



**ENABLING DIGITAL TRANSFORMATION**



The digitisation of state administration and the technological transformation of the administrative processes is one of the current trends of the 21st century. Technological advancements are now deeply integrated in business processes and have significantly developed over the past years, maximising the disruptive impact on the day-to-day administration. However, the speed of digital transformation requires careful approach to these processes, an in-depth analysis of technological trends and making the right decisions. It is therefore very

appropriate expertise to facilitate the successful digital transformation from the "electronic government" to "digital government".

Whilst many countries have recently adopted various innovations in public administration and provision of services to their citizens, in some instances there have been significant delays in the practical implementation of such innovations or lack of optimisation of technological transformation. The reason for this is mainly due to the complex structure of the state institutions and various bureaucratic obstacles in making decisions. Past attempts at digital transformation indicate that its successful implementation at the state level in leading countries is directly related to the involvement of private business in these processes. Different forms of cooperation between the state and private business, including public-private partnership, allow to implement this transformation through the application of more efficient and optimised solutions. The successful public-private partnership can form the Digital Government that maintains the interest of both private businesses and state institutions.

Digital Government is an effective tool that allows to increase productivity, maintain customer satisfaction and deliver services that meet consumer needs. In addition, Digital Government type of solutions are able to analyse and sort the big data produced by digital platform users, facilitating the entire cycle from reception to archiving. By using digital tools, government agencies increase efficiency, reduce costs and offer a wider range of quality services.

SINAM has over 30 years of experience in the implementation of innovative solutions in public administration and has acquired the vision and professional expertise on Digital Government formation in accordance with the modern standards and current transformation trends.

Having extensive experience, SINAM currently offers a variety of "digital government" solutions that can meet the needs of various global governments. As one of the leading IT-companies in the Trans-Caspian region, SINAM has built a strong reputation among our clients, in emerging markets and strong partnerships with our local partners. We are currently expanding to Middle East, Asia, Africa and Western markets. Our solutions are constantly being improved in accordance with the modern technological advancements and customer needs.

In the coming years, we will continue to develop our solutions in line with our motto 'IT is our business' and will ensure that our services correspond with the digitalisation goals. Most importantly, we will never waver on our commitment to quality service and customer satisfaction, which is the most important key to our success.



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## Solutions

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**SINAM Advanced Geo-Information System.** SAGIS is an online GIS-Web resource created for everyone to access information and services.

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**YURDUM** - a navigation software based on Augmented Reality technology that supports the functionality of recognizing objects and images for navigation purposes.

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The electronic map used in the "**GoNav.Az**" navigator currently operates based on the "GoMap.Az" electronic map database, which is popular in the country and covers the territories of Azerbaijan and Georgia. This map includes all roads and streets with up-to-date traffic regulations.

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**FreeFields** - a mobile application for Android and iOS platforms designed to prevent individuals traveling to liberated areas from entering dangerous areas with mines and unexploded ordnance.

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**Yollar Monitoring System** - enables optimizing the use of transportation vehicles, reducing vehicle maintenance costs, automating fleet management, increasing workforce accountability, and monitoring cargo status.

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**BeeTalker** offer PTT products and applications, which will enhance and improve the way your team connects. BeeTalker provides our clients with the tools, and support needed to be up and running fast, in a matter of days, not weeks or months.

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**Veterinary Service Monitoring** is subsystem of the Electronic Agricultural Information System, which was developed for the Animal Health and Veterinary Services Center. This subsystem is designed to enhance the monitoring and management of veterinary services.

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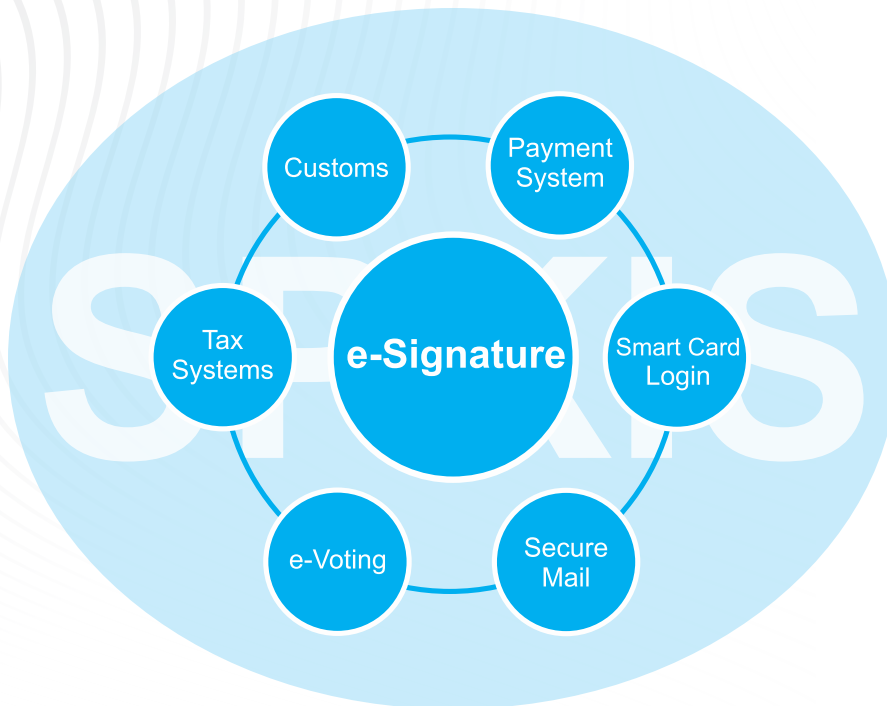
**SPBX** provides new generation communication systems to international organizations, institutions, and governments worldwide by combining the latest advanced technologies, offering agile, reliable and scalable communication solutions.

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## E-Signature Solutions

Electronic signature (e-Signature) serves as an online safeguard, that brings security to consumers while engaging in different forms of trading activity such as purchases over the Web. With the growth of e-Commerce over the last several years, SINAM realized necessity to provide security both to online delivery of government services and commercial applications.



SINAM E-SIGNATURE SOLUTIONS can help State agencies encourage citizens and businesses to make the best use of e-Government services. To guarantee safety of every single data transfer in an organization, all SINAM products are incorporated with the specified protective layer.

### National Certificate Authority of Azerbaijan government

#### Client/Project Period

- Central Bank of Azerbaijan Republic (2008 - 2010)
- Ministry of Digital Development and Transport of the Republic of Azerbaijan (2021-2024)



#### Problem/Background

Creating of National Certificate Authorities and Certificate Policies for root, policy and intermediate Cas. Development of national PKI infrastructure and provide digital signature certificates for government and public sector.

#### Analysis

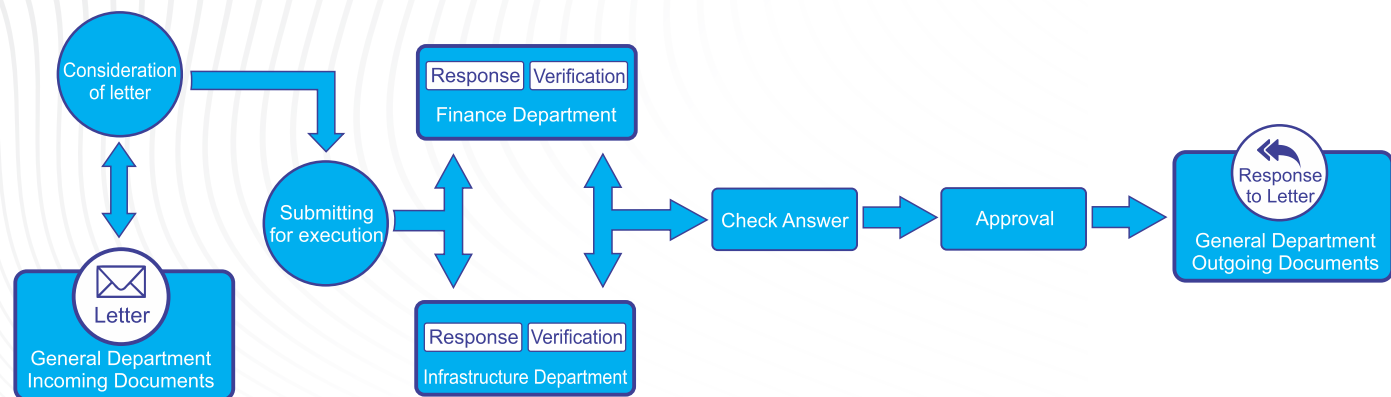
- Create Root and Policy CA for government;
- Create intermediate CA-s for government and accreditation process of custom CAs under Root CA;
- Development of CP, CPS for government Cas.

#### Solution

- Full suite of e-Signature functionalities: Root, policy and intermediate Certificate Authorities, Registration Center, online enrollment system;
- Two and multifactor authentication;
- Single physical system server to host and operate unlimited core CAs and sub-CAs.

# Document Workflow Solutions

Every day, large organizations such as government agencies generate huge volumes of paperwork in various formats. From customer information sheets and service contracts to external correspondences and staff reports, these may come in both printed and digital forms. If left unmanaged, it will become cumbersome or even impossible for managers and staff to process, archive, and later locate a necessary resource or bit of data. This can impede your operations and in turn impact your agency's level of service.



The SINAM Document Workflow System (SESDA) is a full-featured platform, designed to make information management efficient for enterprises. It is scalable, secure, reliable, and easy to use, and will suit any organizational structure, complexity, scope, and network setup.



### SESDA eGovernment Document Flow System

#### Client/Project Period

- Central Bank of Azerbaijan Republic (2010 - 2024)
- National Archive of Azerbaijan Republic (2011 - 2024)
- Ministry of Agriculture of Azerbaijan Republic (2022 - 2024)
- The Ministry of Health of the Republic of Azerbaijan (2022 - 2024)
- Ministry of Energy of AR (2023 - 2024)
- State Agency for Service to Citizens and Social Innovations (ASAN) (2021 - 2024)



#### Problem/Background

In organizations, it is necessary to increase the efficiency of processes.

#### Analysis

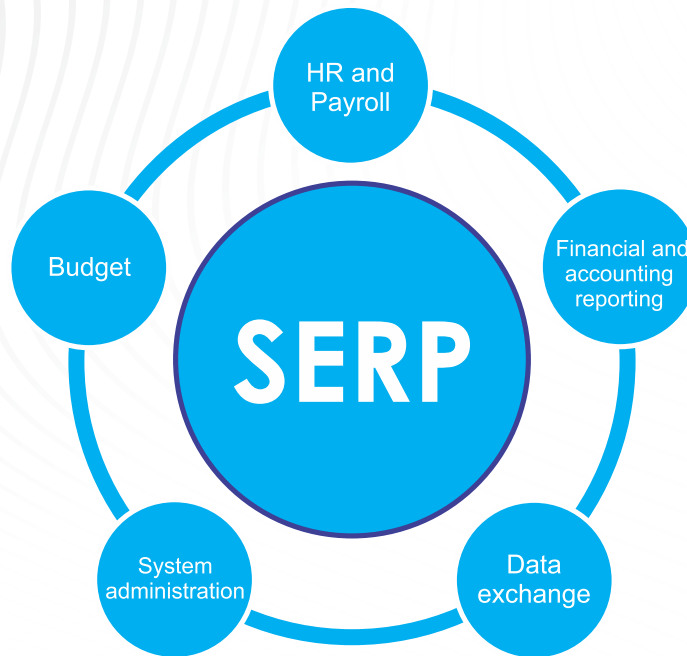
- Tracking and monitoring of activities;
- Shorter turnaround time in approvals;
- Access to reports, correspondences.

#### Solution

- Electronic Workflow System;
- Project Management;
- Reporting services.

## Enterprise Resource Planning

SERP (SINAM Enterprise Resource Planning) system is integrated web application complex that supports multiple functions used by different units. ERP system offered by SINAM allows for smooth integration of separate databases and spreadsheets, thereby removing manual creation and generation of reports by employees. SERP gives users flexibility to view key financial metrics of the company. Since the system is web based, it can be accessed from anywhere across the world.



SERP provides for visibility, analytics and efficiency across the entity. The software speeds the real-time transfer of information across different business units so entity is capable of making faster data-driven decisions. Despite joint exploitation of SERP modules is recommended for an enterprise, they can be used in any preferable combination.

Unique feature of SERP is that it can be implemented with e-Signature environment that will enable secure and authorized information exchange both within the organization and outside of it. Other advantages of the system is multilingual interface, full conformity with local legislations, ability to keep books in several currencies simultaneously and administration of rights among users.

