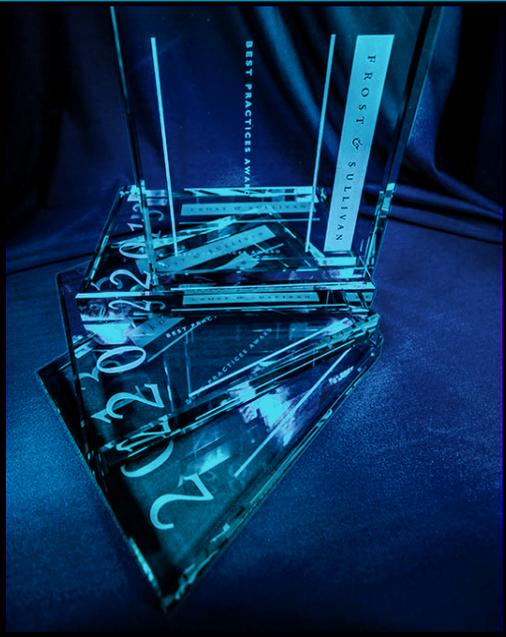


AIRBUS DS Communications | *home of VESTA®*

2016 North American Next Generation
911 Contact Handling Solution
Company of the Year Award



FROST & SULLIVAN

BEST
2016 PRACTICES
AWARD

NORTH AMERICAN NEXT GENERATION
911 CONTACT HANDLING SOLUTION
COMPANY OF THE YEAR AWARD

2016
BEST PRACTICES
AWARDS

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Background and Company Performance

Industry Challenges

As the communications technology revolution rapidly changes the landscape of everyday life for end users, next generation 911 (NG911) encompasses a range of transformations in the public safety sector. For example, Frost & Sullivan research estimates that almost 80% of 911 calls originated from mobile devices in 2015. NG911 promises to enable the public safety sector to adapt to the evolving incident types, communications channels, and technologies.¹

Traditionally, 911 emergency services were divided between call handling competitors and highly regulated local exchange carriers that provided the transport network as well as call routing and database services. The transition to NG911 means that service providers compete in all parts of the market: call handling, transport networks, and call routing and database services. While challenging and uneven, the evolution to NG911 solutions significantly expands the realm of capabilities and opens new avenues for growth in public safety contact handling solutions. Frost & Sullivan research anticipates the NG911 market [composed of customer premise equipment and emergence services Internet protocol network (ESInet) software] to grow from approximately \$100 million in 2015 to over \$460 million by 2021.²

NG911 replaces legacy systems, primarily automatic location identification (ALI) databases, with a standards-based Internet protocol (IP) emergency communications infrastructure supporting a range of multimedia, e.g., voice, text, data. The NG911 systems rely on ESInets, privately provided specialized managed IP networks to transport information from initiating contacts to the public safety answering points (PSAPs). While greatly expanding the universe of possibilities, NG911 systems require tight integration among existing technologies, such as computer-aided dispatch (CAD) systems, to accomplish end-to-end incident response. The number and nature of incidents which PSAPs must respond to are changing, yet the ability to handle these changes depends on forward looking investments.

Overall, Frost & Sullivan estimates that North American municipalities will spend more than \$2 billion on procurements in public safety information and communications technologies in 2017. For growing metropolitan areas, the public safety domain remains a durable top-priority. In contrast, some struggling and rural areas are forced to pull back from investments in public safety and search for cost-cutting measures. A stratified pyramid structure exists where the 100 most populous cities in the United States and Canada accounted for only 29% of the total public safety market in 2015. Smaller cities

¹ Enabling 911 Emergency Response: North American 911 Contact Centers Face New Opportunities and Urgent Issues, *Frost & Sullivan*, 2016.

