

BASS SYSTEMS

EXECUTIVE SUMMARY



ABOUT COMPANY

BASS Systems operates in an environment in which rapid technological innovation and other factors bring about change daily. Every day we work to meet the challenge of improving on leading-edge technologies. By staying at the forefront of the new age and further developing our systems, we are able to deliver convenience and comfort to our customers. Everything we do is aimed at winning the trust of our customers and realizing a society with secure communications.

BASS Systems is fully committed to being the best business partner for its customers by increasing customer value, helping create a more convenient and prosperous society, and creating peace of mind through the establishment of reliable systems.

BASS Systems was created in 2008 and already by 2014 became the leading system integrator in Republic of Moldova, a provider of various IT solutions and telecommunications equipment of leading manufacturers, a company which has established itself among suppliers and customers as a flexible, secure and open business partner. As of Dec. 2018, BASS Systems has reached over 50% of Moldovan systems integration market share.

Dedicated to software and hardware solutions and a full range of services for IT infrastructure support, development and optimization, we focus on embracing our client's networking, application and technology needs. Helping organizations to achieve their business goals and objectives by lowering the cost and maximizing the performance of their information technology systems.

Our Team

System integration division employs over 90 qualified engineers, business analysts, project managers, programmers, sales specialists.

The field service division employs over 100 engineers and technicians experienced in building turn-key Telco infrastructure including FO networks, active systems. Field service division is a separate entity under BASS management.

Strategic Partnerships

Partnerships with various national and international corporations are extremely important. We offer personalized solutions to solve the problems of every single partner and client. BASS Systems pays great attention to vendor independence, but with its strategic partnerships, the company manages to achieve the highest levels of friendship and trust with corporations with which it collaborates.

- Huawei Enterprise Reseller;
- HPE Platinum Partner,
- HP Inc. Gold Partner;
- IBM Silver Partner;
- Oracle Gold Partner;
- Cisco Cloud Partner;
- Cisco Premier Certified Partner;
- Microsoft Dynamics Partner;



- Microsoft Licensing Solution Partner (LSP);
- Microsoft Cloud Service Provider (CSP);
- Motorola Solutions Partner

References

Solid reputation and proven experience in delivering complex turn-key projects:

- Delivery of equipment and implementation services for LTE/LTE-A network to Moldtelecom;
- Equipment and associated services for construction of GPON network for the national telco operator Moldtelecom S.A.;
- Development and Implementation of the Communications Infrastructure and of the Automated Information system of the Single Service for 112 emergency calls.
- Supply of IT and Communications Infrastructure for the opening of 37 Multifunctional Centers within Public Services Agency of Moldova
- Design and implementation of the "Facial Recognition System" for IS CRIS Registru;
- Equipment and Services for Customs Service Information System Modernization –5,300 users;
- Hardware Equipment and associated services for Implementation of the IT Infrastructure of the Social Assistance Automated Information System (SAAIS) in the Republic of Moldova – 1,400 users;
- Fixed and Mobile Communications Network (TETRA) for the Border Guard Service:
 Phase 2 Horesti to Otaci;
- Development and Implementation of Converged Billing for Moldtelecom;
- IT and Communications Infrastructure of the Exceptional Situations and Emergencies
 Management Information System supporting the National Command Center of the Civil
 Protection and Emergency Situations Service of the Ministry of Internal Affairs;

Financials

The company is financially stable moreover is continuously growing at a constant pace. The revenue for the last five full years from financial statements audited by KPMG and Deloitte & Touche:

- 2018: 675,451.705 MDL;*
- 2017: 500,051,401 MDL;
- 2016: 461,004,200 MDL;
- 2015: 400,566,642 MDL;
- 2014: 308,632,200 MDL;

^{*}to be audited by end of May 2019



Ranking in top 10 IT&C companies in Moldova

Rank	Company Name	2015	2016	2017
1	Orange (telco operator)	3,111.90	2,912.80	2,941.20
2	Moldtelecom (telco operator)	2,371.70	2,321.20	1,907.80
3	Moldcell (telco operator)	1,262.40	1,192.50	1,391.80
4	BASS Systems (systems integrator)	400.50	461.00	500.10
5	Accent Electronics (IT distributor)	379.10	311.30	339.60
6	Ericsson (telco solutions)	106.40	167.10	282.40
7	Endava (outsourcing)	174.40	210.70	282.10
8	Starnet soluții (internet provider)	232.40	254.80	246.20
9	Daac systems (systems integrator)	249.40	204.20	140.10
10	Blueline (outsourcing)	114.70	118.10	120.70

^{*} Revenue, in mln. MDL

Standards and Certifications

World-class accreditation is an important factor in the development of BASS Systems company. Alignment to international standards and good practices in the main activity area have contributed substantially to the scaling of our company.