### Integration of ERP system in Surakhani Oil

#### Client/Project Period

Surakhani Oil (2012-2015)



#### Problem/Background

- Poor Cost and Fixed Assets accounting practices.

#### Analysis

- Automation of financial and managerial accounting and production cycle to ensure the transparency and control of business processes of the organization.

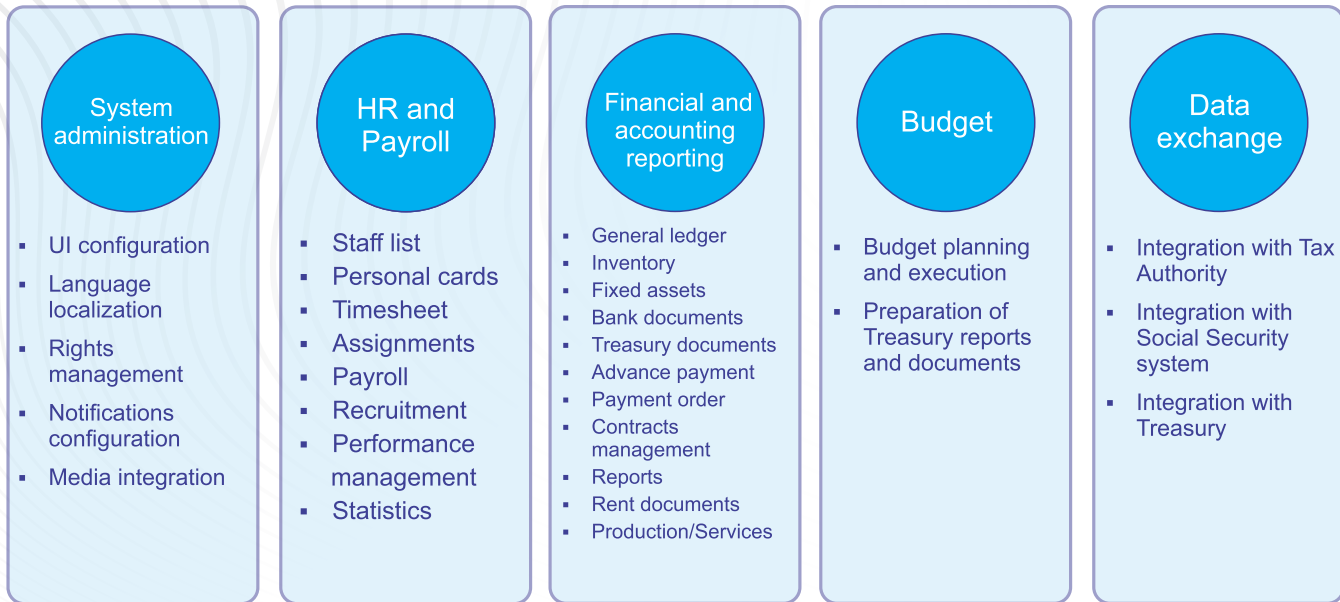
#### Solution

- Cost accounting for vehicles (fuel, repairs, amount of work done by vehicles);
- Payroll accounting for a large number of employees (1,700 people); accounting and control of financial transactions (banking, treasury and other financial documents: about 8000 - 15 000 documents);
- Automatization of business processes as mining of minerals, construction of organization's budget, reporting to top management;
- Application of Fixed Assets module for the management of fixed assets of the Company.



# Government Resources Planning

As an organization grows, the scope of business becomes increasingly complex and may become difficult to manage. The SINAM GOVERNMENT RESOURCES PLANNING solution is an integrated Web application that allows you to better plan, register, control, and analyze all your work processes.



SGRP is easily scalable - making it especially suitable for e-Government efforts, and can be adopted by other types of public or private organizations, regardless of size or nature of business. SINAM's long list of SGRP clients will attest to this.

### Financial and Accounting Reporting Application for Budgetary Institutions

#### Client/Project Period

Ministry of Finance, Republic of Azerbaijan (2012-ongoing)



#### Problem/Background

- Meeting international standards;
- Best practices in budget management, data administration, and reporting.

#### Analysis

- Modern report submission system for 4,000 users in budget offices in all government ministries, higher education institutes, and other State agencies in Azerbaijan.

#### Solution

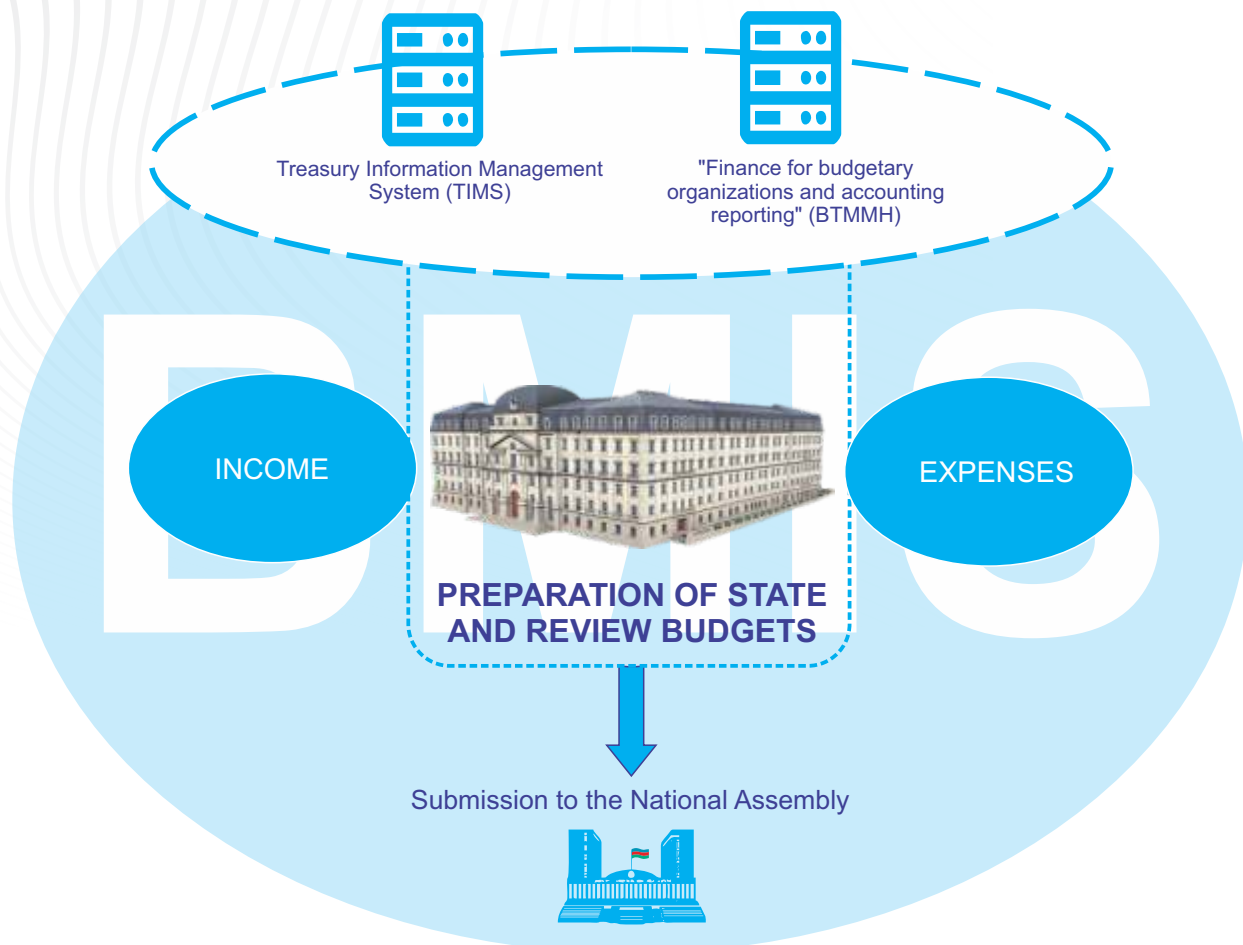
- Oracle BI platform;
- Record management;
- FARABI Data Center.

#### SGRP Clients:

- |                             |   |   |
|-----------------------------|---|---|
| ▪ Ministry of Finance       | ▪ Ministry of Health                        | ▪ National Television and Radio Council           |
| ▪ Ministry of Education     | ▪ Ministry of Ecology and Natural Resources | ▪ State Committee on Property Issues              |
| ▪ Ministry of Youth & Sport | ▪ National Archive Fund                     | ▪ State Urban Planning and Architecture Committee |
| ▪ Ministry of Energy        | ▪ The Copyright Agency                      | ▪ State Committee on work with Diaspora           |
| ▪ Ministry of Economy       | ▪ Academy of Sciences                       | ▪ Supreme Court                                   |
| ▪ Ministry of Culture       | ▪ Heydar Aliyev Center                      | ▪ Constitutional Court                            |
| ▪ Ministry of Agriculture   |   |   |

# Budget Information Management System

Budget Information Management System (BIMS) is a system used by the Ministry of Finance of the Republic of Azerbaijan for state and consolidated budgeting. It is used to forecast and process estimated state budget revenues and expenditures, manage the state debt, and form a basis for state investment programs by various governmental institutions, including the Ministry of Finance, agencies funded by and receiving income from the state budget, and other state companies and committees receiving financial support from the state budget.





### Budget Information Management System for Ministry of Finance

#### Client/Project Period

Ministry of Finance of the Republic of Azerbaijan (2020 – 2024)



#### Problem/Background

The need to create a safe, user-friendly, modern, and sustainable automated system for state and consolidated budgeting.

#### Analysis

- Comparative analysis of budget estimates and actual indicators for the current and past years;
- System analysis of differences between the forecasted and actual financial progress for each project;
- Comparative analysis of budget estimates for the current and past years and actual data for previous years;
- Adoption and analysis of forecasted base and capital expenditures of budgetary institutions, as well as orders for new policy initiatives and sector strategic plans;
- Providing system links required to arrange the monitoring of the implementation of the approved medium-term budget estimates according to targets and indicators applied, including integration with the treasury and other related departments and automatic processing and analysis of the data acquired.

#### Solution

- Instructing budgetary institutions funded from central financial costs and local fiscal bodies in the upper limits of the budget estimate by the Ministry of Finance of the Republic of Azerbaijan;
- Obtaining budget estimates (orders) from subordinate bodies and local units by budgetary institutions funded from central financial costs;
- Obtaining budget estimates (orders) from institutions funded from local costs by local fiscal bodies;
- Forwarding budget estimates to the Budget Department of the apparatus of the Ministry of Finance and relevant sectoral departments by budgetary institutions funded from central financial costs;
- Forwarding budget estimates to the Budget Department of the apparatus of the Ministry of Finance and relevant sectoral departments by local fiscal bodies;
- Creating a state investment program database.

# Treasury Information Management System

Treasury Information Management System (TIMS) is highly integrated, user-friendly system, that provides flexibility and functionality to support main business processes of the Treasury regarding budget performance. The primary function of the country-wide system developed by SINAM is to provide transparency in budget performance and automate functions of Treasury of the Ministry of Finance.



## Main advantages of TIMS:

- Coverage of main business processes of the Treasury;
- No necessity to support the system in the field;
- Support management decision-making with the help of analytical reporting.

### Ministry of Finance

#### Client/Project Period

Ministry of Finance, Azerbaijan Republic



#### Problem/Background

- The main problem was inefficiency in business processes and lack of automated solutions in Treasury;
- Lack of prompt interaction of Treasury information system with other governmental bodies.

#### Analysis

- Management of obligations and expenses in order to ensure budgetary obligations on compliance to allocated limits;
- Control and cash management, including improved cash flow forecasting;
- Financial reporting to increase transparency and improve governance;
- Simplification of reliable and efficient data exchange with other government agencies.

#### Solution

- SINAM developed web-interfaced Integrated system with 12 modules;
- System automates business processes in Treasury institutions and in BOs for budget preparation and execution;
- Integrated analytical reporting system;
- Ensures integration and provision of services for 3rd party organizations;
- National Bank, Ministry of Finance, Ministry of Economy, Ministry of Taxes and other institutions are integrated in the system.

# Integrated Tax Administration System

SINAM's INTEGRATED TAX ADMINISTRATION SYSTEM (ITAS) provides a stable platform for mounting reform efforts, improving compliance, and automating organizational processes. For citizens and enterprises, this translates into easier and less expensive means to pay their taxes.



During economic instability, governments strive to improve their tax and revenue collection systems in order to:

- Improve income administration;
- Institute good governance and transparency;
- Better engage the private sector;
- Ensure macroeconomic stability.

