

**Capability Statement** 

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Complete Portfolio of past and ongoing projects in the period 2010 - 2025. Version of March 2025



























dreamfly

BYS Grup Corporation is the project management firm of SMG Holding Corporation headquartered in İstanbul. BYS Grup is located in Ankara in close collaboration with the central government of Türkiye and main institutions and universities. BYS Munich Gmbh is holding's branch in Germany. Smartmind, Toucan, Creda, Severity are the IT firms specializing in data warehousing, software development, IT security. Smartsource is the HR company of the holding. Genolysis is the agrigenomics company. SMG Holding has more than 300 staff working for its subsidiary companies.

(www.smgroupholding.com )



#### **01. ABOUT BYSGRUP CORPORATION**



50 + Projects



100 + Personnel



15 + Years of Experience



20 + Countries

Founded in 2010 and headquartered in Gazi Technopark, Ankara, BYS Grup stands as a beacon of innovation and expertise in the technology and R&D sector. Our company is driven by a mission to elevate corporate capacity and brand value for our clients through cutting-edge solutions in advanced analytics, information technologies, data mining, and artificial intelligence. BYS Grup serves a wide array of sectors including healthcare, public administration, and environmental management, with services that encompass project management, engineering consultancy, and specialized training. BYS Grup is specialized on the provision of the following services:

#### **Project Management**



Project Integration Management; Project Scope Management; Project Time Management; Project Cost Management; Project Quality Management; Project HR Management; Project Communication Management; Project Risk Management; Project Procurement Management; Project Stakeholder Management;

#### **IT Solutions**



Mobile Technologies; IoT; Database Design;Data Modelling; Big Data; Data Integration; Data Collection; Data Cleaning and Data Management; Data Warehouse; ETL( Extract Transform Load) Processes; Design and Application of Data Mart and OLAP Cubes; Data Mining; Software Development and Process Management; Smart Test Systems Software-Computer Adaptive Testing(CAT); Item Bank Calibration.

#### **Statistics**



Statistical Analysis Applications; Multivariate; Longitudinal and Clustered Data Analysis; Simulation; Projection and Supply-Demand Forecasting; Sampling Selection; Application and Effect Prospecting; Data Mining; Processing; Analysis and Reporting; Application and Adaptation of International Statistical Classification Systems; Statistical Modelling and Programming.

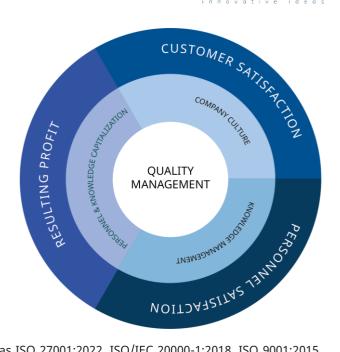
#### **Data Sciences**



Anomaly Detection; Fraud Detection; Forecasting; Credit Scoring and Score Card Design; Improvement of Data Quality; Risk Management; Chum Analysis; Customer Behavior Analysis; Customer Lifetime Analysis; Customer Segmentation; Market Basket Analysis; Principal Component Analysis; Social Media and Sentimantal Analysis; Text Mining.



Our approach is founded on the principles of Quality Management and Knowledge Capitalization, integrating global standards into every facet of our operations to ensure excellence and reliability. Our view of Knowledge Capitalization and Quality Management is summarized in the figure below.



With a robust portfolio of quality certifications such as ISO 27001:2022, ISO/IEC 20000-1:2018, ISO 9001:2015, and ISO 45001:2018, we guarantee that every project aligns with the highest standards of security, quality, and efficiency. Our technical prowess is supported by comprehensive licenses and partnerships with major industry players like SAS and Oracle, enhancing our capability to deliver state-of-the-art solutions.









BYS Grup is not only a participant but a leader in numerous international R&D initiatives, collaborating with prestigious programs. These collaborations are further enriched by our strategic relationships with Gazi University Technopark and Ankara University Technopark, fostering an environment of innovation and research excellence.

BYS Grup works in collaboration with local and global business partners including European Union, World Bank, Un and Turkish Research and Scientific Council (National Coordination Point of European R&D programs such as Horizon Europe and EUREKA) to develop innovative technological solutions and enhance its client's brand value and corporate capacity.

Bys Grup presents concrete solutions and innovative ideas to respond to the needs of its customers and effectively applies these solutions by adopting global perspectives and methods through its in-dept experience of PCM and PRAG rules.

<sup>\*</sup> BYS GRUP is an official partner of SAS (Silver Parner) and ORACLE solutions; and applies ISO 9001:2015, ISo 45001:2018, and ISO 27001:2022 quality standards.

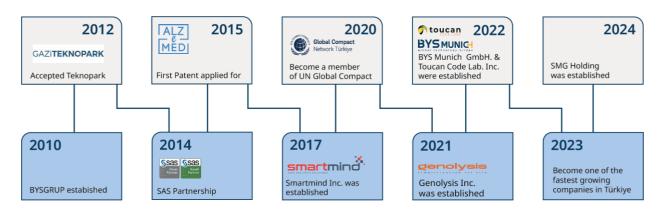
<sup>\*</sup> BYSGRUP is a proud signatory of UN Global Compact Türkite Association, and Women's Empowerment Principles (WEP).



Our international presence is marked by projects across Europe, Asia, and Africa, financed by the EU, UN, World Bank, and other global donors. This extensive network allows us to leverage global insights and best practices to deliver solutions that are both innovative and sustainable.

At BYS Grup, we are dedicated to improving not only our clients' operational capacities but also contributing positively to economic and technological advancement on a global scale. Our team of over 26 full-time professionals, along with a network of expert consultants, ensures a blend of technical expertise and real-world experience that translates into tangible benefits for our clients and their stakeholders.

#### **TIME TUNNEL**



#### **02. CORE COMPETENCE**

In today's business environment, innovation and R&D needs have become two indispensable elements in ensuring sustainability. With more than 20 years of industry experience, BYS Grup aims to create sustainable value on a global scale for public and private sector organizations in achieving their business goals with an innovative and technology-oriented perspective.

BYS Grup provides its services with its own internal resources. This approach, which we think is very important in terms of the quality of the service, the effectiveness of communication and the sustainability of the solution, gives confidence to the organizations we work with. In this context, it has carried out many successful projects within international organizations such as the European Union, the World Bank and the Asian Development Bank.

By constantly following disruptive technologies and innovations, our company, which takes part in institutional capacity building projects, supports reputable institutions in building the future by considering past experiences and today's realities.

There are many benefits when data sciences and information technologies are used together. The main elements that emerged in the BYS Group solutions are given below:

#### DATA SCIENCE - IT TECHNOLOGIES - ARTIFICAL INTELLIGENCE

Data Analysis: Data sciences provide expertise in collecting, cleaning, analyzing and finalizing large amounts of data. Information technology plays an important role in storing, managing and accessing this data. This combination provides the tools needed to analyze data accurately and efficiently.

Predictive Analysis: Data science uses statistical and mathematical techniques to build predictive models. Information technology provides the infrastructure needed to build and use these models. This combination provides a more reliable and effective way to predict future events.

Data Visualization: Data sciences understand that visualization of data is important when working with large data sets. Information technologies provide the tools to present this data in an interactive and understandable way. This combination enables data to be understood and interpreted more effectively.

Artificial Intelligence: Data sciences and information technologies provide the dataset needed to develop artificial intelligence and machine learning algorithms. This combination allows businesses to develop



automated decision-making systems and build smarter applications.

Efficiency in Business Processes: Data sciences and information technologies collect and analyze the data needed to make business processes more efficient and provide businesses with key insights. This combination helps businesses increase efficiency in business processes and adopt smarter approaches to decision-making.

#### **OUR SERVICES**

#### 1. STATISTICS

In the modern business world, as a result of the technological developments, almost everything has become measurable. Unless statistical and analytical concepts are utilized in decision making processes, business decisions may result in being ineffective or even create undesirable consequences Therefore, basic Statistics understanding, and practices are no longer sufficient for members of public and private sectors which aim to succeed in the ever-changing competitive environment. Basic to advanced, we provide our clients with Statistical Solutions such as IT integrated decision support systems, statistical consultancy and trainings, statistical capacity building and result-oriented statistical reporting for decision making. We combine our know-how and experience in IT and Statistics domains and offer solutions that will bring you the success.

Main statistical services rendered by BYS Grup are:

- » Consultancy on Statistics and Biostatistics
- » Institutional Capacity Building in Management of Statistical Infrastructures
- » Data Visualization Solutions and Statistical Analyses
- » Design and Implementation of Paper Based & Online Surveys
- » Development of Computer Adaptive Testing (CAT) Platforms by Item Response Theory (IRT)
- » Econometric Forecasting and Modeling in Longitudinal Data
- » Integration of International Statistical Classifications and Standards
- » Monitoring and Evaluation of Statistical Indicators
- » Analysis of Official Statistics (Demographic and Social Statistics, Environment Statistics, Transportation Statistics, Education Statistics, Justice Statistics, Economic/ Finance Statistics, Energy Statistics, Tourism Statistics)
- » Development of National Statistical Information Systems
- » Design and Implementation of Qualitative and Quantitative Research

#### 2. DATA SCIENCES

At BYS Grup, we define data mining as the junction point of Statistics, Artificial Intelligence and Machine Learning. We practice data mining processes for analyzing structured & unstructured data from different perspectives, discovering patterns and trends for sound business decisions, improved business processes, better data quality and enhanced customer satisfaction. Utilizing descriptive (e.g. clustering, relationship analysis, etc.), predictive (e.g. regression, neural networks, decision tree algorithms, etc.) and data visualization methods, we solve demands of our clients that could not be addressed through simple query and reporting techniques. Big data or not, with the power of employing techniques of Descriptive, Predictive and Rescriptive Analytics, we can provide answers to the questions of not only "what or when will it happen?" but also "why will it happen?"

