

The mainstream group consists of either innovative companies that lag behind in implementation, such as Comba Telecom, or large implementers that lag behind in their R&D and sustainable DAS/DRS solutions, such as Corning.

Followers: JMA Wireless, SOLiD, Wilson Connectivity

The followers group is mainly composed of companies that have a niche strategy, for instance, focusing on specific regional markets or DAS/DRS categories.



INNOVATION CRITERIA

- **Scalability:** Degree to which DAS/DRS solutions can grow and adapt to meet evolving needs. This includes modular design, easy upgrades, and compatibility with older equipment. This criterion is given a weighting of 25 out of 100 points.
- **R&D/Technology Leadership:** Level of investment in R&D, including innovations in DAS/DRS solutions. This encompasses new technologies, collaborative partnerships, and the quality of product design and manufacturing. This criterion is given a weighting of 25 out of 100 points.
- **Sustainability:** Commitment to environmental responsibility and sustainable practices in DAS/DRS solutions. This includes energy efficiency, sustainable manufacturing processes, end-of-life management, and the incorporation of recyclable materials. This criterion is given a weighting of 15 out of 100 points.
- **Deployability and Integration:** Ease of deployment and integration of DAS/DRS solutions. This covers modular design, plug-and-play connectors, auto-discovery of network components, and built-in system testing. This criterion is given a weighting of 25 out of 100 points.
- **Cellular Backward Compatibility/Futureproofing:** Degree of backward compatibility with various cellular technologies, including 2G, 3G, 4G Long Term Evolution (LTE), and 5G. This criterion assesses the ability to work with older technologies, while being ready for future advancements. This criterion is given a weighting of 10 out of 100 points.



IMPLEMENTATION CRITERIA

- **Commercial Success and Growth:** The level of commercial success and growth in DAS/DRS shipments and deployments. The greater the success and growth, the higher the ranking. This criterion is given a weighting of 40 out of 100 points.
- **Geographical Penetration:** Based on the presence of DAS/DRS solutions in each global region. The more regions the vendor's clients are in, the higher the ranking. This criterion is given a weighting of 20 out of 100 points.
- **Vertical Coverage:** The range of industries and applications where DAS/DRS solutions are deployed. This includes transportation, public venues, commercial real estate, healthcare, education, and government. This criterion is given a weighting of 20 out of 100 points.
- **Financial and Organizational Health:** Based on the size of overall firm sales and operating margin. This assesses how robust the vendor is to shocks and their ability to fund internal needs such as R&D and regional distribution. This criterion is given a weighting of 5 out of 100 points.
- **Portfolio:** Range and comprehensiveness of the DAS/DRS portfolio. This includes support for various protocols, frequency bands, and competitive pricing. This criterion is given a weighting of 15 out of 100 points.

** Vendors are requested to fill out a questionnaire and asked to participate in an interview. If confidential data provided under a Non-Disclosure Agreement (NDA) are presented to ABI Research, they are evaluated, but not fully presented in this report.*



April 14, 2025

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