## Reasons to opt for this solution:

- Complete and modern features for operations, reporting, and analysis;
- Anti-corruption mechanisms through multi-level control over information and processes;
- Seamless integration with information systems owned by other regulatory bodies;
- First-rate performance in highly sophisticated operational environments;
- Simplified means to communicate and interact with taxpayers;
- Flexible administration of data and system tools.



### Tax Administration Reform and Modernization Project

#### Client/Project Period

State Tax Service, Kyrgyz Republic (2010-2013)



#### Problem/Background

- Problems with tax collection, Ineffective procedures, and outdated hardware;
- Lack of skilled staff.

#### Analysis

- Need to enhance revenue management, streamline operations, and improve public governance, transparency, and accountability;
- Key functionality: ready access and cohesive view of all government information.

#### Solution

- Use of advanced BI technologies to create dashboard feature;
- Integrated tax management information system and central database;
- Communications infrastructure linking all tax offices to central database;
- Modern call center;
- Integration with pension and treasury systems;
- Centralized system maintenance (i.e., no need to involve field staff).



Transforming the traditional system, mainly using papers in government transactions to electronic governance in order to provide an outstanding services to citizens became our top priority.

Our strategic objective for electronic government system is to support and simplify government operations for citizens, governments and businesses. Another goal is to make ministries more transparent, accountable and speedy.

### Single Window of Ministry of Interior of Kurdistan Regional Government

#### Client/Project Period

Ministry of Interior of the Kurdistan Regional Government, Republic of Iraq (2017)



#### Problem/Background

Reliance on old-fashioned ways of governance led to lack of transparency and automation of highly integrated processes. Lack of integration of modern technology in government resulted in high levels of inefficiency in delivering of public services to citizens.

#### Analysis

Implementation of e-Government services proposed by SINAM will enable Ministry of Internal Affairs of Kurdistan to optimize delivery of governmental services, provide transparency to state information and improve interaction with businesses and industry. Operational efficiency and transparency will result in falling mismanagement and corruption levels, drop in bureaucracy and delays in service delivery. Upon approval of partnership between Ministry of Internal Affairs, SINAM company and ASAN xidmet, SINAM was responsible for preparation of report that outlined technical requirements of the project. SINAM suggested range of their trademark products for Ministry of Internal Affairs to assure smooth and accurate transition electronic government: E-Visa system, e-Signature, Document Workflow Solution, Government Payment Portal, Data Center Solutions, PBX, Security CCTV solutions and others.

#### Solution

Projected benefits from SINAM delivered e-Government transformation:

- Single-Window system to promote transparent and accountable interaction of civil workers with citizens;
- Faster service to citizens of Kurdistan to promote the trust between government and residents;
- Reduction of paper-based transactions between sections and units;
- Drop in corruption levels;
- Cut in government operating costs that will result in millions saved annually.

# Electronic Visa System

Simplification of electronic visa issuing process to foreigners and stateless people arriving to Azerbaijan.

- Accelerated Issuance of e-Visa (3 business days for Standard visa; 3 hours for Urgent visa);
- Electronic issuance of Visa in 3 steps (Apply – Pay – Download);
- Online payment of visa fee;
- About 100 countries are eligible for e-Visa system.



## How it works?

- An application form is filled at <https://evisa.gov.az> portal;
- Online payment of specified fee, depending on visa type issued, is carried out via visa processing portal;
- e-Visa is sent to the applicant's e-mail address;
- Airport terminals are provided with specified equipment for issuance of e-Visa;
- Average daily number of applications: 2000.



### Development of ASAN Visa System

#### Client/Project Period

The State Agency for Public Service and Social Innovations  
under the President of the Republic of Azerbaijan (2016 - 2017)



#### Problem/Background

Necessity to simplify and accelerate issuance process of electronic visas to foreigners arriving in Azerbaijan.

#### Analysis

- Need to accelerate the process of obtaining visas;
- E-visa type: single entry / 90 days validity / 30 days to stay in the country.

#### Solution

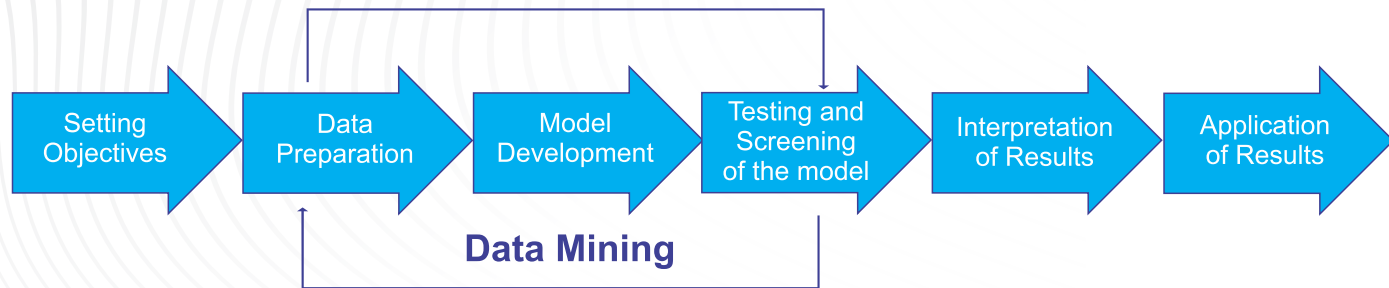
- Web based software;
- User-friendly interface for visa application;
- Possibility of paying visa fee via portal.

# Data Warehouse and Analytical Reporting System

In modern world, banks cannot cope without timely and objective data about market dynamics, banking sector, forecast of future movements and constant valuation of efficiency of their internal structure.

Having established itself as market leader in software development in Azerbaijan, SINAM developed BI (Business Intelligence) platform that provides necessary basis for corporate governance efficiency.

The main purpose of the product is implementation of systems, oriented to dynamic, multidimensional analysis of historical and current data, analysis of trends, projection of future dynamics.



Unique features that system offers are the following:

- Support decision-making through the identification of data of hidden regularities;
- Extract implicit and unstructured information and presenting it in a user-friendly form;
- Advanced administration capabilities.

### Bank Supervision Information Management System

#### Client/Project Period

Central Bank, Republic of Azerbaijan (2014)



#### Problem/Background

- The AR Central Bank used its own IT products to manage business internally and work with financial documentation that regulates mutual relations with banks operating in the country. However, existing information tools did not technically produce required multi-factor operational analysis.

#### Analysis

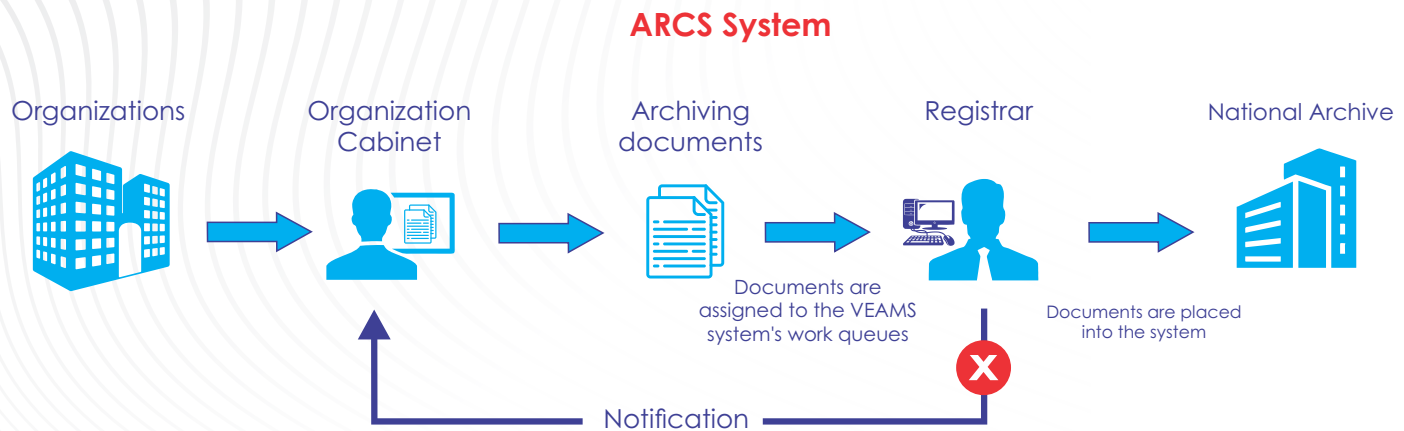
- Since Central Bank of Azerbaijan actively uses analytical tools as the building block for development of its business strategy, there was a dire need for production of cutting-edge solution that would automate multiple processes and provide bank with certain vision. As a result, Data Warehouse analytical tool was created. The product is based on Oracle BI platform and provides for transformation of complex bank settlement transactions and rules into analytics by means of key stages: planning, identification processes, design, configuration and implementation, testing, implementation and support.

#### Solution

- Client-oriented approach to requests and reports;
- The system is compatible with Microsoft, Oracle, Teradata and other database platforms;
- Production of simple reports from complex information sets from different departments;
- Delivery of existing retail data from external sources to the Unified Data Warehouse;
- Build-up of useful models for business users;
- Analysis of annual results and generation of reports in various formats;
- Data Mining.

# Electronic Archive System

In archives of countries and organizations the common challenges of paper document storage is inappropriate space, shortage of (suitable) premises for secure long-term storage of documents, lack of qualified storage management staff, poor records, unauthorized access, time-consuming search. Also, there is big problems with storage and quick access to historical media materials with stores in special rooms with specific temperature and humidity.



Centralized Electronic System (ARCS) can provide quick access to content like this. The purpose of the project is to digitize and electronically archive the existing documents in the archives of any desired organization through scanning. The next stage after digitization is to register the processed documents into the Electronic Archive System, thereby enabling easier and more efficient access to archive information from the system when needed.



### ARCS Centralized Archive Electronic System

#### Client/Project Period

National Archive of Azerbaijan Republic (2018-2024)



#### Problem/Background

- Digitization of historical and other documents and media content;
- Full-text search of documents.

#### Analysis

- Logging and monitoring of archive documents;
- Quick access and recognize archive documents;
- The transfer of electronic documents from organizations to the archive.

#### Solution

- Scanning and recognize of equipment and processes;
- Centralized Electronic Archive System;
- Reporting services.

# Bus Ticketing System

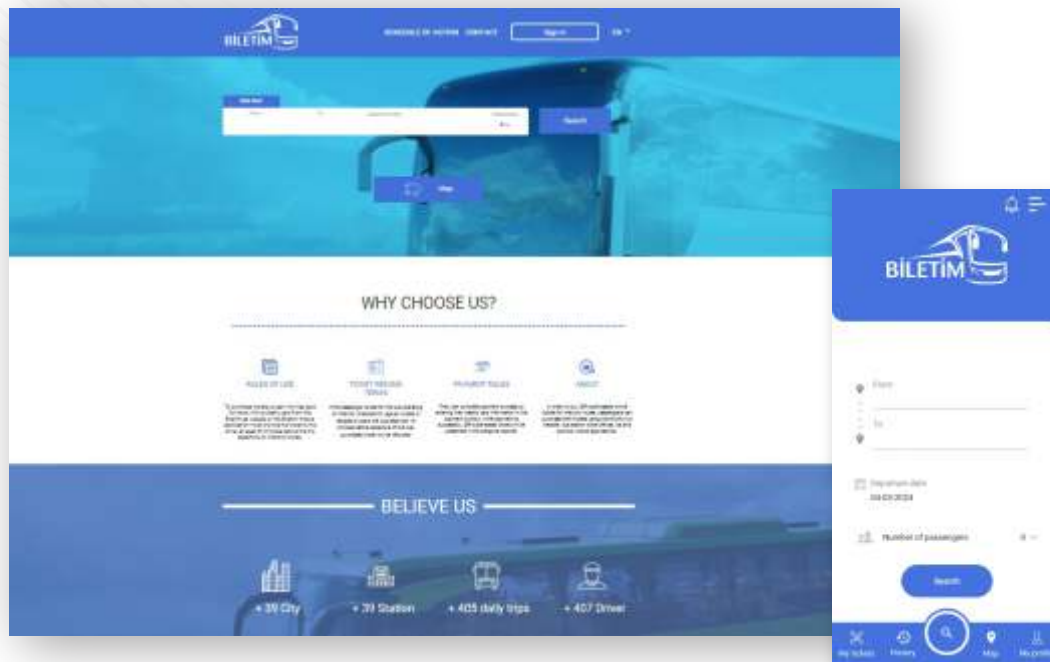
## The ticket sales system for intercity, inter-district and international trips:

- Ensuring both online and offline purchase of tickets based on QR codes.
- Purchasing tickets by selecting seats from the bus schedule.
- Ensuring ticket sales from any bus station.
- Quick refund option for tickets.
- Track the bus location on the map.