² Next Generation 911 (NG911) Market Analysis: *The Migration from Legacy 911 to Next Generation 911*, *Frost & Sullivan*, 2016.

spend much less, but many more of them exist.³

The market in NG911 public safety spending is encountering a variety of new and perennial drivers and restraints. As a consequence of population movements and budgetary concerns, the virtual consolidation of regional operations which facilitate cost savings are seeing increased adoption. Among PSAPs in a region, private cloud hosting enables cost reductions and well as increased flexibility and scalability. A push toward interoperability among agencies is growing and more effectively achieved with NG911 response systems. Similarly, interoperability among the technologies of various agencies and municipalities is a concern as many continue to operate legacy systems. IP infrastructure offers lower costs and more flexible provisioning, enabling the multimedia capabilities, in addition to greater bandwidth. With the ESInet acting as the IP transport network for public safety, connected systems can collect mountains of data points, apply Big Data analysis, and model future scenarios. Concurrently, the ESInet also enables an expanded ecosystem of complimentary service providers to draw from and add to 911 contact handling, such as healthcare and third-party applications. Civil rights and privacy concerns with IT systems are ever-present, but now cyber security is a critical concern as well. With such revolutionary changes transforming the needs and context of public safety, service providers and PSAPs face significant and increasing obstacles if they do not adapt quickly.⁴

Visionary Innovation & Performance and Customer Impact of Airbus Defense and Space Communications

Headquartered in Temecula, California the Airbus Defense and Space Communications (Airbus DS Communications) division continues to refine its flagship VESTA[®] product suite. The VESTA solutions build upon over 40 years of experience in public safety equipment and contact handling. In an era of transition, the VESTA solution suite addresses the evolution to NG911 par excellence. In the U.S., Airbus DS Communications' call handling systems are deployed across 48 states and range in size from two call taking positions to 667 positions.

A Unified Solution to Address the Total Market

In the new NG911 environment it is possible for service providers to offer PSAPs and public safety providers a new level of unified services. Since the 1990s, calling patterns of the public have changed with traditional carriers experiencing a shift toward mobile-only households. As a result, some carriers have narrowed their focus to transport network only. Airbus DS Communications realized early on that the total addressable market would

³ Public Safety ICT in the North American Smart City: A \$10-billion Opportunity in 2016-2020, *Frost & Sullivan*, 2015.

⁴ Enabling 911 Emergency Response: North American 911 Contact Centers Face New Opportunities and Urgent Issues, *Frost & Sullivan*, 2016; and 2015 Outlook for the Global Security Industry: Global Political, Economic, and Social Challenges Drive Investment in Security Technology, *Frost & Sullivan*, 2015.

change dramatically, and that its core offering revolved around more than equipment. The company moved beyond its background to fill the gaps left by traditional carriers and become a competitive local exchange carrier (CLEC) in several states across the country; thus, delivering transportation network and routing/database services in addition to call-handling. Consequently, customers enlist Airbus DS Communications to implement a comprehensive transition strategy from legacy systems to a unified NG911 system.

Future-oriented Industry Leadership

With expert eyes on the future, the company harnesses emerging Mega Trends when designing NG911 solutions. The team perceived the trend toward regionalization and built the VESTA system with virtual consolidation and infrastructure sharing in mind. Multiple PSAPs in multiple jurisdictions can share the features, functions, and costs in a single virtual back office operation. In these multiple jurisdictional contexts, or geodiversity, mapping and locating events become more complicated. The VESTA suite includes multiple mapping applications to choose from built on either ESRI/ArcGIS, ALI, or LAN/WAN, with supported connectivity to the ESInet. The VESTA[®] 9-1-1 call-handling solution features a flexible, open architecture, accommodating geodiversity and cutting costs in addition to eliminating the need for the traditional siloed private branch systems. Airbus DS Communications designs easily shareable and remotely manageable solutions, eliminating the time and cost overheads required for repetitive software configurations at individual workstations. Over 10,000 call handling positions of the VESTA 9-1-1 solution have been ordered and shipped in the U.S, since its release in December 2012.

VESTA also handles the growing Mega Trend to capture and connect Big Data and multimedia content. The VESTA[®] Analytics solution captures data on call counts, transfer averages, trunk and line utilization, and other customizable variables. The solution reports the information in an easy-to-use searchable engine, enabling tracking and modeling for future operations by administrators. Similarly, the VESTA[®] Router solution for advanced call routing replaces aging systems with a solution that provides IP Selective Routing and then allows an upgrade to a full i3 emergency services routing proxy and emergency call routing function. Furthermore, the VESTA[®] SMS solution streamlines integration of text to 911 capabilities, as user behavior migrates to include more text-based communication so that PSAPs quickly and easily view and respond to individual messages. The company builds systems to accommodate emerging multimedia capabilities, with the ability to receive and pre-interpret content and display it to PSAP agents in immediately actionable formats.