Our services within the context of Data Sciences cover, but are not limited to:

- » Anomaly Detection
- » Fraud Detection
- » Forecasting
- » Credit Scoring and Score Card Design
- » Improvement of Data Quality
- » Risk Management
- » Churn Analysis
- » Customer Behavior Analysis
- » Customer Lifetime Analysis
- » Customer Segmentation
- » Market Basket Analysis
- » Principal Component Analysis
- » Social Media and Sentimental Analysis
- » Text Mining



#### 3. IT SOLUTIONS

Information Technologies are now an integral part of each business function in any industry. IT solutions and complementary services offered by BYS Grup enable enterprises to harness more value and efficiency from their value chain. Our competent experts and consultants with hands-on experience in numerous IT projects in a wide range of industries, can design and develop applications that are aligned with your organization's business flow. Using the latest technologies within JAVA, .NET and ANDROID OS, we can support our clients through all phases in the software development life cycle, to redesign their business processes, reduce their costs and increase the efficiency while ensuring the highest level of quality.

Our range of specialization cover:

- » IOT System Design and Development
- » Development of Decision Support Systems
- » Mobile Application Development
- » Data Warehouse Modeling and Implementation
- » Development of Embedded Systems
- » Development of Management Information Systems
- » Improvement of Existing Information Systems
- » System Integration
- » Database Management System Support
- » Software Requirement Analysis Services
- » Software Design and Development Services
- » Software Testing and Quality Assurance Services
- » Maintenance and Technical Support

#### 4. PROJECT MANAGEMENT

Owing to the process-oriented mindset shared among the members of our project teams comprising of competent managers, specialized experts and experienced consultants; we, at BYS Grup, provide a full spectrum of project management consultancy services covering the whole project life cycle starting from the presence of a business opportunity, extending through initiation, planning, implementation phases and ultimately finishing with closure and handover. Our in-house experience on project management is supported by our global network of consultants and strategic alliances on technology.

Project management activities at BYS Grup are run by an enterprise-level PMO; which continuously elevates the company-wide knowledge level on Project Management fundamentals and establishes a common language and common methodology for a successful project delivery.

Our Project management approach mainly focuses on customizing the management tools and processes according to the requirements and needs of each project while ensuring the highest levels of quality, efficiency and timeliness. In other words, we apply:

- » Customization in Project Delivery,
- » Standardization in Quality
- » Possessing extensive individual and corporate experience in projects financed by organizations such as European Union, World Bank, United Nations, TÜBİTAK, BYS Grup professionals offer consultancy services not only for the implementation of similar projects, but also for guidance to reach the available grants and funds provided by national and international funding organizations.
- Within the context of Management Consultancy, we are also capable of providing our clients with services on defining their corporate identity structure and communication plans which are crucial for aligning their strategies with their ultimate project goals.
- » Project Cycle Management
- » Consultancy on Funds by International Organizations (e.g. EU, The World Bank, UN)
- » Contract Management
- » Project Concept Definition
- » Project Development
- » Proposal Writing
- » Strategy Definition & Business Plan Preparation
- » Stakeholder Management
- » Project Monitoring and Evaluation
- » Providing Pool of Experts



#### 03. SECTORS

BYS Group has adopted the principle of interoperability and blending the needs of different sectors with different technologies to produce solutions.



#### 1. HEALTH

Several projects and initiatives in the health domain which are financed domestically or internationally, are being implemented in order to improve the institutional and sectoral services, to align the policies and regulations and to perform capacity building. BYS Group have been collaborating in these endeavors while creating its own R&D projects to leverage the latest technologies in Health.

BYS Group provides services in the following health areas:

- » Harmonization of National Health Legislation with the EU Acquis
- » Social Inclusion System for the Elderly
- » Establishment of Statistical Health Data Collection System
- » Health Statistics
- » Elderly Care Systems
- » Patient Monitoring Systems
- » Hospital Management Systems
- » Biosensors
- » Organ Donation
- » Next Generation Gene Sequencing and Gene Analysis



### 2. FINANCE BANKING & INSURANCE

BYS Group's high-end Data Sciences and Analytical expertise is well suited for the needs of the main players of Finance, Banking and Insurance sectors in enhancing the institution-wide knowledge level, maintaining customer loyalty and ultimately increasing their profitability.

BYS Grup provides services in the following areas:

- » Establishment of analytics, data quality and data mining platforms
- » Development of behavior credit risk scorecard model
- » Machine Learning Algorithms
- » Life and Life Annuity Tables
- » Current Situation Analysis

#### 3. ENERGY AND TRANSPORTATION

Energy and Transportation industries are strategic to any country thus sustainability and efficiency in these industries are critical for nations' prosperity. Institutional strengthening and deployment of new technologies are enabled through services provided by BYS Group in the areas of Information Technologies, Data Sciences and Project Management.

BYS Group provides services in the following areas:

- » Energy Demand Forecasting Studies
- » Green Deal
- » Energy/Renewable Energy Optimization Models
- » Transport Strategy
- » Transportation Information Management Systems
- » Capacity Building in Transportation Services
- » Capacity Building of Public and Civil Society Organizations
- » Road Safety
- » Transportation Accessibility

#### 4. EDUCATION

Institutions operating in the Education industry need to continuously assess and improve their services and internal processes as trends emerging parallel to scientific research and publications are reshaping the variables in this industry. With its highly qualified experts, BYS Grup assists educational institutions in implementing projects for improving their capacities

BYS Group provides services in the following areas:

- » Computer Adaptive Tests (CAT)
- » Needs Assessment
- » Assessment of Student Competency
- » Intelligence Level Assessment
- » Technical and Vocational Education and Training (TVET)
- » Life-long Learning
- » Educational Expenditure Management
- » EUROSTAT Education Statistics
- » Management Information Systems
- » Impact Assessment

#### 5. SOCIAL SECURITY & LABOUR

Reorienting social security instruments, improving the current infrastructure, monitoring and evaluation have been the main subjects of the projects undertaken by BYS Grup for the labour market institutions and organizations.

BYS Group provides services in the following areas:

- » Labour Market Indicators
- » Performance Monitoring Systems for Labour Market Programmes
- » Monitoring and Evaluation Procedures of Labour Market Programmes
- » Current Situation Analysis
- » Data Collection and Dissemination Systems
- » Needs Analysis
- » Training of trainers
- » Improvement and Development of Management Information Systems for institutions



- » Capacity Building of Governmental Institutions' Personnel
- » Impact Assessment

#### 6. JUSTICE

BYS Group takes part in the reform projects, led by the Ministries of Justice and relevant institutions/ organizations, through providing best practices in Data Sciences and IT services. These improvement projects mainly focus on social, cultural and psychological dimensions of the subject matter.

BYS Group provides services in the following areas:

- » Forensic Statistics
- » Data Warehousing and Business Intelligence for Justice System
- » Monitoring and Evaluation
- » Prison Reform
- » Field Researches
- » Dissemination of Model Prison Practices
- » Children on Probation
- » Motivation Assessment Tool for Criminal Offenders
- » Risk Assessment Tool for Assessing Offender Risk Levels
- » Post-Project Evaluation
- » Comprehensive surveys with Target Groups
- » Impact Assessment

#### 7. COMMUNICATION

"Communication", one of the most important needs of today, is one of the BYS Grup work areas. In a period when effective communication is effective governance, we carry out activities to develop communication strategies in our project implementation activities.

BYS Group provides services in the following areas:

- » Communication Action Plan
- » Communication Strategy
- » Communication and Publicity Activities
- » Event Management Activities
- » Promotion and Awareness Raising Activities
- » Website, Micro site, Databases and Social Media Tools Management
- » Statistical Analysis of the Communication Environment and Target Group Characteristics
- » Design and Development of PR, Media and Communication Materials
- » Impact Assessment

#### 8. STATISTICS

Statistics is a science that is used in almost every sector and transforms information into value. Using the theoretical and practical infrastructure of this science in all its projects, BYS Group creates value with statistics produced with accurate and consistent information.

BYS Group provides services in the following areas:

- » Identification of Performance Indicators
- » Harmonization of Country Specific Statistical Definitions with UNESCO-OECD-EUROSTAT (UOE) definitions
- » Official Statistics
- » Statistical Analyses
- » Information and Statistical Systems
- » Statistical Capacity Building
- » Population and Household Census Preparation
- » National Risk and Vulnerability Assessment

#### 9. ENVIRONMENT

Environmental capacity building practices are used to manage natural resources, reduce pollution, combat climate change and develop solutions for sustainability. BYS Grup contributes domain expertise in projects related to climate, environment and habitat protection.

BYS Group provides services in the following areas:

- » Environmental Statistics,
- » Carbon Footprint Tracking and Management System



- » Climate Change Awareness Mobile Game Development
- » Energy Efficiency Feasibility Studies
- » Capacity Building on Water Management

#### 10. SPACE, DEFENSE AND SECURITY

Space, defense and security are important areas for the use of AI applications.AI can help improve human safety and national defense in these sectors. Working on Advanced Technology with a focus on Artificial Intelligence,

BYS Grup develops the following special solutions for the Space and Defense Industry.

- » Image Processing
- » Quantum Programming
- » Cloud-based Multi-Robot Management
- » Artificial Intelligence and Machine Learning Algorithms
- » Command and Control Software
- » Autonomous Systems
- » Anomaly Detection

#### 11. AGRICULTURE & ANIMAL (LIVESTOCK)

The agriculture and livestock sector is one of the areas where artificial intelligence applications are developing rapidly. In these sectors, the applications of the IMS Group can increase productivity, reduce costs and help us use natural resources more efficiently.

BYS Group provides services in the following areas:

- » Prediction Models
- » Agricultural Census and Statistics
- » Image Processing
- » Robotics Applications
- » Productivity Enhancing Systems
- » Animal Health Monitoring

#### 12. CUSTOMS & BORDER MANAGEMENT

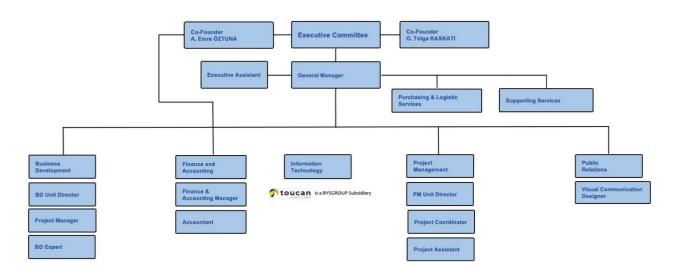
Customs and border management are important areas for the use of AI applications.AI helps to make border security, screening and surveillance more effective in these sectors.