## How it works:

- Tickets can be obtained from the Biletim.az website or through the Biletim mobile applications (available for iOS and Android).
- Payment can be made in cash at the counter, or online via debit card.
- Checking online tickets by the dispatcher through the Biletim platform app without approaching the ticket counter.
- Online tickets can be received both via email and through the portal.
- Traveling is possible by presenting the QR code-based online tickets to the driver.

This is facilitated through the Biletim portal application.



### Bus Ticketing System for Azerbaijan Land Transport Agency

#### Client/Project Period

Ministry of Transport and Digital Development of the Republic of Azerbaijan,  
Azerbaijan Land Transport Agency (2022)



#### Problem/Background

Providing a convenient ticket acquisition process for citizens wishing to travel on intercity, inter-district and international routes.

#### Analysis

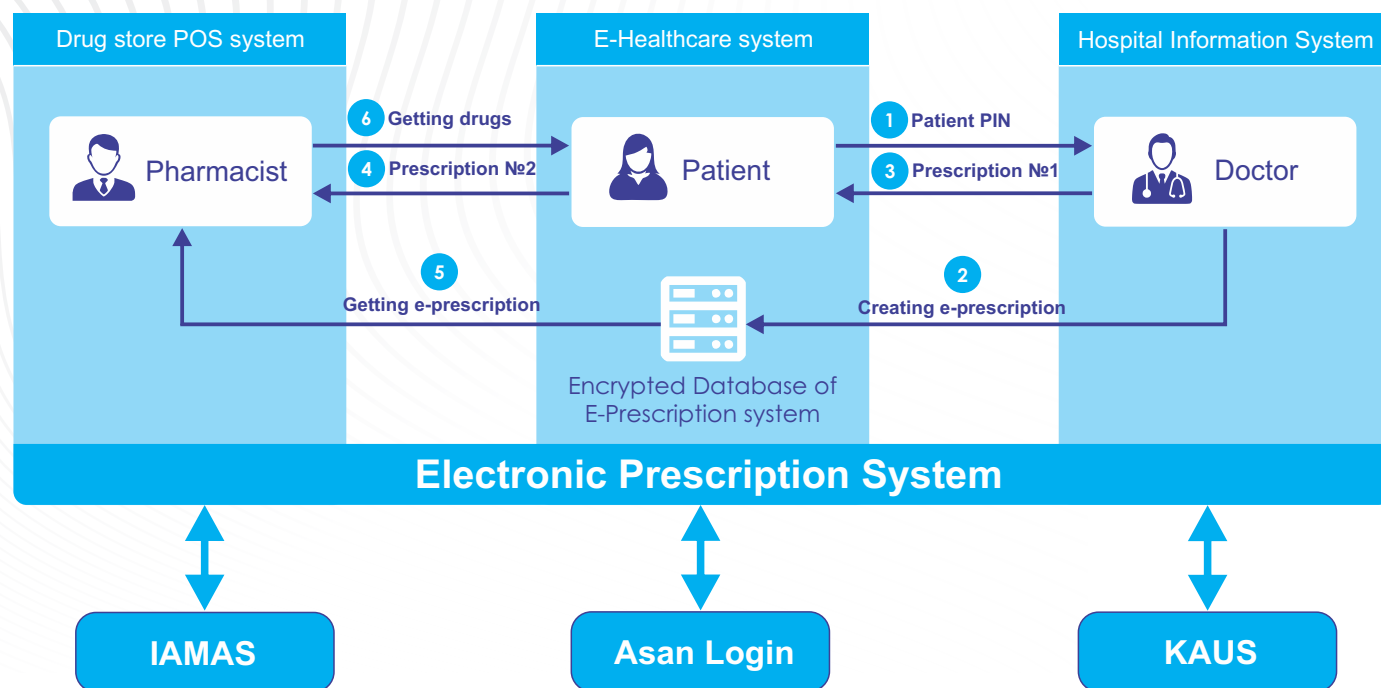
There is a need to ensure comfortable ticket purchase by selecting seats on regular routes from any point.

#### Solution

- Web and mobil base application.
- Daily ticket sales for 405 routes to 39 cities.
- Opportunity to board the bus directly without obtaining physical tickets.

## E-Prescription System

The electronic prescription system in Azerbaijan serves to electronically register and manage prescriptions for citizens across public and private healthcare facilities. Its primary importance lies in consolidating vital principles including accessibility and safeguarding electronic medical records of citizens. This system facilitates healthcare professionals in delivering superior services by leveraging patients' medical history during examinations and treatments, while also enhancing oversight of drug circulation within the nation.



The e-Prescription system enables doctors to electronically issue prescriptions within minutes. All prescriptions are securely stored for both patients and doctors, facilitating future analysis and medical investigations. Patients have access to their prescription information at any time, allowing them to share and print prescriptions as needed. Additionally, they can set medication reminders on their mobile devices for improved adherence to their treatment plans.



### Development of e-Prescription system

#### Client/Project Period

- Ministry of Health of the Republic of Azerbaijan (2023-2024)



#### Problem/Background

The process of digitizing health records and electronically managing prescriptions nationwide.

#### Analysis

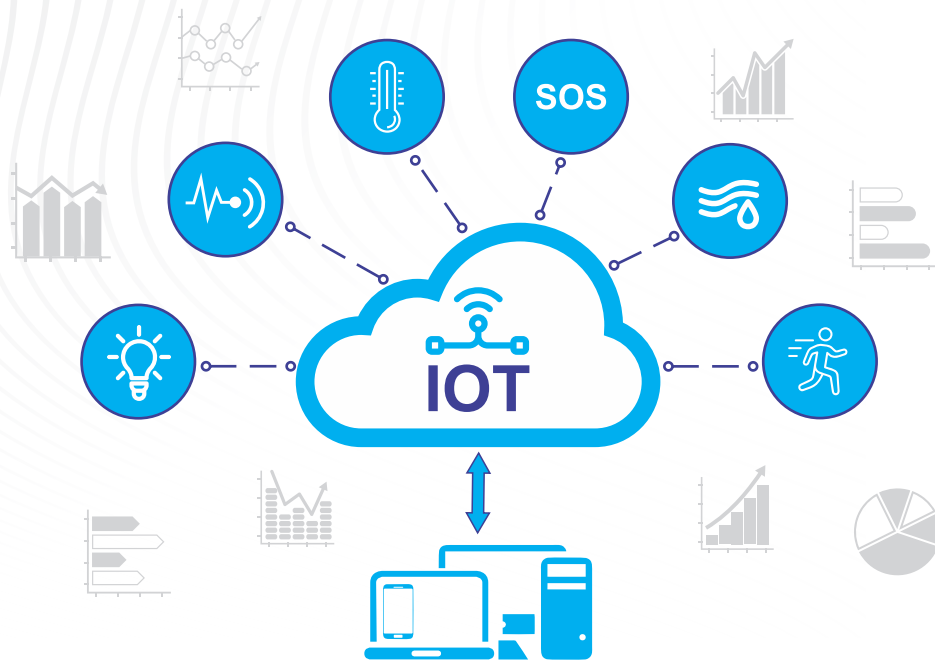
- Examination of domestic legislation concerning the registration and administration of prescriptions;
- Incorporation with various medical data outlets and eGovernment information systems;
- Development of user-friendly applications and services tailored for both patients and healthcare professionals.

#### Solution

- Development of mobile and web applications for the e-Prescription system;
- Implementing API interfaces for seamless integration with third-party custom applications;
- Designing user-friendly interfaces tailored to the needs of both doctors and patients.

# SINAM IoT Management Platform

The solution for IoT platforms with integrated NB-IoT involves seamlessly incorporating NB-IoT functionality into the platform. This enables efficient connectivity, streamlined device management, and reliable data transmission for IoT applications, especially in challenging environments. With NB-IoT capabilities, the platform ensures compatibility with diverse devices, simplifies deployment and maintenance, and enables secure data transmission, facilitating real-time monitoring and decision-making. This integrated solution accelerates IoT deployments, enhances operational efficiency, and fosters innovation across industries.



SINAM IoT Management Platform is an intelligent management, monitoring and interaction platform that enables economical use of resources, making business more competitive and reducing costs

### SINAM IoT Management Platform

#### Client/Project Period

- Ministry of Agroculture of the Republic of Azerbaijan. "Smart village" Project (2022 - 2023)
- Azeriqaz. «Azeriqaz NB-IoT» pilot project (2024)



#### Problem/Background

Effectively managing and integrating diverse devices, data streams, and protocols to enable seamless connectivity and interoperability.

#### Analysis

- Evaluating scalability
- Security protocols
- Data processing capabilities
- Compatibility with various devices and protocols
- Availability of analytics and visualization tools
- Ability to support real-time monitoring and decision-making.

#### Solution

- Implementing robust cloud-based architectures capable of handling large volumes of data,
- Employing advanced encryption methods to ensure data security,
- Integrating efficient data processing algorithms for real-time analytics,
- Developing versatile APIs to facilitate compatibility with diverse devices and protocols,
- Incorporating user-friendly dashboards and visualization tools for data interpretation,
- Implementing automated alert systems to enable proactive decision-making based on real-time insights.

## “Smart village” Management Platform

A “Smart Village” refers to a rural community that leverages modern technologies and innovative solutions to enhance various aspects of daily life, including agriculture, infrastructure, healthcare, education, and socio-economic development.

Smart villages aim to improve efficiency, sustainability, and quality of life for residents through the integration of digital tools, data-driven decision-making, and community engagement.



The SINAM 'Smart Village' solution is an innovative management platform that combines technology and agriculture for the development of villages in Azerbaijan."

### SINAM “Smart Village” Management Platform

#### Client/Project Period

Ministry of Agroculture of the Republic of Azerbaijan.  
“Smart village” Project (2022 - 2023)



#### Problem/Background

Rural areas in Azerbaijan lack access to modern technology and suffer from inadequate infrastructure, leading to declining agricultural productivity and rural depopulation. This necessitates innovative solutions integrating technology and agriculture to revitalize these communities and promote sustainable development.

#### Analysis

- Informed Decision Making: Uses data analytics for resource allocation, service improvement, safety, and future forecasting.
- Community Engagement: Encourages collaboration, empowering local participation and informed decision-making based on analytics.
- Infrastructure Optimization: Prioritizes projects to enhance services, green energy adoption, safety, and future readiness.
- Sustainability: Promotes sustainable practices in agriculture, energy, and environmental conservation, considering future trends.
- Scalability: Adaptable to different contexts, ensuring relevance and effectiveness over time.

#### Solution

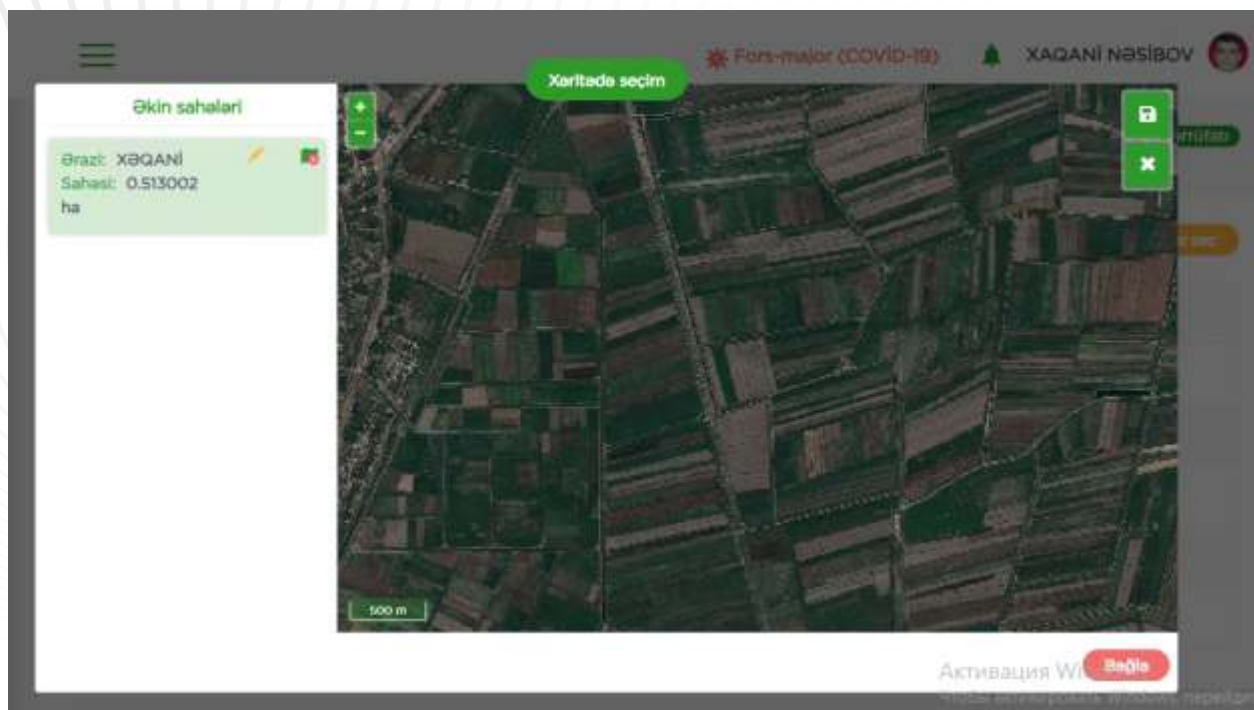
- Informed Decision Making: Empowers stakeholders with data analytics and forecasting tools for resource optimization and future planning.
- Community Engagement: Fosters collaboration among residents, authorities, and stakeholders for informed decision-making and safety awareness.
- Infrastructure Optimization: Addresses infrastructure needs, promotes green energy adoption, and enhances safety standards.
- Sustainability: Promotes sustainable practices in agriculture, energy, and environmental conservation, while anticipating future trends.
- Scalability: Designed for adaptability across diverse rural contexts, promoting green energy adoption, safety, and informed decision-making.