BASS Systems is among the few IT teams in Moldova holding a large set of ISO certifications. We are the only company that combines these certifications with a complex portfolio of accreditations and partnerships with various international corporations.

ISO 9001 certification

Quality Management System. BASS Systems conforms to and maintains ISO 9001 certification to provide customers and partners with the implementation of best quality practices for products and services delivery. Compliance with ISO 9001 standards enables the company to use quality assurance tools at the highest level throughout the implementation and maintenance of projects.

ISO 27001 certification

Information technology, security techniques, information security management systems. The entire set of standards contributes to securing financial information, intellectual property, employee data, or information provided by third parties.

The implementation of ISO 27001 standards represents an advantage for BASS Systems, its customers, and partners being certain regarding internal and external information security.

ISO 20000 certification

IT services management. This is an international level management service that allows companies to ensure that IT service management processes are aligned with both company values and best practices. Companies that have ISO 20000 certification provide high-quality services, ensure the professional fulfillment of all customer and partner requirements, and more.



ISO 14001 certification

Environmental management systems. Environmental management standards and systems imply that the impact of company's processes on the environment will be controlled and minimized. By joining these standards, BASS Systems offers a number of benefits:

- emissions, noise and waste reduction;
- cost reduction;
- a positive image on the market;
- improvement of working and living conditions for employees;
- maintenance of good relationships with environmental authorities.

ISO 37001 certification

Anti-bribery management systems. ISO 37001 is designed to help any type of organization establish, implement, maintain, and improve an anti-bribery management system in accordance with relevant legislation and best-practices.

Coverage and Service Organization

- Service organization covers more than 1,800 locations through the whole territory of Moldova;
- Toll free 0-800 number available 24/24 to our customers;
- Guaranteed restoration and extended coverage SLAs both in Chisinau and in territories;
- Remote and on-site support with round the clock support team;
- ITSM/ITILv3 aligned operations.



SOLUTIONS

Information Systems Integration

BASS Systems has strategic partnerships with the world's leading international technology suppliers. The company provides key solutions such as Enterprise Resource Planning, Business Process Management, Customer Relationship Management, Geographic Information Systems, Business Intelligence, Information Portals. Our vast experience covers not just commercial products, but also open-source products.

The solutions offered as a result of existing partnerships allow refining operations, streamlining information flows, automating repetitive activities, as well as precision in measuring key indicators, analysis and forecasts for the entire organization.

BASS Systems offers the most innovative technologies, developed on the basis of secure software, completed with customization, localization and integration services. The company continues to invest in platforms' compliance with national standards, especially in financial and accounting fields, as well as in the translation of graphical interfaces into the languages commonly used in the Republic of Moldova.

BASS Systems has all the tools necessary to provide the best solutions for its customers, such as:

- Operational activity surveillance and automation;
- Goods and services flow monitoring;
- Reports generation and automation;
- Expenditure forecasting;
- Modeling and/or implementing a suite of services.

The company offers solutions that allow paper-based documents digitization, digital information sorting and organizing a modern digital archive.

BASS Systems' solutions also include the use of standard data export and import mechanisms, as well as the use of APIs and web services. As a result, investments related to systems can be reused without blocking the functionality of a new computer system.

The company's portfolio includes solutions from various reputable suppliers:

- Microsoft Dynamics AX Enterprise Resource Planning and Customer Relationship Management;
- Oracle Utilities Customer Care and Billing;
- IBM Business Process Manager, Control Desk, Cognos Analytics, IBM QRadar, IBM Guardium;
- ASYCUDAWorld:
- MIND CTI MindBill.

Upon customer request, the company offers systems in private or public cloud environments.

Presently the resources usage is subject to an active shift from traditional deliveries to cloud platforms. Customers will be able to use all the benefits available on private cloud platforms or within the infrastructures of BASS Systems' partners—for example, Microsoft Azure.