BYS Group provides services in the following areas of customs and border management:

- » Anomaly Detection
- » Object Scanning
- » Data Analysis
- » Language Processing
- » Monitoring and Evaluation Systems



### **04. ORGANIZATION**



In addition to the HQ staff there are over 100 project employees are working for our project under contract. Moreover, SMG holding (Our mother company, has move then 300 staff over multiple subsidiaries)

### 05. FINANCIAL CAPACITY

\*\*Estimated Figures

Financial data	2 years before last 2021 EUR	The year before last year 2022 EUR	Last year 2023 EUR	Average EUR	Last Year 2024 EUR**	Current Year 2025 EUR**
Annual turnover, excluding this contract	1,501,982.00	1,287,635.22	1,530,248.85	1,439,955.36	1.552.607,40	1.785.500
Current assets	1,577,760.00	762,193.95	1,066,771.09	1,135,575.01	733.569,22	843.600
Current liabilities	120,289.00	141,811.55	649,431.93	303,844.16	647.014,99	745.000
[Current ratio (current assets/current liabilities)	Not applicable	Not applicable	1.64	Not applicable	Not applicable]	Not applicable



#### **06. CONTACT INFORMATION**

BYS Grup A.Ş. - Türkiye

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Ref. 01	Projec	t title	IT Tool Softwar	re Development SIAC2-CoE-T	СС			
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS GROUP	Türkiye	135.000 EUR / Received Amount 27,000 EUR	%100	-Software Developer -Project Coordinator -Non-Key Experts	Council of Europe / Republic of Türkiye Constitutional Court	Co-funded by the European Union & The Council of Europe	27.08.2024 – Ongoing	-

The SIAC2-CoE-TCC IT Tool Software Development project is part of an initiative aimed at supporting the effective implementation of Turkish Constitutional Court (TCC) judgments in the field of fundamental rights. This initiative is being implemented by the Council of Europe (CoE) in cooperation with TCC.

The project aims to develop a Case Law Database and related IT systems that will enable the monitoring and execution of TCC judgments, ensuring alignment with European human rights standards. The system will be installed on TCC servers at UYAP premises and will be developed by an external professional body under the supervision of TCC.

The project consists of two primary results:

- Development and installation of a Case Law Database and related software modules.
- Supply of sustainability components, including licenses, training, and maintenance support.

The **main beneficiaries** of the project include TCC judges, rapporteur judges, legal clerks, lawyers, academics, and the general public.

The SIAC2-CoE-TCC-BYS-IT Tool Software Development project is a big step in modernizing the Turkish judicial system. By leveraging **AI-driven legal analysis and structured digital case law databases**, the project will enhance transparency, efficiency, and accessibility within the Turkish Constitutional Court's legal processes. The structured implementation plan and sustainability measures ensure that the system remains effective beyond the project's lifecycle.

### The consultancy assignment will be implemented following the steps

below:
Work Streams and Activities:

#### 1. Software Development

• Requirement Analysis: A detailed Software Requirements Specification (SRS) will be prepared.

Type and scope of services provided

- Design & Development: The software will be designed based on IEEE
   12207 software development lifecycle standards.
- Implementation & Testing: The system will undergo multiple testing phases, including security and penetration testing.
- Deployment & Support: The final software will be installed on TCC's infrastructure, along with training for users and system administrators.

#### 2. Supply of Sustainability Components

- Automated Testing System: Ensuring quality and accuracy in legal case processing.
- **Development & Maintenance Tools:** Providing required software licenses and system monitoring tools.
- Training Packages: Covering various aspects, including:
  - AI-based Named Entity Recognition (NER) and deep learning applications.
  - AI-driven Case Categorization: Automatic classification and linking of legal precedents.
  - o **AI-powered Anonymization & Data Security:** Protecting personal data using AI-driven redaction.



The initiative aligns with European Union and Council of Europe objectives in strengthening the rule of law and fundamental rights in Türkiye.

#### **Key Features of the Developed IT System**

- Judgment/Review Publication & Inquiry: Advanced search functions with keyword and full-text search.
- **AI-driven Case Categorization:** Automatic classification and linking of legal precedents.
- **AI-powered Anonymization & Data Security:** Protecting personal data using AI-driven redaction.
- **AI-assisted Query Optimization:** Enhancing search efficiency based on previous user interactions.
- Subscription & Notification System: Users can track legal developments and receive case law updates.
- Multi-device Accessibility: Web-based and mobile application support (Android & iOS).

- o **AI-assisted Query Optimization:** Enhancing search efficiency based on user behavior analysis.
- Database Management with PostgreSQL and Content Management with MongoDB.
- Network & Information Security.
- o Agile Software Development and Configuration Management.
- Scenario-based Automated Software Testing.
- o End-user training (Train-the-Trainer approach).

#### **Project Deliverables**

The following key deliverables are expected:

- Software Requirement Specification (SRS)
- Software Design Description (SDD) -
- Installed Software & Source Code Delivery -
- Training Material & User Manuals -
- Monthly Progress Reports -
- Final Report & Revised Source Code



Ref. 02	Projec	title	The Development and Deployment of a Monitoring and Evaluation Management Information System (M&E MIS) TZ-MAINRL-428187-CS-CQS							
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any		
BYS GROUP	The United Republic of Tanzania	81.000 USD	%100	-TL / Information System -System & DB Developer -Data Quality SpcGeo Visualization Infographics Spc	The Ministry of Agriculture, Irrigation, Natural Resources and Livestock (MAINRL) Zanzibar	World Bank	23.01.2025 - Ongoing	-		

The objective of the consultancy is to develop and establish a web-based M&E MIS, that will be used for collecting and providing data for the project data needs including reporting.

#### The M&E MIS is expected:

- i. to capture information for all project (TFSRP) activities, outputs, targets, and achievements (including supporting evidence documentation);
- ii. to track TFSRP activities implemented and provide reports in a summarized format for management and oversight purpose;
- iii. to provide automated reports in formats that are ready to use, or formats that allow additional/further analysis to meet the MAINRL data/information needs, including a dashboard to display selected indicators data (to be agreed upon with the project team).
- iv. to follow an open-source technology solution that provides flexibility and rights to use, study, change and distribute the software and its source code for the purpose of achieving the project goals.
- v. Software GIS System Integration.

#### Deliverables:

- An inception report highlighting understanding of the assignment, including proposed system framework/architecture and hardware requirements.
- Business Requirement Specification (BRS) and Proposed System Model.
- Draft Demo System.
- Training plan and materials.
- System User manuals

# Type and scope of services provided The consultancy assignment will be implemented

- i. Study the project appraisal document, results framework, M&E plan, and other key documents to familiarize with the information needs and required data formats.
- ii. Prepare an inception report that explains the consultants understanding of the client's data/information needs, including the framework/architecture of the system design and hardware requirements.
- iii. Undertake a system design development and testing against the set objectives and specified client's data needs.
- iv. Develop a user guide

following the steps below:

- v. Conduct training for the system administrator and all TFSRP M&E focal points on use of the system. And then use the training lessons and experiences to improve the user guide.
- vi. Roll out the system at MAINRL, while checking elements of usability (user friendly), controls and confidentiality, among other aspects of a quality a good and functional system.



- System Administration Guide
- Training of Technical and Operational Staff and system administrators
- An automated final system.
- Consolidated system, training report, user manuals and system administration manuals.
- Post Project Implementation Support and mentoring of TFSRP PMT staff and M&E focal points
- vii. Implement 1 year user support for effective functionality of the system and document experiences and lessons of developing the system and recommend required adjustments/improvements if necessary.



Ref. 03	Projec	ct title	Resilient Cities and Communities – Technical Assistance to Municipalities in Earthquake Affected Provinces						
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	398.000,00 EUR	BYS Share:100% EUR 398,000.00 (Amount received as of 24.12.2024: 398.000,01 EUR)	6 experts (TL and Sn. Experts), 3 Experts	German Development Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH, GIZ)	GIZ	05.06.2024- 31.12.2024 ONGOING	BYS Grup	
	Detailed de	escription o	f proiect			Type and sco	pe of services p	rovided	

The Technical Assistance to Municipalites in Earthquake Affected Provinces project covers Hatay Metropolitan Municipality and Adıyaman Municipality which were among the worst affected provinces in the February 2023 earthquakes.

The primary goal of this project is to empower Hatay Metropolitan Municipality (Hatay M.M. in short) and Adıyaman Municipality to effectively manage their reconstruction efforts through digital transformation and the adoption of evidence-driven methodologies. The assignment has 4 pillars: Smart Cities Approach for the two municipalities, alleviating the needs for Sustainable Urban- Rural Development Management for Hatay M. Municipality and for Urban Mobility for Adıyaman Municipality among the priority issues, and stakeholder management/community engagement while carrying out the assignment.

Objectives of the assignment are:

Overall objective (impact) for Hatay M. Municipality: Supporting Hatay M. M. in overcoming the damages of the February 2023 earthquakes and contributing to building back better efforts by promoting community engagement practices. Specific objective for Hatay M. Municipality: Alleviating the damaging effects of the earthquake through contribution to the Urban Information System and urban-rural development management in Hatay M. M. – by capacity building of the Municipality.

Type and scope of services provided

The following activities will be carried out to realize the objectives of the project: Activity 1: Inception Phase and Needs for the post-earthquake situation:

Activity 1 initiates the project by focusing on the inception and comprehensive needs assessment regarding the sustainable urban-rural development management in Hatay Metropolitan Municipality and urban mobility in Adıyaman Municipality, following the devastating earthquake. This phase is critical to ensure that all subsequent project actions are based on a solid understanding of the existing needs and challenges of both municipalities. It has two sub activities: classical Inception phase and Needs Assessment for Hatay and Adıyaman municipalities. Emphasis will be on Hatay's damaged rural infrastructure & both Adıyaman & Hatay becoming a smart city to cope with future and present challenges.

#### Activity 2: Software deployment for the identified needs:

This activity is for developing data warehouse software for repurposing the present urban information systems of Hatay and Adıyaman municipalities. Then development and deployment of software for sustainable Urban-Rural Development Management of Hatay Municipality and to meet the Urban Mobility needs identified in the previous activity for the Adıyaman municipality. The solutions involve development of data warehouse in lieu of present urban



**Overall objective (impact) for Adıyaman Municipality:** Supporting Adıyaman Province in overcoming the damages of February 6, 2023, earthquakes and contributing to building back better efforts by promoting community engagement practices.

**Specific objective for Adıyaman Municipality:** Alleviating the damaging effects of the earthquake through contribution to the Urban Information System and mobility sector in Adıyaman Municipality by Capacity Building of the Municipality.