# AgroGIS

Sometimes companies have to implement projects GIS operations (drawing an area, dividing this area, combining, visualizing, moving, etc.) on their web resources. The use of such tools greatly simplifies the management of Geospatial Data on the web resource of the company and allows saving additional programming work.

"SINAM" company developed and put into use the "GISTools" service based on its product, the SAGIS system.



"GISTools" allows users registered in any web resource, geographic data (for example, owned land plots) to enter the system, edit, divide, merge, enter data, etc. software for doing as these things.

### “AgroGIS” software development for the Ministry of Agriculture

#### Client/Project Period

Ministry of Agroculture of the Republic of Azerbaijan (2020-2022)



#### Problem/Background

- Use of paid resources for management of various geographic information on own web resources;
- Using the paid map component

#### Analysis

Geographic Information System tools for managing and tracking company geographic data on the Web in its own web resource.

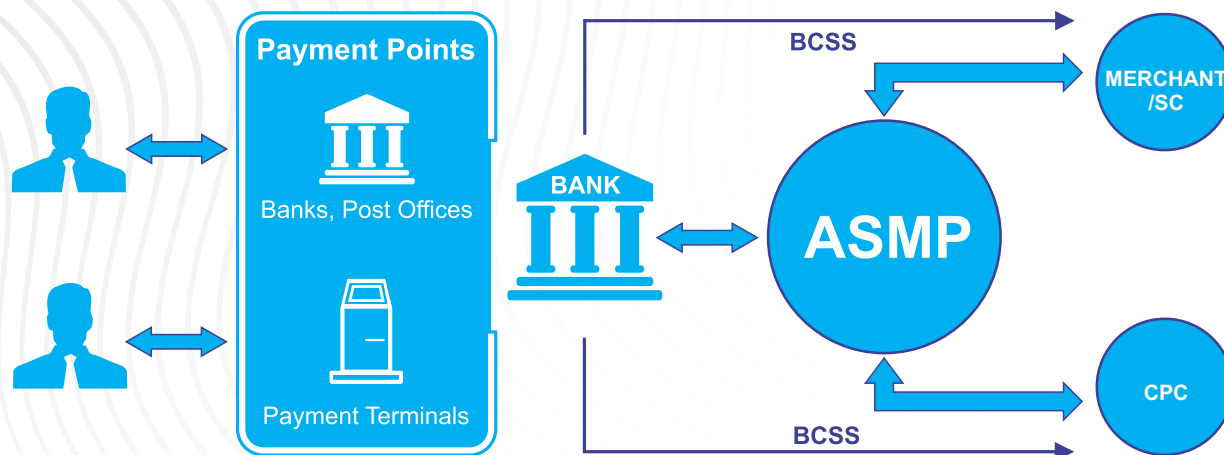
#### Solution

“AgroGIS” system was developed using the following technologies:

- PostgreSQL, JAVA;
- Service Oriented Architecture (SOA);
- Veb-API.

## Automated System For Mass Payments

Every household subscribes to utility services like gas, electricity, water, and telephone. Since each service is delivered by a separate entity, consumers have to deal with several bills, each with specific settlement method and period.



The Electronic Bill Presentment and Payment Solutions is a software solution for development of payment systems on corporate and government scale. Capabilities of this system allow providing centralized, secure EBPP infrastructure between variety types of organizations, to increase cashless payments in overall economy and provide legal conformity of these payments.

Centralized mass bill presentment and payment system, which would enable service subscribers to pay their bills on the unique payment portal through wide range of payment channels using variety of payment methods, can be created basing on this concept. These bill payments can be budget payments and non-budget payments. Budget payments are paid to government organizations for dues, taxes, penalties etc. Non-budget payments are paid to non-government organizations for utilities, telecom services, bank or mortgage credits etc.

Payment service providers including operator itself, can provide payment services through wide range of applications, such as Payment Service Terminals, ATM terminals, POS terminals, Mobile applications, Internet portals, Bank tellers etc. These channels simplify accessing and paying their debts for customers.

### Development of the Government Payment Portal (GPP)

#### Client/Project Period

Central Bank, Republic of Azerbaijan (2008)



#### Problem/Background

- Need to link public utility companies to National Payments System infrastructure;
- Improve collection rates of utility payments;
- Increase transparency of utility payment procedures;
- Potential subscriber base: 9 million individuals.

#### Analysis

- Consolidation of customer lists of utility companies and mass service providers;
- Access to individual account information and modern payment facilities.

#### Solution

- Bills payment through: 31 banks (including ATMs), 1370 postal branches, 8 debit card processing centers, smart meter networks;
- Average number of daily payments: 235 000;
- Average amount of daily payments – more than 13,7 mln AZN.

# Instant Payment System

Instant Payment System is a system of electronic payments that are processed in real time, 24 hours a day, 365 days a year, where the funds are made available immediately for use by the recipient. The main goal of establishing IPS is to provide an option for users to make fast, cheap transfers and payments from one account to another using convenient, modern, and innovative access channels and methods of initiating payment transactions.

Besides, the growth of e-commerce has caused changes in people's spending patterns. Shopping is no longer confined to regular business hours, creating new challenges for funds transfers. Similarly, merchants require faster and more reliable money transfer systems to keep up with consumers' demands.

IPS will foster the development of the payment infrastructure, meet market and user expectations, promote financial inclusion, and increase noncash settlements.





### AniPAY Instant Payment System for Central Bank

#### Client/Project Period

Central Bank, Azerbaijan Republic (2022-2024)



#### Problem/Background

- Need to consolidate users' multiple bank accounts within a single application;
- Need to integrate Government Payment Portal to consolidate budget, utility, communication, fine, insurance and other payments within a single platform;
- Need to facilitate transfers through straightforward identification methods such as mobile numbers, email addresses, PINs, TINs, etc.;
- Need to process payments through QR code transactions.

#### Analysis

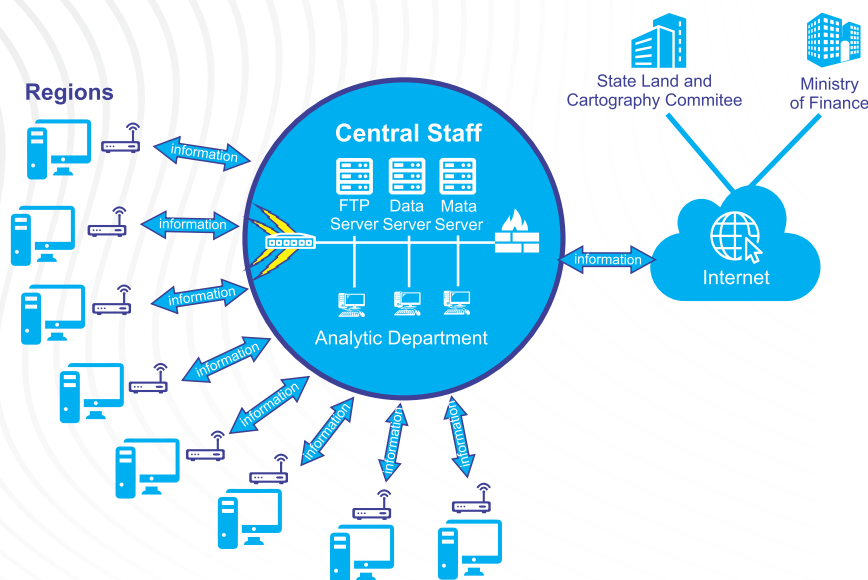
- Integration of all banks operating in the country into the established infrastructure;
- Access to individual account information and modern payment facilities.

#### Solution

- 24/7/365 operation
- Funds are transferred between user accounts
- Urgent payments
- Immediate availability of funds to the recipient for use
- Instant notification of the recipient on funds credited.
- Availability of statistics on operations made by the user

## Analytical Information System For Social-economic Development Of Regions

In order to improve design and delivery of their programs at the local, national, regional, and transnational levels, State decision makers should be able to benchmark against other governments. The ultimate goal is to secure economic development by becoming an attractive target for investment.



To meet these objectives, it is essential to have ready access to relevant information. SINAM ANALYTICAL INFORMATION SYSTEM FOR SOCIAL-ECONOMIC DEVELOPMENT OF REGIONS (AISSEDR) can help national governments, regional associations, and other agencies collect, manage, and analyze key development indicators, all from a single database.

### Why SINAM AISSEDR?

- Automated data collection on regional development activities;
- Complex analyses of social-economic indicators;
- Visualization of information to aid in the decision-making process;
- Promotion of open exchange and transparency of information;
- Improved linkages between the State, business structures, and population.

### AISSEDR for Azerbaijan

#### Client/Project Period

Executive Office of the President (2006-2007)



#### Problem/Background

- Limited availability of information about the country's development activities;
- Need for ready access to socioeconomic indicators within its borders and across the region.

#### Analysis

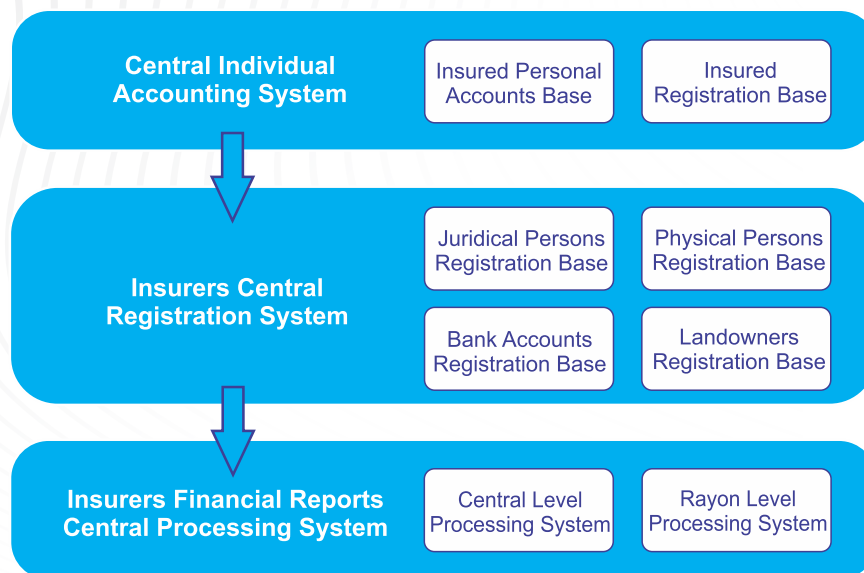
- Single database for key socioeconomic indicators on region;
- Real-time data collection, processing, and analysis.

#### Solution

- Customized analytical reports;
- Visual presentation of reports (e.g., charts, graphs, maps).

## Management Information System for National Pension Fund

Access to social safety nets is an essential right of each citizen and basic responsibility of the State. When the distribution of above-mentioned public benefits is impeded, many sectors will be left highly vulnerable, especially the low-income, elderly, youth, and disabled members of society. SINAM MANAGEMENT INFORMATION SYSTEM FOR NATIONAL PENSION SCHEMES is a turn-key solution that integrates social protection and tax systems by making various processes more efficient and transparent.



As of the end of FY2012, more than two million insurance providers have been registered in the SSPF system. In mid-2012, Automated System For Mass Payments (ASMP) starting accepting social insurance payments. Individuals, landowners, and other insurers can now pay their pension fees using cash, credit card, bank transfer, electronic cheques, and other modalities through commercial banks, ATMs, post office branches, and even the Internet ([www.gpp.az](http://www.gpp.az)). ASMP was also developed by SINAM.