Clear Commitment to Best Practices and Customer Success

The diverse portfolio in the VESTA line offers core contact handling assistance and transition to NG911, but most importantly it enables customization based on customer preferences. The company understands that a one-size solution does not fit all

jurisdictions. The executive team pays close attention to developments in the industry and technology sectors, participating in several regulatory and industry trade groups to keep up-to-date. Moreover, the company's leadership and designers spend a great deal of time with customers in forums and ongoing service relationships. The multifaceted relationship focuses on listening to customers and building solutions to increase value, saving public safety providers time and money. In 2012, the company implemented their Voice of the Customer program comprised of consistent customer surveys to produce a statistically predictive metric, Net Promoter Score of repurchase and referral. World class Net Promoter Scores fall in the range of 50-70% range, Apple, Google, Harley-Davidson, as an example. Since 2015, Airbus DS Communications has consistently achieved a 70% score. The company uses the feedback to improve processes, products, and the customer experience.

Responding to customer needs is a critical aspect of regional integration and local customization. Sharing infrastructure, benefits, and costs open up new opportunities, but many locales prefer individual configurations and operational capacities with some autonomy. The VESTA system can tailor to meet the needs of regional cooperators and be subdivided to serve local agents. With Airbus DS Communications and the VESTA system, PSAPs and service providers address capital expenditures and ongoing operational expenditures as desired: some jurisdictions buy and own the equipment and operate independently, others maintain joint operations with Airbus DS Communications, and other customers purchase 911 as a fully managed cloud software as a service.

Concurrently, the company offers a strong customer-focused and customizable service and support process. From installation, training, and project management, Airbus DS Communications walks customers through each step of the hardware and software implementation process and maintains best-in-class service and support throughout the lifecycle of the solution. To onboard PSAP agents the company offers onsite field engineering, real-time remote monitoring and correction, and even hosts training at the Temecula, California facility. With an impressive commitment to customer focus, Airbus DS Communications provides support for its portfolio with comprehensive depth and breadth.

A Track Record of Strong Performance and Proven Value

Building from over 40 years of experience and strong performance in the market, Airbus DS Communications and the VESTA system demonstrate a high-level performance value. With over 60% market share, protecting over 200 million people in North America, in its background segment in call-handling, the company expands into the full addressable transportation networks and NG911 core services market from a unique position of strength. While the NG911 market is still in a nascent phase, early adopters are turning to the VESTA system and building momentum for Airbus DS Communications. The company follows developments in the market and customer demands closely, a prime reason for its

success and strength. Legacy systems holders and NG911 early adopters both recognize Airbus DS Communications for its premier products and services. These relationships and the durability of its strength in the market demonstrate that Airbus DS Communications maintains the strongest reputation in the industry. Throughout decades of technological evolution and market change, customer retention and strong overall performance validate the stability and continuity proven by the Temecula, California division.

Conclusion

As new technologies and social changes exert pressure on legacy 911 systems and emergency response, public safety answering points must adapt to a new landscape. Airbus DS Communications and the VESTA system differentiate themselves among the next generation of 911 contact handling service providers with a diverse solutions portfolio based on customer needs and leading edge technology. Perceiving the most important trends, from a close understanding of client needs and industry developments, Airbus DS Communications offers the VESTA system to deliver the most comprehensive NG911 solution.

AIRBUS DS Communications | home of VESTA® CRITICAL MATTERS®

**Experience the Difference –
The VESTA® Difference**

home of VESTA® Suite

VESTA® 9-1-1	VESTA® Analytics
VESTA® SMS	VESTA® Radio
VESTA® Router	VESTA® Alert
VESTA® Map	VESTA® Communicator
VESTA® Locate	VESTA® Services

VESTA® NEXT
Your Way to **NG9-1-1**

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With its strong overall performance, derived from a dedication to customer success and industry leadership, Airbus DS Communications earns Frost & Sullivan’s 2016 North America Company of the Year award for next generation 911 contact handling.