The overall objectives show the expected impact / the raison d'etre of the assignment. Specific objectives show what needs to be done for the assignment: transformation of the urban information system of the two municipalities into data warehouse format and development and deployment of software for rational management of water resources and urban mobility issues, and two pilot proposals for these two sectors. In the assignment, critical issues related to the pilot proposals will also be clarified: which institutions may finance the two proposals and proposal timelines. Financing will depend on the cost of the proposals and investment programs of possible institutions among other factors. It is aimed that with the digitalization of urban information systems, urban mobility and urban-rural development management of the two municipalities; flexible and modular urban management systems will be created and decision support mechanisms and strategic plans of the municipalities will be realized efficiently. Contractor's final aim is making Hatay and Adiyaman Municipalities to be best practices for earthquake affected provinces throughout Türkiye. Key areas of focus are:

- Knowledge documentation and transfer: From the contractor to the municipalities.
- Digital integration: Using advanced digital tools and platforms for the urban information system of the municipalities.
- Promoting Innovation: Particularly for focusing on rebuilding and resilience.
- Practical implementation: Continuous learning and improvement, sustainability, Capacity building, Collaboration and stakeholder management.

Impact on future projects: By documenting and disseminating knowledge, leveraging digital tools, developing replicable models, and fostering innovation, a robust framework for sustainable development will be created.

information system and development and deployment of software for sustainable urban-rural development and urban mobility.

#### **Activity 3: Trainings:**

Trainings will be carried out for relevant staff of Hatay municipality for the new perspective. The aim is to train the staff for the smart cities approach including vision for build back better and resilient urban development, repositioning of the urban info system into data warehouse and its training, training on the software produced and sustainable urban-rural development and urban mobility respectively for Hatay and Adıyaman municipalities.

Training Needs Analysis will be carried out and face to face training will be delivered to 25 and 15 Hatay and Adıyaman municipalities respectively. And also on -the-job training for one week each will be given to both municipalities.

#### **Activity 4: Preparation of Project proposals and ToRs:**

Problems related to water supply/distribution & data loss in Hatay municipality is to be studied and a project proposal prepared to meet the needs of some of the priority areas in sustainable urban-rural development management. It will be the subject of the proposal and its ToR. It should be borne in mind that inputs are expected to come from Activity 5, the Knowledge Exchange Event also. Needs of Hatay municipality, stakeholder input in the post-earthquake timeline.

In the case of Adıyaman Municipality one of the areas in which the municipality has suffered in the earthquake is the mobility aspect. Therefore, a project related to urban mobility is to be prepared for the municipality. Aside from the inputs of the project activities, outcomes from Knowledge Exchange Event (Activity 5) to take place are also expected. Interaction with stakeholders, data validation and holistic approach are most important for this activity.

#### **Activity 5: Contributing to the knowledge exchange events:**

GIZ will organize Knowledge Exchange Events both for Hatay and Adiyaman municipalities to showcase and disseminate information on the assignment's key findings and activities, mainly data warehouse, software and sustainable urban-rural development management proposal. It is also expected to encourage stakeholder collaboration. Contractor will implement the supporting tasks for the Events.



Ref. 04	Proje	ect title	Data Management Platform for Yeşilay /Yeşilay için Veri Yönetim Platformu (TÜBİTAK 1707- 3235026)						
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	152.881,72 EUR (4.994.202,63 TRY)	~89% 136.158,66 EUR (4.447.908,75 TR)		YEŞİLAY	TÜBİTAK	01.01.2024 - 31.12.2025 ONGOING	Yeşilay Danışmanlık ve Pazarlama A.Ş. BYS Grup	

This project, initiated under the auspices of Yeşilay which is the NGO established in 1920 and works for fighting against addiction in Turkiye, and through its branches in other countries; aims to establish a comprehensive data management platform designed to systematize and enhance the analytical capabilities of the organization. The primary goal is to create a specialized data warehouse database system that will organize both historical and ongoing records, transforming disparate data into structured formats conducive to advanced analysis.

By employing sophisticated data mining methods, the project seeks to derive meaningful, time-based insights that align with historical data trends. This will facilitate the creation of a unifying decision support system that integrates data from various sources, thus enabling more informed decision-making processes. Additionally, the project will focus on ensuring data privacy and security, which are paramount given the sensitive nature of the data handled.

The envisioned platform will support Yeşilay's strategic objectives by providing actions and predictive analytics that can guide future strategies and interventions in addiction prevention and treatment. This initiative will not only streamline data management but also unlock the potential for data-driven decision-making within the organization.

## Type and scope of services provided Data Warehouse Development:

- Database System Design: Establishing a secure and scalable data warehouse architecture that will serve as the backbone of the data management platform, utilizing technologies like PostgreSQL for robust data handling.
- Data Integration and Harmonization: Consolidating and harmonizing data from various sources within Yeşilay, ensuring consistency and accuracy for reliable analytics.
- Advanced Analytical Modelling and Data Mining:
  - Algorithm Implementation
  - Data Collection and Preprocessing
- Machine Learning Infrastructure:
  - Dynamic Software Architecture
  - Model Training and Evaluation
- Statistical Analysis and Business Intelligence (BI) Applications:
  - Data Visualization and Reporting
  - BI Integration
- Data Privacy Measures, Monitoring and Updates
- Capacity Building and Technical Support



Ref. 05	Proje	ct Title	Needs Analysis and D Municipalities	eeds Analysis and Development of Comprehensive ToR for Technical Assistance for Hatay and Adiyamar unicipalities							
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any			
BYS Grup	Türkiye	63.978 EUR	BYS Share:100% BYS Received 47,826 EUR (VAT excluded)	2 experts, 1 STE	German Development Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH, GIZ)	GIZ	November 2023 – February 2024 (3 months)	BYS Grup			

The following services are envisaged within the scope of the project:

The Technical Assistance for Earthquake Recovery and Urban Infrastructure Rebuilding Project is a project initiated by GIZ, which aims at providing technical assistance to the earthquakeaffected Municipalities of Hatay and Adıyaman in Türkiye. In response to this disaster, GIZ is committed to providing sustainable and disaster-resilient solutions for the recovery and reconstruction efforts in the affected areas. Through this Project, it is aimed to strengthen the municipalities' capacities in rebuilding urban service infrastructure and promoting community engagement principles for inclusive and sustainable development. The Project intends to foster resilience, inclusivity, and environmentally friendly smart practices, contributing to creating more resilient cities and communities that can withstand future challenges. The EU, international donors and International Finance Institutions have pledged substantial funds for the reconstruction efforts. Accordingly, the Project aims to enable the Hatay and Adıyaman Municipalities to access these resources in their efforts to Build-Back-Better.

#### **Preparation of Needs Analysis Reports:**

BYS conducted an overall needs analysis in close communication and coordination with Hatay and Adıyaman Municipalities (Mayors and heads of technical units), GIZ and other stakeholders to identify the critical areas and sectors (i.e., water management, waste/wastewater management, retrofitting and restoring cultural/historical buildings and municipal buildings and mobility systems) requiring technical support for Hatay and Adıyaman Municipalities by taking into consideration master city/reconstruction and development plans developed by Ministry of Environment, Urbanisation and Climate Change for Hatay and Adıyaman. This analysis will serve as the foundation for understanding the specific challenges, gaps, plans and opportunities resulting from the earthquakes. The analysis will provide a comprehensive understanding of the existing state of infrastructure, public services, and community needs.

Type and scope of services provided

### Sector Selection and Development of Comprehensive ToRs for Technical Assistance:

Based on the findings from the needs analysis reports and master reconstruction and development plans developed by the Ministry of Environment, Urbanisation and Climate Change for Hatay and Adiyaman, the BYS collaborates closely with GIZ, the two municipalities (Mayors and heads of technical units) and other project stakeholders to select the key sectors (i.e., water management, waste/wastewater management, retrofitting and restoring cultural/historical



Purpose description of this assignment

'Needs Analysis and Development of a Comprehensive Terms of Reference (ToRs) for Technical Assistance for Hatay and Adıyaman' is the first measure of this project (Technical Assistance for Earthquake Recovery and Urban Infrastructure Rebuilding Project) incorporating the below-listed deliverables.

- Needs Analysis Report for Hatay Municipality
- Needs Analysis Report for Adıyaman Municipality
- Comprehensive selected sector ToR for Technical Assistance for Hatay Municipality on the selected sector
- Steering Strategy Report for Hatay Municipality Steering Strategy Report for Adıyaman Municipality
- Comprehensive ToR for Technical Assistance for Adıyaman Municipality on the selected sector
- Access to Finance Strategy Report for Hatay Municipality
- Access to Finance Strategy Report for Adıyaman Municipality
- Strategy and ToR for Knowledge Exchange with Earthquake-Affected and Other Municipalities

buildings and municipal buildings and mobility systems) for provision of technical assistance in Hatay and Adıyaman Municipalities at a later stage.

#### **Steering Strategy for Project Implementation:**

BYS Group pledged to develop a steering structure strategy that outlines the coordination and collaboration mechanisms in the post-earthquake recovery and reconstruction process from a Municipality-centric perspective.

#### **Development a strategy for Access to Finance:**

BYS Group will develop access to finance strategy in the post-earthquake recovery and reconstruction process for Hatay and Adıyaman Municipalities. The EU, international donors and International Finance Institutions have pledged substantial funds for the reconstruction efforts. Accordingly, the Project aims to enable the Hatay and Adıyaman Municipalities to access these resources for the sector/area that the Technical Assistance will be provided within the Project. It will identify key finance resources, eligibility and conditions. This strategy will define and propose the communication channels to be used for access to finance.

## Design a Strategy and Writing the ToR for Knowledge Exchange with Earthquake-Affected and Other Municipalities:

BYS Group guarantees designing a strategy and developing ToR regarding knowledge exchange that facilitates sharing experiences, best practices, and lessons learned with other earthquake-affected municipalities in the region.



Ref. 06	Proj	ect Title		Technical Assistance for The Provision of Capacity Building Measures to The Ministry of Health in Turkey for Strengthening Healthcare Infrastructure for All (SHIFA) Project (Procedure No: 2021-04 CAB/TAM/LD/SHIFA, Lo:						
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any		
BYS Grup	Türkiye	500.000 EUR +extension <b>633.000 EUR</b>	BYS Share:100% (BYS payment received as of August 2024, 421,347.92 EUR)	61 man- days out of 990 man/days	Republic of Türkiye Ministry of Health	Council of Europe Development Bank	ONGOING  December 31, 2021 –  December 31, 2024  Extension: Feb. 28, 2025  (36 + 2 months)	BYS Grup		

The influx of Syrian refugees to Türkiye created various problems for the country and EU. As a result, Türkiye is hosting millions of refugees at present.