### New SSPF Pension System

#### Client/Project Period

State Social Protection Fund, Azerbaijan Republic (2005-2012)



#### Problem/Background

- UNDP-Azerbaijan Government joint effort pursuing reform in SSPF;
- Recognized by RBEC as top Transformational Change Success Story in 2010.

#### Analysis

- Collect and manage social insurance payments from insurers;
- Segregate and save fees paid by insurants;
- Integration of social protection and tax systems for more efficient/transparent processes.

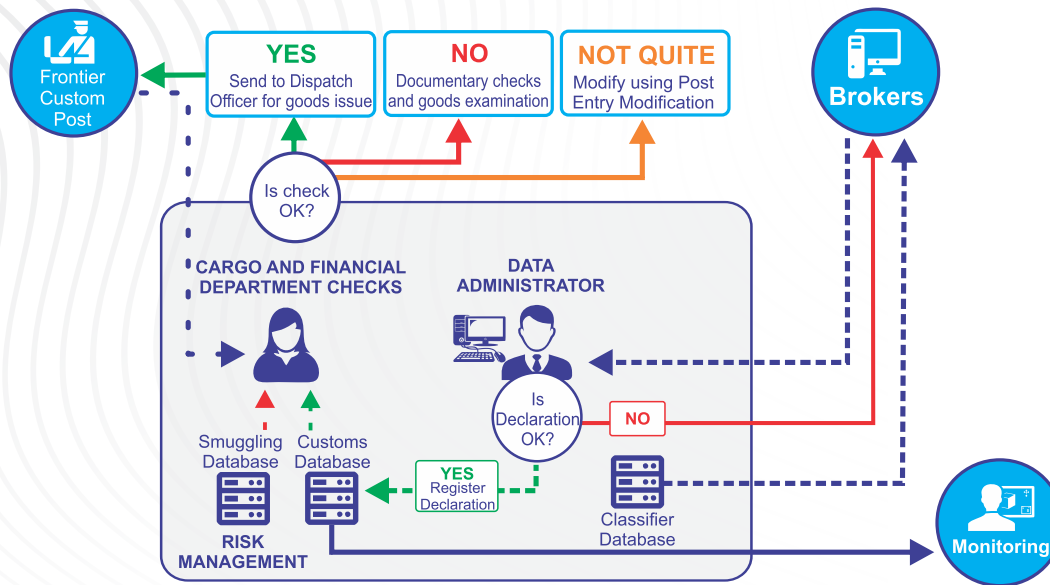
#### Solution

- ICT-driven mechanisms ensuring reliable data exchange between SSPF and local branches;
- Automation of major business processes across SSPF network;
- Integration with ASMP to accept social insurance payments through multiple channels.



# Automated Information System For Customs Declarations And Operations

Customs agencies play an important role in the global economy. Their operations must be efficient, transparent, and up-to-date with international trading regulations and norms. Otherwise, poor management corrupt and illegal practices will lead to millions in lost revenue.



SINAM AUTOMATED INFORMATION SYSTEM FOR CUSTOMS DECLARATIONS AND OPERATIONS is designed to automate business processes, improve transparency, cut costs, and ensure smooth flow of goods.

## Reasons to opt for this solution:

- End-to-end automation of cargo declaration process;
- Support for anti-smuggling efforts;
- Reduced errors due to manual data entry procedures;
- Advanced tracking of warehouse space usage, to accommodate temporary storage requirements of importers and exporters.

### Azerbaijan State Customs Committee

#### Client/Project Period

State Customs Committee, Republic of Azerbaijan (2005-2008)



#### Problem/Background

- Structural reform to develop state-of-the-art customs operation, addressing trade barriers, corruption, and investor needs.

#### Analysis

- Customs database;
- Need to accelerate collection of customs information;
- Technical capacity and overall efficiency of SCC.

#### Solution

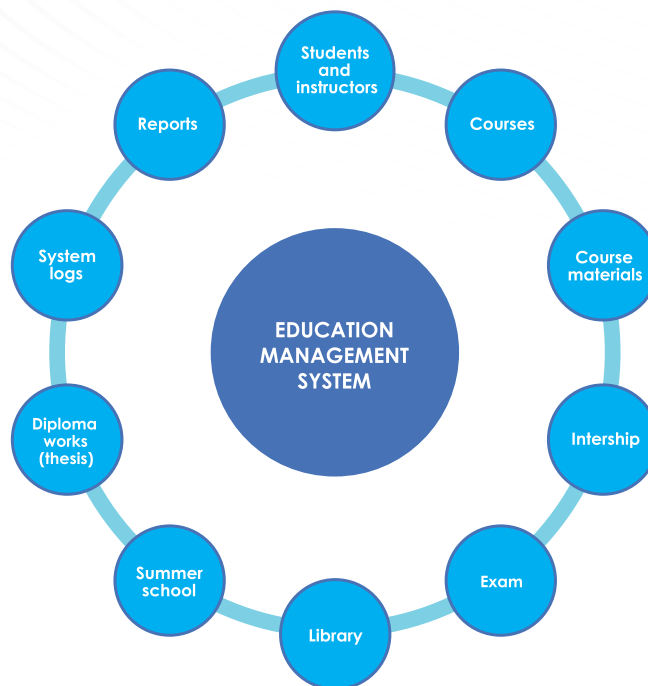
- Customs registration and control system;
- Automated workplace for declarants;
- Customs risk management system;
- Registration system for vehicles crossing borders;
- Secure information exchange system;
- Analytical report generating system.

# Education Management System

UNIVERS is an application software that includes tools for managing, monitoring, documenting, reporting, delivering educational content and monitoring education. The system is designed for educational institutions, however, it may be of interest to enterprises as a means of corporate education, certification and certification.

The functionality of the UNIVERS system is to automate the main issues of the educational process and it meets the requirements of Azerbaijani educational institutions and adjustable for others:

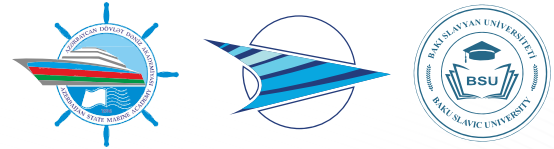
- Establishment of organizational structures of universities;
- Planning, implementation and management of educational activities having a single platform for solutions;
- Compilation of lesson schedule taking into account the distribution of hourly workload automation;
- Rapid and effective deployment of educational content and presentation to educational institutions to be made;
- Special and international information resources in traditional and electronic form (electronic library) entrance;
- Use of various educational methods, including distance and mixed education;
- Organization and holding of video lessons;
- Carrying out various methods to assess the level of knowledge;



### UNIVERS - Education Management System

#### Client/Project Period

- Azerbaijan State Marine Academy
- Baku Business University
- National Aviation Academy
- Baku Slavic University
- Baku State University



#### Problem/Background

- Reliance on old-fashioned ways of managing education system led to lack of transparency and automation of highly integrated processes.
- Lack of integration of modern technology in education sector resulted in high levels of inefficiency in getting final organizational reports.
- Lack of Communication among stakeholders.
- Data availability problem and etc.

#### Analysis

- Quick registration management;
- Grading processes;
- Automatic timetable management;
- Communication and file transfer between students and instructors;
- Digital examination;
- Various report generations and etc.

#### Solution

- Automated course addition;
- Automatically calculated final grades of student;
- Fully automation of scheduling process;
- Performance measurement of both instructors and students;
- Fully digital examination process;
- Digitalized thesis and defense process;
- Based on system information, it provides reports on users, courses, curricula, exams, educational progress, and so on.

# Video Conference Management System

The period of the pandemic is a difficult time for all spheres of public life. In an effort to adapt to the new environment, many companies and educational institutions are forced to restructure their operations by moving internal processes online. It is important to use modern software and services in business processes, business negotiations and distance learning, and other online discussions. For this purpose, SINAM's highly qualified programmers have developed the MEETADORE software product, which meets modern requirements for organizing and conducting online events, video conferences, seminars and broadcasts with a large number of participants. This document contains a description of the MEETADORE program, the working process of its functional modules, as well as software and hardware (technical) requirements. This information is useful not only for managers of companies and educational institutions, but also for those who need a quality tool for "live" online communication.

Software and hardware (technical) requirements the following must be installed on the user's computer:

- Any operating system;
- Any web browser;
- Updated Flash component in the browser;
- Stable access to the Internet;
- Webcam, microphone and sound player (headphones, speakers).

Users and their capabilities the functionality of the MEETADORE program does not depend on the category of users of the program, but may be limited by the organizer of the video meeting, depending on the purpose of participation: moderator or listener, teacher or student, business partner or employee. In the MEETADORE program, each user can create personal meetings, add participants, prepare the minutes of the meeting and save a video of their meetings. The MEETADORE program also provides an offline meeting mode, in which participants are informed in advance about the time and place of the meeting. All scheduled meetings are reflected in the calendar of software users.

Below are the basic features for MEETADORE users:

- Organization and management of video meetings and conferences;
- Management of video conferencing and conference participants;
- Broadcasting of personal videos;
- Display of a screen or electronic board for joint work;
- Transferring the role of "speaker" to other participants of the meeting and conference;
- Use of a common chat to negotiate with meeting participants and a personal chat to communicate with a selected participant;
- Reviewing and listening to presentations;
- Preparation of minutes of video meetings and conferences;
- Recording of meetings and conference broadcasts;



### MEETADORE – Video Conference Management System

#### Client/Project Period

- Academy of the State Customs Committee
- Baku Business University
- National Aviation Academy
- Training Center of ASCO
- Training center of AYNÄ



#### Problem/Background

- Ability to meet from anywhere;
- Remote teaching process, online classes management;

#### Analysis

- There is a need for meetings in the form of video conferences, which can adapt to the profile of any enterprise and have many integration opportunities

#### Solution

- Management of online meetings;
- Conducting the learning management process online, remote management of lessons;
- Organic integration of online meetings into other systems.

# Geographic Information System

Increasing availability of information technologies is closing the gap between physical and virtual space. To bridge the narrowing gap, government agencies are hard-pressed to undertake mapping activities, to promote local services, facilitate sharing of public assets and resources, and provide prompt response during emergencies and disasters.



Using the SINAM GEOGRAPHIC INFORMATION SYSTEM (GIS), you will be able to realize maximum value from your available data. Meanwhile, the business of geolocation is in the hands of ordinary citizens, who are using gadgets like smartphones to map landmarks and places for recreation. SINAM GIS will enable an access to mobile users and allow them to participate in mapping programs.

### GoMap.az & GoMap.ge

#### Client/Project Period

Ministry for Culture of Azerbaijan Republic (2008 - 2010)



**Ministry for Culture  
of the Republic of Azerbaijan**

#### Problem/Background

- Positioning Azerbaijan as a preferred business and leisure destination;
- Need to balance profitability (intensified tourism promotion to generate revenues) and ecological sustainability (monitoring of natural resources).

#### Analysis

- Geographic information and navigation system to showcase landmarks and tourist attractions and monitor the state of its natural resources.

#### Solution

- Web- and mobile-based portal;
- Interactive map of Azerbaijan & Georgia: administrative divisions; settlements, buildings, postal indexes; road networks; hotels, restaurants, organizations, shops, other establishments;
- Client-server technology for input-output of data in different formats and structures;
- Optimal route planning system;
- Text search;
- API GoMap.az

# SINAM Advance Geo-Information Systems

"SINAM" company has started conducting research in the field of Geographical Information Systems and implementing various projects since 2008.

Our experts developed the web-based SAGIS software for working with geographic data, entering, processing, receiving and transmitting reports based on the experience gained during this period and the investigation of various software available in this field.



SAGIS has the following opportunities for users:

- Creation of thematic electronic maps via computer and mobile phone on the web;
- Insertion/modification of coordinates and meta data on the location of geographical objects on the map;
- Defining of relationships among objects;
- Establishing integrations with various analog systems on electronic services;
- Management of large volumes of information by using minimal resources.



### Geographical Information System (BNAGIS) of the Azerbaijan Land Transport Agency

#### Client/Project Period

Ministry of Transport and Digital Development of the Republic of Azerbaijan,  
Azerbaijan Land Transport Agency (2018-2020)



#### Problem/Background

- Obligation to purchase expensive GIS programs for enterprises that are not professionally engaged in GIS;
- Maintenance of specially trained specialists to work with such programs;
- Allocating substantial funds annually for the technical support of these programs.