BASS Systems offers the following services:

- Elaboration and implementation of complex IT solutions: Delivery of equipment from world leading manufacturers, installation and commissioning, installing and configuring the operating environment, the individual adjustment of the systems to the needs of the client, the integration of complex systems including document management integration in the existing IT structure.
- Elaboration and implementation of network infrastructure projects: Implementation of projects for the design and layout of enterprise networks based on technologies like twisted pair and



fibro optics, with their subsequent certification according to generally accepted international standards.

- Supply of hardware and software of the world's leading manufacturers, corresponding to the corporate standards and preferences of customers.
- A wide range of consulting and outsourcing services provided by the highly professional specialists of our company.
- ERP turn-key projects: Analysis, customization and implementation of Microsoft Dynamics 365
 ERP and CRM
- Information Security Systems: Delivery of complex multi-vendor hardware and software security solutions.
- Automation of business processes and workflow.
- Telephony solutions, including digital telephony, analog voice, and solutions on IP telephony.

IT&C Infrastructure

BASS Systems provides design, testing, and implementation of IT infrastructure solutions. The team offers various solutions to ensure business projects or initiatives, starting with building fiber optic and copper fiber networks and finishing with turnkey data centers.

- BASS Systems experts have the necessary knowledge to develop and maintain critical infrastructure. The company guarantees IT infrastructure optimization by:
- Analyzing the existing situation
- Defining objectives and selecting optimal solutions
- Developing and implementing architectural plans
- Implementing cabling and power solutions
- Creating or technologically updating the infrastructure
- Consolidation and virtualization
- Development and implementation of continuity and recovery plans
- Implementing private cloud or hybrid solutions
- Ensuring the information system's end-to-end resilience

The company builds robust solutions that can operate in critical production environments. In case of innovative projects, BASS Systems provides additional consulting for the adoption of new technologies, as well as the necessary training sessions to the client's team.

BASS Systems professionals understand the complexity of building a modern and reliable IT infrastructure, but also its flexibility and scalability to make it easy to maintain.

Telco Infrastructure Construction

BASS Systems proposes services for the construction of the optical fiber distribution networks that will ensure the upgrading of the data transmission system, fixed and mobile telephony and other services. The works carried out in strict compliance with the legislation and norms and with compliance to the standards and requirements of the customer. The quality of the works will be ensured not only through the high qualification of our technicians, but also through the implementation of the project management methods and strict adherence to the best practices in the industry.

Custom applications development

BASS Systems is one of Republic of Moldova's leading companies offering custom applications development services based on popular platforms. The company's customers can transform their business



ideas into profitable activities and integrate existing applications or their equipment and facilities into their businesses.

The solutions offered by BASS Systems satisfy customers' needs and wishes, offering more than just standard applications.

BASS Systems' teams include highly qualified professionals who understand the business environment and can suggest successful solutions, meeting the requirements, the deadline, and the budget. Besides developing custom applications, BASS Systems offers a complete cycle of platforms development, deployment, maintenance, and customization.

BASS Systems' team builds platforms that optimize the customer's potential business—from automating business processes, commerce and document management to employees' collaboration. Company's experts use the latest software development methods and technologies.

Integration

A company's proper functioning depends on a set of applications, whether external or internal.

The BASS Systems' team offers the right applications integration solutions. The company's analysts and developers help the customer consolidate its existing or purchased IT systems, simultaneously ensuring the transitioning to modern software or cloud hosting.

Even if it seems to be a long and complicated process, software integration is very important.

BASS Systems provides the perfect fusion of such systems as ERP, CRM, BPM, and more, offered by international manufacturers or other automated systems created at customer's request.

Technologies

Some of BASS System's areas of expertise in technology include:

• Backend: .NET, Java, PHP, Node.js, C++

Mobile: iOS. Android

Frontend: HTML5, CSS3, JS

• Databases: Microsoft SQL Server, MySQL, Oracle, SQL Azure, IBM DB2

Upgrading

Most often, customers' requirements extend beyond the possibilities offered by existing functional applications.

BASS Systems provides old applications replacement, adjustment or rewriting using modern technologies.

Quality

BASS Systems' team consists of experienced professional developers, who can deliver products on time, taking into account the price-quality ratio. Applications are built based on top architectures that guarantee simple, easy future extension and maintenance, with user-friendly interfaces.

Maintenance

BASS Systems offers a wide range of operational and quality maintenance services.