Accommodation, cultural shock, education of minors and health facilities were among the issues for refugees. The EU has become the leading donor to support Türkiye with this challenge. In 2015 "The Facility for Refugees in Turkey – FRIT" was established. Health care is one of the most important components of FRIT. In 2020 a second project FRIT 2 was set up for health care infrastructure projects named as "Strengthening Healthcare Infrastructure for all – SHIFA" project. This project is a direct grant of EUR 210 million to the Turkish Ministry of Health (MoH) to secure healthcare services to refugees as well as local people.

#### **Expected outputs of the SHIFA project are:**

- New E/MHCs (Extended/Migrant Health Centres) constructed and existing ones
   renovated
- Healthcare facilities supplied with new medical devices/equipment
- PTR (Physical Therapy) units in selected hospitals equipped
- Increased refugees' awareness of newly available health services
- Increased capacity of MoH to procure and manage the implementation of health infrastructure projects.

Therefore, SHIFA project is divided into 1) Physical capacity development: construction and renovation of related hospitals for E/MHCs and PTRs, 2) Provision of medical equipment, 3) Monitoring and reporting and supporting activities of risk management and capacity building.

Project at hand is category 3 above. Supervision of all construction and equipment procurement for the health infrastructure of SHIFA project. In the project, 65 new MHCs is to be constructed, 52 MHCs upgraded, and various PTRs constructed for refugees as annexes

## Type and scope of services provided Establishment of Monitoring Management Information System

- MMIS for SHIFA project:

Management of a service provider for MMIS and monitoring of the project.

- Preparation of ToR, defining the evaluation and analysis stages of the data to be collected for the SHIFA project, including baseline data collection and analysis, performance data collection and analysis.
- Selecting a subcontractor for preparing the evaluation software according to the requirements of the ToR.
- Monitoring and management of the software to follow the stages of construction and equipment provision.

Preparing Monitoring and Reporting Manual & Training Contents on the Use of MMIS Software.

Providing Support for Continuous Functioning of MMIS for Monitoring and Reporting of Project Cycle.

The following two activities are support activities for MMIS.

#### **Supporting Activity - Risk Management:**

Coordinating and supporting delivery of an introduction workshop for risk management

Preparing risk management materials and adoption process Supporting MoH in updating and submitting the Risk Register Developing and updating Gantt charts and a procurement tracking system

**Supporting Activity - Capacity Building:** 



to hospitals. As a result, 8.500.000 consultations are to be provided to refugees and 200.000 refugees will be provided with physical rehabilitation services in 2024.

Aim of the present project is preparation of a management information system for the Providing workshops and follow up training on updating the risk monitoring of the physical health investments for hospitals, physical therapy sections to be carried out in 25 provinces of Turkiye. Because of the diverse nature of the investments and distribution in various provinces, an effective, efficient, and robust monitoring and reporting system (Monitoring Management Information System - MMIS) will be established to support the MoH in delivering the project outputs. The MMIS to be developed will have an efficient system and process for gathering, analysing, evaluating, and reporting construction of health facilities and equipment procurement data to track progress and will include formal monitoring channel(s) amongst key stakeholders to determine progress and successful outputs/results.

The other two activities of the project are supporting activities for the set-up of MMIS. The Contractor will provide support to effectively manage project risks by systematically identifying (early detection) project delivery risks within the various processes, systems, human activities, and to develop risk amelioration responses. The Contractor will also provide logistical support and report on all capacity building measures undertaken.

Designing and rolling out a training and support plan for system users for risk management and trainings

maps and operational manuals for capacity building.

Two workshops have been implemented: one related to procurement and one related to risk management.



Ref. 07	Proj	ject title		chnical Assistance for Agrigenomics Hub -Animal and Plant Genomics Research Innovation Center uropeAid/140061/IH/SER/TR)						
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any		
BYS Grup	Türkiye	1.105.246,00 EUR	BYS payment received as of <b>20.01 2021 – 01.08.2024 (with 6</b> <sup>th</sup>	1846 man/days	Republic of Türkiye Ministry of Industry &	EU	+ extension	BYS Grup Diadikasia Business Consulting S.A [DBC Europe S.A.(BE)],		
			Interim Report): 666.922,21 EUR	as of March 2023	Technology		21.05 2024	CARTIF (SP)		

The project is **part of the Competitiveness**, **and Innovation Sector Operational** • **Programme (CISOP) in IPA II**; being implemented by the Ministry of Industry and Technology of Republic of Türkiye.

The overall objective of the project is to develop thematic competencies in Agrigenomics Sector to increase research and development capacities of Turkey as well as competitiveness and growth of SMEs in the sector. There are two results to be achieved:

- Having operational and accredited Agri genomics Hub- Animal and Plant Genomics Research innovation Centre and shared infrastructure for SMEs/entrepreneurs in the field
- Increasing the Productivity and Product Development Capabilities of the Agri genomics
   SMEs and Entrepreneurs in the field

Contracting Authority and Operating Structure is: Ministry of industry and Technology, DG for European Union and Foreign Affairs, Directorate of EU Financial Programmes (MoIT/DoEUFP). End Recipient of Assistance (ERA) is Ankara University Technopolis.

Agri genomics Hub which will be operationalized within this project, and going to be high technology design, prototype manufacturing and testing provider for food, agriculture and livestock breeding sectors. SMEs will be using Agrigenomics Hub's accredited infrastructure for their research. SMEs will also have access to and be able to implement their R&D and R&I projects benefiting from EU – R&I funding schemes, in collaboration with academia, incubation, mentorship and accelerator programmes. This way SMEs will be enabled to reach high tech food, agriculture and animal husbandry markets.

In order to address the issues mentioned above, Agrigenomics Hub will be operationalized to serve as a specialized Hub on high technology design and prototype manufacturing for

### Type and scope of services provided

- Preparation of Capability Assessment Report for biotechnology sector identification and mapping
- Preparation of business plan for the Hub.
- Support for Accreditation of the labs of the Hub and preparation of Service Manuals.
- Technical and managerial training for Hub staff.
- Development and operationalization of the agrigenomics hub portal platform and website
- Producing Best-Practices Book
- Establishment and reinforcement of business and research partnerships through at least 3 study visits and preparation for the following studies:
  - University-Industry Cooperation Strategy
  - IPR Strategy
  - o National and International Cooperation Roadmap
- Promotion of Agri genomics Hub and dissemination of activities of the Hub
- Delivery of Business Development and Mentoring services to SMEs being in the R&I Centre, and other client SMEs for accessing EU-R&I funding schemes (Horizon Europe, Eureka, Eurostar and the like) to increase SMEs' capacities for growth.
- Delivery of Capacity Building and Awareness Raising activities to the SMEs and entrepreneurs to increase their level of



Agrigenomics sector SMEs and entrepreneurs, as well as capacity building for growth of the mentioned SMEs through access to finance and funding institutions within Turkiye and abroad.

Therefore, Agrigenomics Hub project is based on the pillars of product development and competitiveness and growth through accessing sustainable finance.

- awareness and application capacity for EU-R&I funding schemes.
- Creation of an incubation centre model
- Developing Agrigenomics Hub mentoring system
- Designing and delivering training programmes for Hub beneficiaries
- Organizing partner-matching events for joint ventures with EU firms.
- Developing project proposals for local and EU funds and joint activities for commercialization and financing opportunities.
- Preparing on the job training (OJT) program for Agri genomics Hub staff
- Creating a Start-up Help Desk for entrepreneurs



Ref. 08	Proje	rt titla			<b>ob and Vocational Cou</b> Orientation Tests and C	-	•	
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	Initial Subcontracting budget: 440.000 EUR + additional funding	100% (BYS Grup received EUR 459.935,00 as of 31.12.2024)	7 experts	Türkiye Employment Agency (İŞKUR)	EU	ONGOING 01 August 2022 - 31 December 2024	DAI Global Austria GmbH & Co KG (leader) BYS Grup (subcontractor)
Detailed descri	ntion of pr	oiect				Type and	scope of services pro	ovided

The development of online vocational orientation and counselling tests will enable the **collation and** analysis of robust data for human resources aspect of economic development. The project is for the development of the institutional capacity of iŞKUR. Concerning the needs of İŞKUR services in Türkiye, the scope of the test developments will be covering 2 different target groups. Specifically, these target groups are:

- Target Group A: 7., 8., 9., 10., 11. grade students.
- Target Group B: Adults (Registered İŞKUR jobseeker adults).

This will improve the effectiveness and efficiency of public employment and career quidance services by enabling better targeting of services and resources. Using these tests, the İSKUR Job and Vocational Counsellors will be better able to assist, evaluate and direct registered jobseekers in career choice through training and vocational job search.

"Vocational orientation test will be prepared both with its theoretical background and IT component." The content will be compatible and transferred to İŞKUR web site. To ensure proper career choices and direct young people and students, as a software, vocational orientation test battery is expected to be: An inventory in which at least three of abilities,

interests, professional values and personality traits of the individual that (e.g., interest, personality and ability) can be evaluated together should be developed or adapted to Türkiye. The test should include guestions based on a person's statement as well as performance-based guestions. The test should be able to produce a result by evaluating all the fields together as well as producing separate result for each field that it evaluates (their abilities, interests, professional values, and personality traits).

The report should include the evaluation of each field and suggestions for what the individual should do/improve in these fields."