#### Analysis

Geographical Information System for maintaining the registry of geographic data of enterprises on the Web, managing and tracking objects on a single environment.

#### Solution

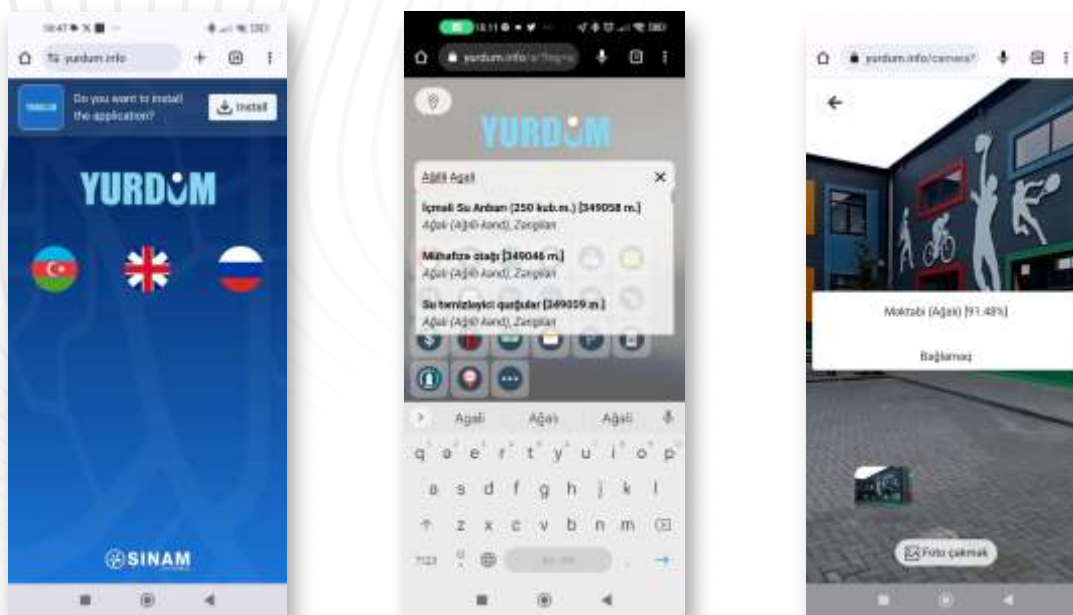
The following technologies have been used for the development of SAGIS:

- PostgreSQL;
- Service Oriented Architecture (SOA);
- Bootstrap.



# YURDUM

Recently, large-scale infrastructure projects, including the construction of tourist facilities and the restoration of historical and cultural monuments, have been implemented in Azerbaijan. In order to convey all these achievements to everyone, special guide programs should be developed and made available to the population and our guests. SINAM company always uses modern IT technologies and offers non-standard solutions by applying innovations.



Recently, large-scale infrastructure projects, including the construction of tourist facilities and the restoration of historical and cultural monuments, have been implemented in Azerbaijan. In order to convey all these achievements to everyone, special guide programs should be developed and made available to the population and our guests. SINAM company always uses modern IT technologies and offers non-standard solutions by applying innovations.

### Building ICT components for the Smart Village

#### Client/Project Period

Ministry of Agriculture of the Republic of Azerbaijan (2021 – 2024)



#### Problem/Background

- Lack of innovative solutions for receiving information while traveling in the country;
- Supporting the application of artificial intelligence technologies in the concept of a smart village.

#### Analysis

"Yurдум" geographical information system is an electronic system developed by the application of Augmented Reality, Artificial Intelligence, "Object recognition" (Machine learning) technologies in any area, including the entire country.

#### Solution

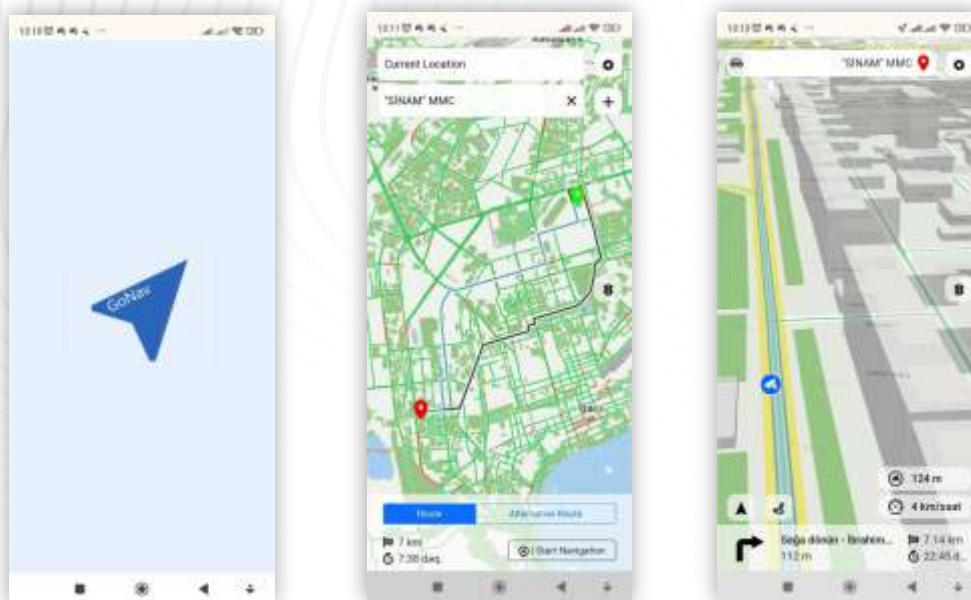
Creation of "Yurдум" geographic information system ("Augmented Reality"), including:

- Creating a detailed electronic map of the village;
- Digital mapping of points of interest of the village and processing of their graphic images for recognition with "Machine learning" artificial intelligence system;
- Development of "Yurдум" augmented reality mobile application.

## “GoNav.Az” Online Navigator

As a result of the targeted policy implemented in the Republic of Azerbaijan, the application of modern information and communication technologies and mobile technologies continues to emerge as a key factor with fundamental and decisive capabilities.

Currently, numerous infrastructure projects are being implemented across the country, with new villages and cities being constructed, roads built, and a new address concept being applied everywhere. In such a context, having a navigation system that covers the entire country will make travel safer and easier for both residents and tourists visiting the nation.



You can start using “GoNav.Az” immediately by entering the link in the browser of any tablet PC or mobile phone.

The electronic map used in the “GoNav.Az” navigator currently operates based on the “GoMap.Az” electronic map database, which is popular in the country and covers the territories of Azerbaijan and Georgia. This map includes all roads and streets with up-to-date traffic regulations.

The “GoNav.Az” Navigator features a single-line search system for objects, cities, villages, new, and old addresses.

### GoNav.Az

#### Client/Project Period

Ministry of Digital Development and Transport of The Republic of Azerbaijan



#### Problem/Background

The absence of a navigator that operates based on a regularly updated electronic map in the country, and the existing navigators not fully covering the entire territory of the country or all the traffic regulations on the roads, are significant issues.

#### Analysis

Using “GoNav.Az”, it is possible to travel safely by car and on foot across Azerbaijan and Georgia. The navigator calculates the most optimal route, taking into account the traffic regulations and traffic conditions (traffic jams) on the roads.

#### Solution

In the “GoNav.Az” Online Navigator, the following technologies have been used:

- MongoDB
- Bootstrap
- Python

# FreeFields

In September-November 2020, Azerbaijan successfully liberated territories that had been occupied for nearly 30 years during the '44-day Country War.' Following liberation, construction efforts commenced in these areas. However, due to the presence of landmines planted during the years of occupation, our citizens are facing life-threatening dangers during construction activities.

In response, SINAM company, as part of the State-Business partnership, has developed and deployed the 'FreeFields' software. This mobile application utilizes maps provided by the Mine Action Agency of the Republic of Azerbaijan, highlighting both dangerous and cleared areas. The aim is to mitigate risks during construction projects conducted in the newly liberated territories, and the software is provided free of charge.



The objective of the 'FreeFields' project is to safeguard individuals working in demilitarized zones and ordinary users traveling through these areas by preventing inadvertent entry into dangerous zones containing landmines and unexploded ordnance, thereby reducing the risk of accidents.



### 'FreeFields' Project for Mine Action Agency

#### Client/Project Period

Mine Action Agency of the Republic of Azerbaijan (2020-2023)



#### Problem/Background

- Individuals traveling to the liberated territories of Azerbaijan for any purpose faced significant danger, necessitating the accompaniment of employees from the Mine Action Agency of the Republic of Azerbaijan to mitigate this risk;
- Access to information regarding cleared areas for those traveling to these regions was severely restricted;
- Individuals encountered challenges in determining their precise coordinates or location while within the area.

#### Analysis

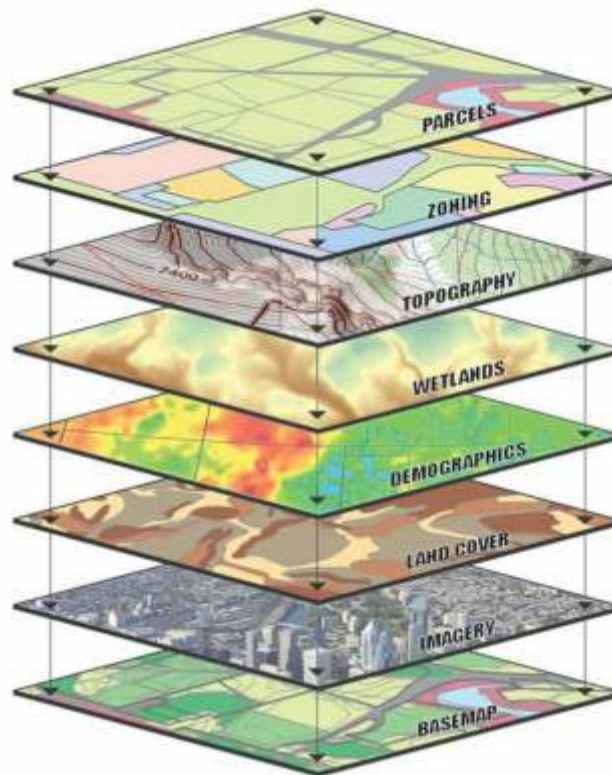
The software operates on mobile devices, communicating information about hazardous areas within demilitarized zones to users through a mobile platform. It also issues alarms and warnings to alert users when they are entering dangerous areas.

#### Solution

The "FreeFields" application is developed as a mobile app on the Flutter platform, compatible with both Android and iOS operating systems (OS). Geographical data management within the system is facilitated by SAGIS software and exchanged with electronic services through APIs.

## Location Based Services and Street Addressing

Since 2008 SINAM has been successfully implementing number projects, including GIS, GPS surveying, digitizing, and processing of geographical data. Efficiency of these projects in Azerbaijan allowed SINAM to expand its activity beyond the country. GIS related solutions include development of online web map, car navigation systems, GPS tracking, street addressing and land use.



Ministry of Communication and Information Technology (MCIT),  
Islamic Republic of Afghanistan

### Client/Project Period

Support of ICT Department on Framing up of Strategy for Location Based Services  
in Kabul City (January 2014 – November 2014)



### Problem/Background

- MCIT has received financing from the World Bank towards the cost of the ICT Sector Development Project. Strategy of Location Based Services (LBS) development was successfully created in framework of this Project. System of Street Addressing (SA) as the core component of the LBS was designed especially for conditions of Kabul, including 22 districts, area of 1000 sq. km. and population of 6.5 million.

### Analysis

- Studying the world best practices used to development of SA and LBS;
- Studying existing SA system, implemented in some areas of Kabul;
- Studying different areas of Kabul, including of CBD, slums, "Soviet housing", and New City (DCDA);
- Studying existing documentations and plans, used by the City Administration;
- Development of SA methodology and tender documents.

### Solution

- Zoning of SA by types of development and administrative districts;
- SA system, compatible with existing systems;
- Special SA system for slum areas;
- Street codification and naming system;
- Sketches of street signs and plaques;
- Methodology and bidding documents;
- API GoMap.az

## Fleet Management System

During its operations, SINAM established itself as reliable and professional partner in the sphere of implementation of leading innovative solutions of satellite-based monitoring of vehicles and GPS navigation in Azerbaijan, Georgia, and Turkmenistan. Over the course of past 20 years, the firm developed number of cutting-edge navigation products that revamped mapping system of Azerbaijan.





### YOLLAR.AZ

Yollar is a fleet management system that is designed to optimize the traffic, reduce fuel usage and automate control in the car. Two key components of YOLLAR navigation system is GSM/GPS tracker and web-server monitoring. Vehicle location is transmitted through satellites via internet channel on real-time basis. This device also conveys information about routes, bus stops, parking lots and other objects. Additional functionalities such as fuel, temperature, pressure and other sensors can be added to the tracker. Monitoring system is accessible through any computer with internet connection. The system also allows for generation of reports based on specified criteria. SMS notifications for exceeding speed limit could be activated.