The company provides non-stop support, solving each problem in the shortest possible time. Maintenance services are provided for the entire period requested by the customer.

Information security

The activity of each internet user is directly proportional to the development of digital technologies.



The global network connects not only businesses and agencies, but also households, gadgets, cars, and other common use devices.

We live in an era of continuous breaches. Hence the need for information security, defense systems being created based on risk analysis, security management, event detection and immediate reactions.

Cybersecurity is a complex issue involving technological, legal, political, human factor, ethical and risk management issues. The company provides customers with multi-vendor IT security tools that are designed to protect business data, personal data, applications, or IT infrastructure.

Solutions

- Network protection—Firewalls, IPS/IDS, VNP, DDOS protection;
- Systems and data protection—Information and data management, Antivirus and endpoint security, Anti-spam and email security, Authentication, account and access management, Data loss prevention (DLP);
- Monitoring and management—Vulnerability management, SIEM, Risk management, configuration management, Network flow and anomaly management.

Services

- Analysis and assessment;
- Incident and event management;
- Consulting services;
- Developing complex information security projects.

Cloud services

Today's modern challenges and dynamic demand for more processing power, storage and increased productivity capabilities can be quickly solved by using efficient cloud services.

BASS Systems develops and implements cloud solutions provided by leading global vendors. The company helps clients migrate their IT infrastructure and business applications to private, public or hybrid cloud environments.

There are multiple benefits of using BASS Systems' cloud computing and services:

- Flexibility: scalable environments, unlimited virtual resources that adapt to current computing needs;
- Economy: payment of actual used resources;
- Security: advanced protection, essential for small business as well as big corporate data centers;
- Accessibility: maintaining 99.9% cloud uptime, clients have access to their services anywhere they go;
- Support: our engineers ensure the smooth operation of the systems, consult on industry best practices and provide SLAs.

Online collaboration services

Modern collaboration technologies allow company employees to communicate in an efficient, convenient and fast way. Modern cyberspace connection tools allow creating new collaboration possibilities through all types of communication, including voice, video, audio, video conferencing or messaging.

Team's agility, as well as connecting with customers represents an advantage for any business. The client is a click away from online chats, video sessions, teamwork, or documents sharing.



Video Conferencing

The company's objective regarding video conferencing is to turn them into an accessible way of communication. BASS Systems uses Cisco Unified Manager integrated conferencing solutions through Cisco WebEx. The latter is a leader in cloud-based web conferencing, events, online training and support. Thanks to this service, the company's customers gain access to an interactive environment with advanced integrated voice, web, and video conferencing capabilities, HD experiences on desktop, mobile, or any other navigation system.

Voice communication

Voice communication remains the most important tool of a business. However, few businesses have extensive expertise in combining advanced solutions. BASS Systems offers a complete set of services, equipment, or application environments necessary to build a robust and efficient business communications network.

Cisco's VOIP solutions help company's customers provide their employees with the latest communications technology. The implementation of Cisco VOIP technologies allows for communication costs reduction, overall team performance improvement and increased profits.

Audio Conferencing

Audio conferencing is still an irreplaceable tool for teamwork. Digital convergence and IP-based technologies extend the potential of any collaborative environment. BASS Systems provides consultancy and conference rooms equipping with state-of-the-art audio conferencing technologies.

Additionally, can be offered Cisco WebEx solutions with Dimension Data, the global cloud provider. This allows for full integration, based on cloud innovations and audio, video or web conferencing.

Advantages:

- Professional image of the client's business;
- Increased team performance through modern collaborative methods, real-time shared editing of documents, advanced communication, and high-definition video integration;
- Turnkey solution with integration of all facilities and technical support;
- Advanced cloud-based availability with reduced operational costs.

Maintenance and support

In order to ensure customers' comfort by providing equipment and solutions maintenance, BASS Systems has developed an advanced Technical Support Service. The Technical Support Service comprises skilled and experienced technicians able to provide non-stop technical assistance.

A customer can get help from BASS Systems' experts by signing a maintenance and support contract. Contracts are personalized according to each client's needs and requirements.

Signing a maintenance contract guarantees:

- Telephone support, e-mail support, 8×5 or 24×7 ticketing application, in accordance with the contract;
- Off-site and on-site technical assistance;
- Preventive and corrective maintenance;
- Limited/unlimited number of interventions, according to the provisions of the contract;
- Reduced response and resolution time.