Development of Item Pool

- Creation of the Item Pool
- **Determination of Test Battery Sub-Dimensions**
- Writing Items
- Item Pool and Visual Design Meeting
- Reviewing Items According to Assessment and **Evaluation Criteria**
- Items Design and Compilation
- Adaptive Testing Software Design and Development 1st Prototype
- **Software Functional Tests**

#### Trial Field Work

- **Determination of Trial Field Work Sample**
- **Trainer Practitioner Training**
- Psychometric Analysis
- Data Analysis
- Adaptive Testing Software Development 2nd Prototype

#### Creating Norm Table and Norm Field Work

- Adaptive Testing Software Commissioning
- Adaptive Test Software Validation and Commissioning
- Norm Field Work and Training
- Norm Field Work
- Psychometric and Data Analysis
- Assessment of Norm Field Work Results

#### Computer-based test (CAPI) applied to:

- 3,248 students and 4,525 adults in Turkish,
- 300 students and 357 adults in Arabic,



## • 32 students and 86 adults in English Totalling **8,458 individuals across 14 provinces.**

Ref. 09	Proj	ect title	Al Based Secure and S	Al Based Secure and Safe Framework for Public Transportation (AISECTRANS)							
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any			
BYS Grup	Thailand	450.000 USD	BYS Amount Received: 340.920,00 USD	-	Asian Developmen t Bank (ADB)	Asian Development Bank (ADB)	ONGOING 01.06.2023 – 30.11.2024	BYS Grup MIA Teknoloji Jungotech			
		Detailed de	as of 14.10.2024				Type and scope of servic	PCS Thailand es provided			

The project is a Transport High-Level Technology Application a regional technical assistance (TA) project by Asian Development Bank to propose and conduct a pilot on high-level technology solution to improve security for public transport users for a duration of 12 months. The pilot country is selected as Thailand (Bangkok).

AISECTRANS by its nature addresses the challenges stated above by promoting secure and safer public transport against private vehicles by AI based solutions with data analytics and real time information to stakeholders and increases safety perception of public transport among the users. AISECTRANS aims to promote public transport among the vulnerable groups also by increasing the safety perception of this mode and so encouraging them to use it especially when this may facilitate the inclusivity.

In the proposed solution, we are aiming to deploy 'AI Based Secure and Safe Public Transport Management System' into mass transportation to increase safety and security of passengers. The objectives include monitoring driver's attitude and driving behaviour, monitoring safety inside public transport and mass transport vehicles and monitoring the health status of the shuttle or the bus and face tracking and anomaly detection with deep learning and image processing as well as certain capabilities for notification of negative natural occurrences such as weather events and natural disasters (flood etc.) warnings. In the proposed system; driver's behavioural analysis will be conducted by AI based software by analysing driver's daily driving attitudes on the same route and almost similar traffic conditions. Driver will also be monitored and assessed by 'Driver Monitoring and Risk Assessment Device' that will be installed in the driver's cabin. Shuttle doors for passengers during entrance and exit will be monitored and recorded to the system database for instant and future analysis.

Intended users are mass transport operators and drivers of the subject vehicles. Transport users including vulnerable groups will benefit from the technology.

- Project Management
- Localization and Customization
- Procurement
- Integration
- Pilot execution



Ref. 10 Pro	ject title	Provision of I ICMPD/23.02			es of ENHANC	ER Project (Procuren	nent Reference:	
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any
BYS Grup	Türkiye	43,450 EUR	BYS	3 experts	International	EU	December 14,	BYS Grup
			Share:100%		Centre for		2023 – May	
			43.450		Migration		2025 ONGOING	
					Policy			
					Development			
					(ICMPD)			
	Detaile	d description	of project			Туре	and scope of servi	ces provided

ENHANCER project is being funded by ICMPD (International Centra for Migration Policy Development). The ENHANCER project aims to equip Syrians under Temporary Protection (SuTPs) and local host communities LHCs with entrepreneurship skills and provide them with opportunities for business development and job creation based on regional characteristics and local market needs that can contribute to the socio-economic inclusion of the SuTP to the LCH. The overall objective of the ENHANCER project is to improve employment and • livelihood opportunities for SuTPs and LHCs in selected provinces with high concentrations of SuTPs.

The ENHANCER project's specific objectives are to:

- Supported SuTP and LHC members establish and sustain new enterprises.
- Supported existing enterprises owned by SuTP and LHC members expanded.
- Institutional and policy environment in target provinces for supporting SuTP-owned enterprise development improved.
- Access for SuTP and LHC entrepreneurs to market opportunities and business support services improved and sustained.

Under the "Provision of External Evaluation Services of ENHANCER Project" contract, evaluation of the ENHANCER project accordingly with the OECD's DAC (Development Assistance Committee) criteria will be conducted. The evaluation will be focused primarily on assessing progress towards the achievement of planned results using project indicators as well as

### Type and scope of services provided

BYS Grup will conduct an evaluation of project results and assess capacity of design to contribute to results. This can include, but is not limited to:

- Reviewing the intervention logic as documented in the theory of change and log frame,
- Developing a set of evaluation guestions focused on progress toward project objectives and results achieved as well as the strength of the project's intervention logic and design,
- Constructing a synthetic baseline using project administrative data.
- Choosing an approach to the evaluation and methodology(ies) able to address each evaluation question,
- Creating an evaluation matrix that convenes the evaluation questions, sub questions, indicators, and methods,
- Developing data collection tools and analytic approach that align with the evaluation matrix.
- Conducting the evaluation as designed, reporting on evaluation progress monthly, including progress on data collection and early results as they become available.

The evaluation proposal will include a clear approach to the evaluation, which is separate from the description of the



assess the project design (activities/components, theory of change, assumptions, log frame) for their capacity to contribute to and achieve its planned results.

The main aim of the evaluation is to provide the donor and ICMPD with sufficient information to:

- Assess and document the achievement of the project's results and objectives since project's start.
- Asses the quality and focus of the project's overall design, including components, activities, theory of change, assumptions, and log frame in relation to capacity to contribute to project results.
- Support organisational learning at ICMPD and generate lessons which can inform the design and implementation of the project and the future interventions.
- Provide recommendations on to enhance project design, replication, scale up and/or potential future projects.

methodology(ies) to be used (which will also be included). Besides, it is going to describe how the approach and methodology(ies) will be used to address the proposed evaluation questions, as well as to assess project progress and results and where planned, to test the project's intervention logic.

As the approach will incorporate a descriptive, summative outcomes-focused evaluation of project progress and results as well as an analysis of the strength of the theory of change, the evaluation is going to propose a mix of professional evaluation methodologies to address the evaluation questions and assess progress against project indicators.



Ref. 11	Project title		Technical Assistance for BEST for Energy (Boosting Effective and Sustainable Transformation for Energy) (EuropeAid/139882/IH/SER/TR)							
Name of legal entity	Country	Overall Contract Value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any		
BYS Grup	Türkiye	Subcontractin g budget: 33.000 EUR		BYS Grup staff	İZKA (İzmir Development Agency)	EU Republic of Turkiye, Ministry of Industry and Technology, Directorate General for EU and Foreign Affairs	01.05.2021 – 21.06.2023	DAI BYS Grup		

The project involves designing and implementing a comprehensive statistical web portal related to the energy sector. This portal aims to serve as a dynamic, multilingual platform that effectively supports the visibility and engagement of various stakeholders in the renewable energy sector. It will provide a centralized hub for disseminating industry-related information, including updates on project activities, industry news, technological advancements, training programs, and access to financial resources. The web portal will also promote the renewable energy equipment cluster organization and its member companies, facilitating the sharing of technical and legal standards, and linking to other pertinent websites. The preparation of B2B matchmaking and survey application module software is to increase commercialization potential of energy firms.

Key functionalities will include interactive features, such as the ability for users to upload content, provide feedback, and interact via social media integration. The portal will be equipped to pull and analyse data from multiple online databases through APIs, ensuring that the content remains up-to-date and relevant. Additionally, the portal will be designed to be user-friendly, mobile-optimized, and compatible across all major browsers to ensure broad accessibility.

### Type and scope of services provided

- Web Portal Design and Development:
  - Using advanced, recognized web development technologies for both the front end and database platform. The development process includes the preparation and approval of the methodology, technology choices, and design prototypes
- Preparation of B2B matchmaking and survey application module software
- Content Management and Updates:
  - Regular updating and management of the portal content, including news, reports, project updates, and announcements of upcoming events and activities.
- Hosting and Technical Maintenance:
  - The portal is hosted on a cloud-based platform. This includes registering and managing the domain name, ensuring high uptime, and providing technical support.
- Multilingual and Multi-Feature Support:
  - Implementation of a bilingual interface (Turkish and English) and integration of functionalities such as social media synchronization, search engine optimization, and mobile optimization to enhance user engagement and accessibility.
- Stakeholder Interaction and Feedback Management: Development of features that allow for user interaction, such as comments, ratings, and content uploads, which is moderated by the website administrators to maintain quality and relevance.
- Performance Monitoring and Reporting:
  - Monitoring the portal's performance, including access and social media statistics, and providing monthly reports detailing all activities and content updates.



Ref. 12	Project title		Analysing Green Hydrogen and Power-to-X Supply Chain Development in Türkiye and the Export Potential to Europe and Germany						
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)		Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	63,414.29 EUR		3 experts	German Development	GIZ	01.09.2023 - 30.11.2023	BYS Grup (leader)	
			52,845.24 EUR		Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH, GIZ)		50.11.2023	H2 Energy Solutions UG (Germany)	

### Type and scope of services provided

The "International Hydrogen Ramp-Up Program" (H2 Uppp) has the German federal ministry for Economic The following services are envisaged within the scope of Affairs and climate action (BMWK) with the aim to accompany and support efforts to ramp up the market the project: for green hydrogen (H2) and Power-to-X (PtX) applications in selected developing countries and emerging Activity 1: Analysing green hydrogen business cases. economies in cooperation with the private sectors. Türkiye is one of the selected countries.

H2 Uppp aims to identify, repair and a company the implementation of projects for the production and use of green H2 and PtX application, and to raise awareness and promote knowledge transfer for the development of projects relating to green hydrogen.

To achieve the program objectives, H2-Uppp focuses on three fields of action:

- Field of action 1: Networking & Project scouting
- Field of action 2: PPP -Public Private Partnership
- Field of action 3: Know-how and capacity development

In the context of the Field of action 3- Know-how and capacity development program, this consultancy aims WP 2.3: Comparative analysis of scenarios to create a detailed analysis with the topic of "Analysing Green Hydrogen and Power-to-X Supply Chain Development in Türkiye and the Export Potential to Europe and Germany".

The main objective of this consultancy is to analyse potential business cases for exporting infrastructures of green hydrogen and PtX derivatives from Türkiye to the German market and to determine the local supply chain. For this analysis, the expected mid- and long-term hydrogen supply in Türkiye are to be estimated, supply chain development and transport scenarios for the potential export to Europe and Germany will be studied.