Detailed maps of Azerbaijan, Turkey and Georgia were created within this project.

### Advantages of YOLLAR

20% reduction of vehicle's mileage is achieved through optimization of routes depending on live situation on roads. Increase in efficiency of transport usage. Competent automated dispatching with real-time monitoring makes it possible to reduce equipment downtime and increase trucks' utilization rate. Effective management based on constant monitoring results in timely delivery of customers to their destinations which leads to higher satisfaction rates.

The software allows for tracking of automobiles along its route to multiple destinations. This tool is particularly useful for freight transportation companies that need to track live location of their drivers. Companies are well-positioned to make conclusions on inefficient utilization of vehicles or heist occurring in case of severe deviation from the predetermined route.

### Main Clients:

- Individuals
- Taxi Services
- Logistics firms
- Shipping companies
- Cash-in-transit courier
- Car rental services
- Transportation department of production firms
- Construction companies



## BeeTalker - Professional Push-to-Talk Solutions

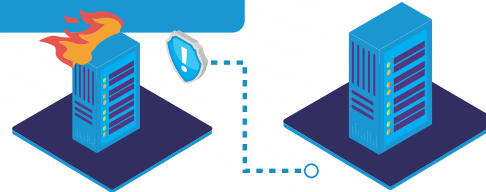
BeeTalker software now growing rapidly in the field of critical communications worldwide from 2017. Our innovative broadband push-to-talk products are first that work with wialon software. We serve a variety of sectors including public safety, private security, utilities, transportation and more. One touch instant communication, connect with one person or several in less than one second. Virtually no distance limitations! Across the street or around the world.

At BeeTalker we understand that the PMR industry is critical for maintaining a safe world, and see the massive potential for its development in parallel with broadband and internet technology. Our aim is to take advantage of this technology and integrate it with traditional PMR form factors, thus providing innovative and valuable solutions to our channel partners and customers. Beetalker has the ability to deliver product with virtually no lead time to any part of the world.

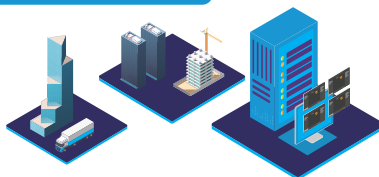
### DATA & VOICE ENCRYPTION



### REDUNDANCY SERVERS



### FLEET MANAGEMENT



### DATA SECURITY



We are observing interesting trend in two-way radio world. Professional radios are getting more and more digitized. And it is not only about the way of voice transmission, it is about business logic capabilities. Good examples are digital radios based on DMR standard. The capabilities of digital technologies brought two-way radios on completely new level of professional communication with the whole family of software applications.

We tried to do the insight into the future and imagine the next step of evolution. There are two facts: smartphones and tablets are becoming more powerful and more reliable (ruggedized, water resistant and dust proof), wireless network infrastructure is getting faster and more reliable as well. Keeping this in mind, we have the reason to predict that two-way digital radios and smartphones will eventually merge into something joint. BeeTalker Walkie Talkie is our attempt to implement private communication system having the capabilities of two-way radios on Android devices.

## BENEFITS OF BeeTalker® PUSH TO TALK SYSTEMS



### INSTANT COMMUNICATION

Less than ONE second connection time.



### GROUP COMMUNICATION

Instantly Connect With Hundreds of Users At Once.  
Or, talk Privately 1-1 with Anyone in your Group.



### WIALON GPS SYSTEM

Real-Time GPS tracking for accurate and complete visibility on wialon software



### RUGGED DEVICES

Made to Withstand Dust, Dirt,  
Water & Extreme Temperatures.



### DISPATCH

Windows Based Dispatch Console



### WORLDWIDE COVERAGE

Global Coverage Available Worldwide.

# Veterinary Service Monitoring

The "Electronic Agricultural Information System" (EKTİS) is a unified system that embodies the core principles of activity for the Ministry of Agriculture of the Republic of Azerbaijan - proximity to farmers, transparent and efficient management, and the application of innovation. It offers extensive integration capabilities with internal and external systems and facilitates the establishment of the agricultural chain.

One component of this system is the Veterinary Service Monitoring (BXM) subsystem, which was developed and implemented by "SİNAM" company for the Animal Health and Veterinary Services Center. This subsystem is designed to enhance the monitoring and management of veterinary services, supporting the overall functionality of the Electronic Agricultural Information System (EKTİS).



With the help of the VSM subsystem:

- The Animal Health and Veterinary Services Center ensures the health of various types of animals, increases productivity in livestock, and oversees and manages the implementation of measures against epizootic diseases.
- It prepares current, annual, and long-term plans for preventive and health improvement measures to eliminate diseases among animals within the Republic.
- It ensures the implementation of measures for the prevention and eradication of animal diseases throughout the territory of the Republic, planning appropriate actions to prevent the spread of infectious and exotic diseases.
- During the execution of measures against particularly dangerous diseases, which are financed by the state budget, the implementation of these measures is monitored by private veterinarians.

### Veterinary Service Monitoring (BXM)

#### Client/Project Period

Agrarian Services Agency



#### Problem/Background

- The absence of an automated universal management and control mechanism at the Animal Health and Veterinary Services Center;
- The results of veterinary doctors' work being recorded only on paper and lacking operational efficiency.

#### Analysis

BXM is a software designed for the automation of veterinary services across all farms in the country, aimed at more effective management of business processes through a single platform.

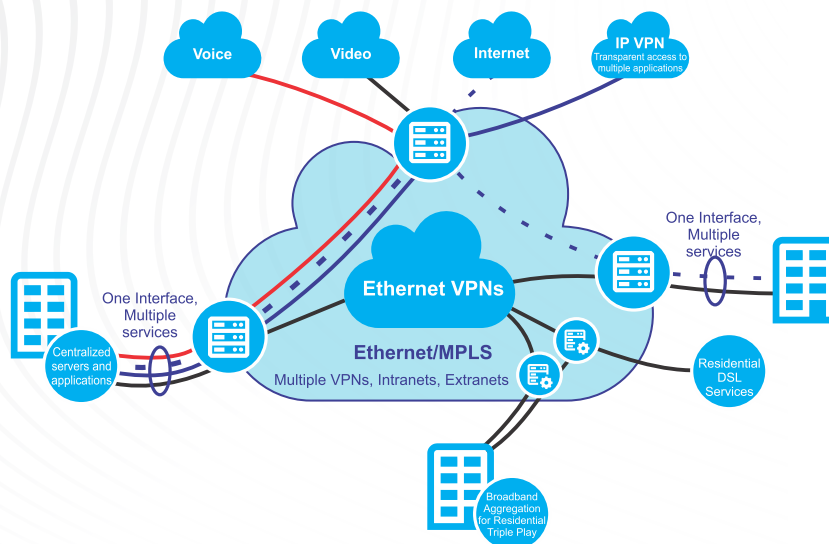
#### Solution

The BXM subsystem incorporates the following technologies:

- PostgreSQL
- Service-oriented architecture (SOA)
- Bootstrap
- Java
- DevOps, Microservis, Docker
- Javascript

# State-of-the-Art Solutions for Network Infrastructure

As a leading provider of systems integration services in the TransCaspian region, SINAM is able to offer a wide range of telecommunications solutions that can readily impact State operations: from high-tech Next Generation and 4G networks to data center facilities, network security, and VoIP telephony. SINAM delivered, installed, and configured all equipment required to build AzDATACOM National Data Transmission Network, which serves as the backbone of Azerbaijan's telecommunications infrastructure.



## Data Centers

Data centers contain computer systems and their components, such as telecommunications and related storage facilities. Below is the list of their primary purposes:

- Redundant or backup power supply;
- Connections for data communications;
- Environmental controls;
- Security devices.

Large organizations, such as government agencies, tend to require several data centers in order to accommodate massive customer demand for electronic offerings. SINAM employs high-availability or failover clusters to ensure redundancy, allowing for provision of continuous service and uninterrupted access to data, in case of application failure or connection loss.



### Next Generation Networks

#### Client/Project Period

AzDATACOM (2005-2011),  
Ministry of Digital Development and Transport of the Republic of Azerbaijan



#### Problem/Background

- The AzDATACOM network project is the main component of the “National E-Governance Initiative” project implemented by the Ministry of Digital Development and Transport in partnership with the United Nations Development Programme (UNDP). The AzDATACOM project is a network infrastructure for data transmission with coverage of almost all regions of the country.

#### Analysis

- Increase the potential of the national information and communications infrastructure
- Elimination of digital divide in the country
- To meet the ever increasing requirements of state bodies, population and business sectors for ICT services.

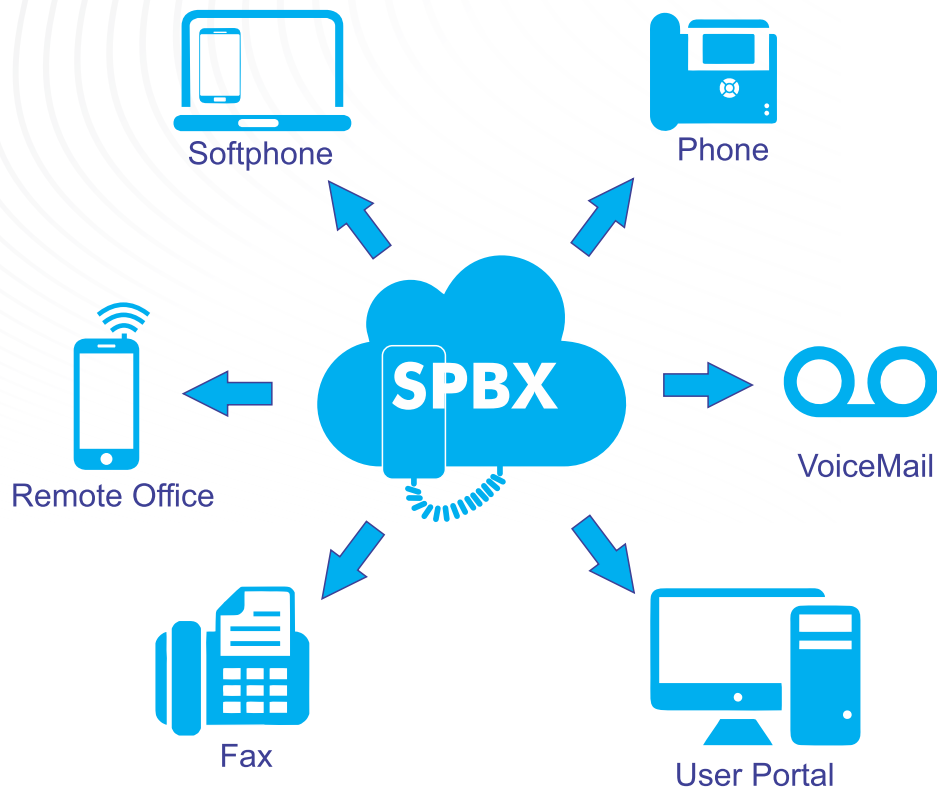
#### Solution

- 4G Networks
- Broadband Access
- Private Networks
- IP/MPLS network development
- Quadruple Play services over IP/MPLS networks
- Audio/Video Conferencing

## VoIP telephony

Voice over Internet Protocol, better known as Voice over IP or simply VoIP, supports Web-based delivery of voice data. It eliminates toll expenses incurred using regular services and reduces hardware investment and administrative costs, thus bringing down your long distance charges and other fees.

For government offices and other large users, VoIP technologies will promote employee mobility. For example, if you assign staff at a branch office or other remote location, they can still communicate with their managers, co-workers, and even clients, by taking advantage of SINAM's voice mail, fax-to-email, and other services. SINAM can help you transition to a full IP solution or, if you prefer, a basic PBX system that can still support modern applications. It can also serve multi-site IP requirements for use across entire organizations.



### VoIP

#### Client/Project Period

AzerTurkBank (2015)

The logo for AzerTurkBank (ATB) is a purple rounded rectangle with the lowercase letters 'atb' in white.

#### Problem/Background

- Need to establish high-speed and reliable connection between head office and branches of the bank.

#### Analysis

- Installation of new Structured Cable System in the administrative building of the bank;
- Installation and customization of SPBX IP Telephony system.

#### Solution

- Control and management system, including alarm;
- Security Video Surveillance (CCTV);
- IP Telephony system ;
- Local Network;
- Trainings for bank employees.



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