Significance of Company of the Year

To win the Company of the Year award (i.e., to be recognized as a leader not only in your industry, but among your non-industry peers as well) requires a company to demonstrate excellence in growth, innovation, and leadership. This kind of excellence typically translates into superior performance in three key areas: demand generation, brand development, and competitive positioning. These areas serve as the foundation of a company's future success and prepare it to deliver on the two criteria that define the Company of the Year Award (Visionary Innovation & Performance and Customer Impact).



Understanding Company of the Year

As discussed above, driving demand, brand strength, and competitive differentiation all play a critical role in delivering unique value to customers. This three-fold focus, however, must ideally be complemented by an equally rigorous focus on visionary innovation to enhance customer value and impact.

Key Benchmarking Criteria

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated two key factors—Visionary Innovation & Performance and Customer Impact—according to the criteria identified below.

Visionary Innovation & Performance

- Criterion 1: Addressing Unmet Needs
- Criterion 2: Visionary Scenarios through Mega Trends
- Criterion 3: Implementation Best Practices
- Criterion 4: Blue Ocean Strategy
- Criterion 5: Financial Performance

Customer Impact

- Criterion 1: Price/Performance Value
- Criterion 2: Customer Purchase Experience
- Criterion 3: Customer Ownership Experience
- Criterion 4: Customer Service Experience
- Criterion 5: Brand Equity

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree-view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often, companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry players and for identifying those performing at best-in-class levels.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS



Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan Awards follow a 10-step process to evaluate award candidates and assess their fit with select best practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

STEP	OBJECTIVE	KEY ACTIVITIES	OUTPUT
1 Monitor, target, and screen	Identify award recipient candidates from around the globe	<ul style="list-style-type: none"> • Conduct in-depth industry research • Identify emerging sectors • Scan multiple geographies 	Pipeline of candidates who potentially meet all best-practice criteria
2 Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	<ul style="list-style-type: none"> • Interview thought leaders and industry practitioners • Assess candidates' fit with best-practice criteria • Rank all candidates 	Matrix positioning all candidates' performance relative to one another
3 Invite thought leadership in best practices	Perform in-depth examination of all candidates	<ul style="list-style-type: none"> • Confirm best-practice criteria • Examine eligibility of all candidates • Identify any information gaps 	Detailed profiles of all ranked candidates
4 Initiate research director review	Conduct an unbiased evaluation of all candidate profiles	<ul style="list-style-type: none"> • Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles 	Final prioritization of all eligible candidates and companion best-practice positioning paper
5 Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	<ul style="list-style-type: none"> • Share findings • Strengthen cases for candidate eligibility • Prioritize candidates 	Refined list of prioritized award candidates
6 Conduct global industry review	Build consensus on award candidates' eligibility	<ul style="list-style-type: none"> • Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates 	Final list of eligible award candidates, representing success stories worldwide
7 Perform quality check	Develop official award consideration materials	<ul style="list-style-type: none"> • Perform final performance benchmarking activities • Write nominations • Perform quality review 	High-quality, accurate, and creative presentation of nominees' successes
8 Reconnect with panel of industry experts	Finalize the selection of the best-practice award recipient	<ul style="list-style-type: none"> • Review analysis with panel • Build consensus • Select winner 	Decision on which company performs best against all best-practice criteria
9 Communicate recognition	Inform award recipient of award recognition	<ul style="list-style-type: none"> • Present award to the CEO • Inspire the organization for continued success • Celebrate the recipient's performance 	Announcement of award and plan for how recipient can use the award to enhance the brand
10 Take strategic action	Upon licensing, company may share award news with stakeholders and customers	<ul style="list-style-type: none"> • Coordinate media outreach • Design a marketing plan • Assess award's role in future strategic planning 	Widespread awareness of recipient's award status among investors, media personnel, and employees

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best in class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages almost 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from 31 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.