- WP 1.1: Market screening and off-take
- WP 1.2: Business case analyses, costmodelling, and gap-bridging
- WP 1.3: Conclusions

Activity 2: Analysis of the transport scenarios of green hydrogen from Türkiye to Europe/ Germany

- WP 2.1: Data collection
- WP 2.2: Scenario development



The contractor is also requested to analyse the year pre-feasibility in different scenarios and to conduct a comparative technical-economic analysis of them modes which are;

- the transport of green hydrogen by pipeline in a short and a medium term,
- the transport of green hydrogen and its PtX derivatives through maritime and land routes in a short and a medium term.



Ref. 13	_		Technical Assistance for Improving the Detection Capacity of Turkish Customs Enforcement (EuropeAid/139188/IH/SER/TR)						
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	1.925.944,00 EUR	<b>BYS Share:</b> 28,4% (547.675,00 EUR) Received all)	1500 Man- Month 6 LTEs	Republic of Türkiye Ministry of Trade General Directorate of Customs Enforcement	Central	COMPLETED 10.06.2019 – 11.05.2022	TUBITAK BILGEM (Leader) BYS Grup HAVELSAN Hava Elektronik San.ve Tic. A.Ş.	
		Detailed	description of project				Type and scope of s	ervices provided	

The overall objective of the Project is to improve integrated border management in line with the EU Acquis, international trade rules, and European Standards.

The main purpose is to strengthen the customs surveillance and control function of the Turkish

Ministry of Trade across Turkish Customs Territory by increasing its administrative, technical, and

operational capacity, by implementing international trade rules, and by strengthening the

structure of Customs Enforcement Coordination Centre.

This project aims to develop a data governance tool in order to process all the relevant data from sources such as Customs Data Warehouse, Anti-Smuggling Database and Vehicle Tracking System. Three main components of the new data governance tool are i) data management system, ii) data analytic framework and iii) targeting, data visualization and reporting which will be targeted through software solutions. The new data governance tool has been developed in accordance with the WTO Customs Risk Management Compendium as well as all the relevant regulations and legislations in Turkey and the EU Customs Union. All the relevant regulations and legislations have been reviewed and the WTO Customs Risk Management Compendium has been thoroughly analysed to ensure compliance. In addition, 25 risk profiles from the compendium that are applicable to the unique context of Türkiye has been identified and informed the enduser scenarios running on the product of the project, the data governance tool. In addition, the project delivered a Current Situation Analysis Report and a Business Process Modelling Report through field visits, study visits and workshops. The project also includes tests and training that will strengthen the administrative, operational, and technical capacity and structure of the Customs Enforcement Coordination Centre.

- Current situation analysis
- Business Process Modelling
- 4 field visits
- Building a private cloud infrastructure
- Design and implementation of a data processing infrastructure
- Creating a data management system
- Design and implementation of data analytic framework
- Design and implementation of a data targeting, data visualization and reporting system
- System integration and test of software
- Creation of risk profiles and integration of WCO Customs Risk Compendium into the Analytics platform
- Preparation of training package and user manuals
- Trainings
- Study visits



Ref. 14	Proj	ect title	Technical Assistance for Increasing the Capacity and Quality of Judicial Statistics (EuropeAid/139115/IH/SER/TR)							
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any		
BYS Grup	Türkiye	2.000.499,50 EUR	<b>BYS Share:</b> 80% (1.600.359,60 EUR)	19 LTEs	Republic of Türkiye Ministry of Justice	EU	COMPLETED 07.03.2019 - 22.12.2022	GOPA Consultants BYS Grup, GOPA Luxembourg, Teched Consulting Services		

The overall objective of the project is to ensure rule of law and fundamental rights in Revision of content and method of Judicial Statistics Turkey fully in line with international and European standards.

The purpose of the project is to further strengthen and make more concrete and visible the independence, impartiality, efficiency, and administration of the judiciary. In this regard, project outputs were i) EU Turkey 2023-2024 Report on Chapter 23: Judiciary and fundamental rights and Chapter 24: Justice, freedom and security, ii) Judicial Statistics Report, iii) more judicial datasets and iv) more judicial statistics.

The project is structured along several converging components in order to increase the capacity as well as quality in Judicial Statistics. As part of the project IT and IT-based tool for calculation of judicial statistics to shorten the period elapsing during the communication and processing of judicial data including migration will be promoted. Enhancing IT infrastructure Moreover, the available data warehouse will be reviewed, and necessary parts improved in close collaboration with the Information Technology Department (ITD).

This project supports ongoing improvements in the national judicial system and statistics system. The project also focuses on training personnel entering UYAP (National Judiciary Informatics System) administrative records and aims at diversifying the data pool. The increase of capacity and quality in the judicial statistics depends on the multi-stakeholder collaboration in exchange of timely and correctly entered data.

Improvement of stronger and more reliable statistics system will also contribute to international efforts as Turkey provides various international organizations and agencies with judicial statistics.

An important aspect of the Criminal Justice system is Probation. The project covers the analysis of variables and available data in the Probation Module in the Judicial Data Bank,

- Review of the content and identification of the needs
- o Drafting "the Judicial Statistics Production and Data Dissemination Strategy Document"

Type and scope of services provided

- o Development of the data exchange and ownership protocols in the TISS
- Workshops on the mapping study of the International Classification of Crime for Statistical Purposes and classification of types of lawsuits
- o Improving the design and content of statistical publications

- o Gap Analysis & Upgrade of the existing data warehouse: gap analysis for the existing data warehouse consisting of 8 modules in order to identify pluses and minuses, upgrade points etc., including analysis of existing data warehouse design, determination of new modules and variables to be added to the data warehouse, gaps to be filled in terms of statistical rules and terminology, upgrade methodology, time & action plan for data warehouse upgrade.
- o Designing and Implementing Extract-Transfer-Load (ETL) Processes: rules and processes applied into ETL tool, outcomes of the tests reported, developed and tested ETL tool uploaded to the servers, the data transfer to the statistical data warehouse initiated.



which is integrated with UYAP, within the Ministry of Justice. The analysis of probation data (e.g., the number of persons entering probation and the number of probation officers) will enable improving the efficiency of decision-making processes in the probation system.

#### Expected results are:

- The content and method of the judicial statistics are revised.
- Information Technology (IT) infrastructure is enhanced.
- Awareness is raised on judicial statistics.
- Institutional capacity of GDCRS and other stakeholders are increased.

- Designing Statistical Tabulation and Calculation (STC) Tool and Business Intelligence (BI) application: STC tool will enable users to transform the data into tables and have the ability to make simple linear models and projections. Business intelligence (BI) application will be designed, developed and implemented on top of ITD's licensed BI software platform. This BI application will enable ministry staff to make cross table queries and calculations between different tables and indicators.
- Developing Statistical Tabulation and Calculation (STC) Tool: analysis and architectural design documents of the STC Tool will be prepared, defining the functional requirements, nonfunctional requirements (UI design constraints, security requirements etc.), use-case scenarios, high-level software architecture; STC tool is development and upload on the servers.
- Pilot Implementation: pilot implementation of the new system carried out and impact assessment conducted
- Strengthening advanced statistical analysis and modelling capacity of GDCRS staff

## Awareness raising on judicial statistics

National and International Conferences

# Increasing the Institutional Capacity of GDCRS and other stakeholders

Study Visits and Trainings



Ref. 15	Proj	ect title	Technical Assistance fo (EuropeAid/139011/IH/	_	e for New Era	for Sta	atistics			
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	_	gin of ding	Dates (start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	1.441.662 E UR	BYS Share: 6%, [90.000 EUR (50.000 + 40.000)] (received all)	Up to 100 NKE man/days 1 Support staff	TURKSTAT (TÜİK)	E	EU	COMPLETED March 2019 – February 2021	GOPA GmbH; BYS Grup, GOPA Luxembourg, Statistics Netherlands, GOPA Worldwide Consulta GmbH	
The purpose of with Acquis Cor of facilitating p the adoption of In this context, development of economic and	uction with f this contr mmunauta olicy decisi f the Acquis the Contra f several ir environme	the EU Acqui act is to imprire and to pro- ions towards is in statistics. actor shall pro- ndexes in the ntal statistics,	ove compliance level of povide adequate data and a implementation of the provide various technical assifield of business statistics, organization of local wo	particular stat analysis for the e-accession s istance servic s, social statis rkshops, stud	cistical areas the purposes strategy and tes including stics, macro-	0	Organiz Organiz Provisio Organiz Organiz Provisio environ Organiz environ Organiz	mental statistics cation of study visits mental statistics cation of workshops	siness statistics usiness statistics usiness statistics ial statistics ocial statistics in macro-economic s in macro-economic	and and
visibility confer	ences etc. 1	to achieve the	objectives of the contrac	t.		0 0	Provisio Organiz	mental statistics on of consultancies for ca cation of study visits for c cation of workshops for c	apacity building	



Ref. 16	Project title	Technical Assistance Technical Legislation	-	_	-	Better Harmonisation an 5/IH/SER/TR)	d Implementation of EU
Name of legal entity	Country Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	889,500.00 EUR - initial contract value Türkiye 871,585.06 EUR - realized contract amount	BYS Share: 90%	KE man- days + 8 Staff	Republic of Türkiye Ministry of Industry and Technology	EU	COMPLETED 19.03.2019 – 31.03.2020	BYS Grup European Profiles S.A., REA Consultancy

The overall objective of the project is **to achieve a higher level of product safety aiming at consumer protection** through better harmonization and implementation of EU technical legislation and to contribute to effective implementation of EU technical legislation on Machinery.

With this project the Directive 2006/42/EC on machinery, Directive 2000/14/EC for the noise emission by outdoors equipment, and Regulation 2016/1628/EU on requirements on pollutant emission limits and type approval for internal combustion engines **is adapted and revised according to the EU legislation**.

In Turkey, Ministry of Industry and Technology (MOIT) is responsible for all issues related to conformity and quality, whereas 8 Notified Bodies are responsible for the directives mentioned and they carry out the **conformity assessment of machinery products**. Also, there are NGOs which are umbrella organizations for the manufacture of machinery.

Although great strides were implemented, there is still the need to improve the knowledge infrastructure of MOIT, NBs and Machinery NGOs. In this respect the experience of EU member states and mastering the two important EU Directives is most important. Knowhow of carrying out efficient and **effective market surveillance activities, e-commerce investigation, safety rules, dealing with products** with bigger dimensions like machine tools, wood working machineries, chillers are some of the subjects for which improvements are needed and will be achieved throughout the scope of the project.

#### Type and scope of services provided

The Consortium envisages the Improving Product Safety through Better Harmonisation and Implementation of EU Technical Legislation on Machinery Sector Project, its objectives, activities and expected results as below:

- Strengthen the capacity of Ministry of Industry and Technology
- Enabling ease access to information through technical terms dictionary and National Machinery Knowledge Portal (NMKP).
- Translation of all basic documents stated in ToR:
  - The latest version of "New Blue Guide on the Implementation of EU Product Rules" for the manufacturers.
  - The latest version of the "Guide to the Application of the Machinery Directive 2006/42/EC" regarding marketing surveillance
  - FAQ on EU regulation 2016/1628/EU related to pollutant emission limits for internal combustion engines and non-road mobile machinery.
  - Sample guideline on Market Surveillance procedures of an EU member country
  - Best Practise Techniques in Market Surveillance (A Prosafe Project) Product Safety- Safeguarding Consumers, Supporting Fair Condition, Effective Consultation
  - Corrective Action Guide (Prosafe Joint Actions Best Practive) Consumer Product Safety in Europe: Guidelines for



- Business to manage Product Recalls & Other Corrective Action- EMARS II.
- **Regulation (EC) No: 765/2008** of the European Parliament and of the Council of 9July 2008 setting out the requirements for accreditation and market surveillance.
- 20 training programmes with 3 interactive training module production and organisation of project management professional training for the Beneficiary for Capacity Improvement and TNA Survey.
- Implementation of Training Programmes and 4 Workshops and determining critical issues through impact analysis surveys
- Organization of 3 international and 1 national study Visits and implementation of awareness raising activities, including 3 films
- **Exploring inter-ministerial / institutional co-operation** during the study visits on market

The expected results of the project are as follows:

- Informed well MoIT, NBs and NGOs staff about EU technical legislation.
- **Increased capacity and quality** within the Ministry of Industry and Technology (MoIT) in the product safety resulting in consumer protection in the machinery sector through EU guidelines
- **Improved skills and knowledge** of MoIT staff and the stakeholders and raised awareness in product safety in the sector
- Models developed and tested for inter-ministerial cooperation and coordination through 3 international and 1 national study visits
- Translated relevant EU documents and produced a technical terms dictionary
- Eased access to information and knowledge through the National Machinery Knowledge Portal (Web-Based Inventory on Machinery Sector) (NMKP)



Ref. 17	Project title	TRB2 REGION, Statistical Methods with R Programming- DAKA								
Name of legal entity	Country Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provide	Name of client d	Origin of funding	Dates (start-end)	Name of consortium members, if any			
BYS Grup	17.163,48 TL (2.704,40 EUF Türkiye according to exchange rati for 01.11.2018	R 100% e	1	Eastern Anatolia Development Agency (DAKA)	National t (Republic of Türkiye)	November 2018	BYS Grup			
		escription of project			Type and scope of se	rvices provided				

R Programming is a powerful and versatile programming language and environment used primarily for statistical computing and graphics. It's widely used among statisticians and data analysts for data mining, data analysis, and graphical representation of data. R offers an extensive package ecosystem and is highly extensible, allowing for a wide range of statistical techniques including linear and nonlinear modelling, classical statistical tests, time-series analysis, classification, clustering, and more. It's known for its capability to produce well-designed publication-quality plots.

As a service, R Programming training has been organised and conducted for the Eastern Anatolia Development Agency. The training program was designed to provide • comprehensive instruction in R programming, covering fundamental concepts, tools, and • applications. Participants gained practical skills and theoretical understanding necessary to apply R in various data analysis and statistical contexts.

The training program was designed to be interactive and practical, ensuring participants not only understood the theoretical aspects of R programming but also gained hands-on experience in applying these concepts to real-world data analysis scenarios.

R programming training was about:

- Introduction to the R interface and environment setup.
- Navigating and customizing the RStudio interface for efficient workflow.
- Practical exercises on variable assignments and data storage.
- Exploring various comparison operators in R.
- Understanding assignment operators and their use in R.
- Comprehensive overview of data structures like vectors, matrices, lists, and data frames.
- Introduction to basic data types (numeric, character, logical,
- Writing custom functions in R for specific tasks.
- Managing date and time data in R.
- Apply functions in R.
- Techniques for reading from and writing to various file formats (CSV, Excel, etc.).



Ref. 18	Pro	ject title	TRB2 REGION, Estab	lishing A Reg	gional Statisti	cs Compilation, A	nalysis and Presentati	ion Platform - DAKA
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	7.400 EUR	100%	2 Experts	Eastern Anatolia Development Agency (DAKA)	: National	April 2019 – Decembe 2019	r BYS Grup
		Detailed des	scription of project			T	ype and scope of serv	ices provided
Van (TRB2 NUT compilation, and of economic do Analytical and oweb-based modetermined by	S II Regionallysis, and evelopmer synamic ar nitoring state the Benef	on (Zonguldak, presentation p nt within the I nalyses can be system. The p iciary, have be	rom the data sources Karabük and Bartın) latform (statistical mass Eastern Anatolia Deve performed in this data provincial and region sen interactively access cs are monitored by the	within regionster database elopment Agobase and motal statistics statistics with the web	onal statistics e) for the sake ency (DAKA). onitored from which were	Eastern Anat Combining re to produce the Automatic st statistics an Interface (AP To give differ the time serie Ranking of re and Turkey de Ensuring the conduct rese thematic ana Ability to disp to change the Future project Comparison regions Presentation appropriate of Providing da code (Excel, 1) Establishmen	olia sub-region (DAKA), egional and institutional endicators for social attaitstical data collection of portals using with [1]" codes, rent statistical data of es methods, egional data and compalata for economic develoat individuals, institution error reach accurate, colleges, reach accurate, reach accurate, reach accurate, reach accurate, reach accurate, reach accurate, reach accurate, reach accurate, reach accurate, reach accurate, reach accurate, reach	al statistics on a single platform and economic development, a from internet sites providing in "Application Programming the TR81 region depending on are with other provinces, cities, opment level.  Tons, and organizations which Region, performing sectoral or current, and comparative data, appropriate graphic chart and is by the user.



Ref. 19	Pro	ject title	Establishment of Ad	vanced Analy	tics and Dat	a Mining Platform	n for Social Security 1	Institution	
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	89.198 € Supply + 80.000 € Services	<b>BYS Share:</b> 100% (169.198 EUR) (received all)	7 experts 45 man- months	Central Bank of the Republic of Turkey	National (Republi of Türkiye)	COMPLETED 01.12. 2013 – 14.11. 2019	BYS Grup	
	Detailed description of project					Type and scope of services provided			

The purpose of the assignment is to establish an analytics and data mining platform for Social Security Institution in Türkiye (SGK) to maintain the pension, health insurance, social security, audit, actuarial, health/public finance, medicine sector, hospitals related data handling operations and other statistical calculations, modelling, algorithms for the reform of the individually operated IT systems and providing SAS Licences to SSI.

Conducting a workshop study throughout inspection practices with segmentation analysis • for detection of anomalies in unregistered employment issues in Turkey.

Carrying out an assignment under the advanced training of Risk Assessment manual which provides to the staff in order to make reports by using data mining process and data analysis on SAS software.

The following trainings were conducted to SSI staff (Directorate for Actuary and Funds, Directorate General of Service Delivery, Directorate for Guidance and Inspection, Directorate General of Pension Services, Directorate General of Universal Health Insurance and Risk Analysis Departments):

- 1. SAS Enterprise Guide Querying and Reporting
- 2. SAS Enterprise Guide Advanced Task and Queries
- 3. SAS Enterprise Guide ANOVA, Regression and Logistic Regression
- 4. SAS Enterprise Miner Applied Analytics Using SAS Miner
- 5. SAS Programming, I
- 6. SAS Programming, II
- 7. SAS Admin User Training

- Identification of System requirements for Databases (ORACLE)
- Current Situation Analysis
  - Identification of Target Groups
  - Determination of Data Sources Review of Legislation, Strategic Plan and other existing documents
  - o Preparation of installation guideline
- Installation Requirement Analysis
  - Identification of Software Standards, Programming Language, Development Tools
  - Identification of Data Transfer Architecture (ETL)
  - Formation of System Architecture and Design Document including technical recommendations
  - o Identification of New and Additional Software Needs
  - o Preparation of Management Process Document
- Development of SAS database and server architectures,
- Identification of user profiling
- Administration of the management console
- Installation and maintenance of SAS Office Analytics, Data Quality products
- Technical assistance and support services
- Trainings of Actuarial, Health, Insurance, M&E, Pension, Risk Analysis
   Departments



Name/profile of main staff provided  2 Senior Yes Statistician 3 Senior Yes Trainers 2 Junior Yes Trainers 2 Senior No	Number of months worked on the project
2 Senior Yes	12 Months
	12 Months
Trainers	
2 Junior Yes	12 Months
Trainers	
2 Senior No	3 Months
Modelling	
Experts	
1 Computer Yes Engineer	6 Months



Ref. 20	Pro	ject title	TA for Capacity Build Agricultural Support	•		•	a Regulatory Impact ass	sessment (RIA) for Decoupled
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	7.800,00 EUR	<b>BYS Share:</b> 100% (7.800 EUR)	1 Expert	Republic of Türkiye Ministry of Food, agriculture and Livestock (MoFAL)	EU	COMPLETED 2018 – 2019	NIRAS IC Sp. Z o.o. BYS Grup(subcontract)
		Detailed de	escription of project				Type and scope of s	ervices provided
for the alignm opening benc assessment ar decoupled agr	ent of nation hmark, by nd to supposicicultural su	onal agriculture building the cort the conduct upport policy in	support MoFAL for the e policies with the EU Ca capacity required to ca of an impact assessma Turkey in accordance modelling practices with	AP, in line with arry out regulent of the intrology with the EU a	n the relevant latory impact oduction of a pproach. BYS	off in (A)  Exit do (A)  Exit d	the Project within the sco compliance with the Terr appendix 2).  Execute the activities and eadlines and in formats es eccute the tasks assigned to ligence, in a professional re- coordinate his / her active epert(s) and Project Directed ith the structure of the Pro- laintain good cooperation experts, Project Directed dministrative staff, Benefiakeholders during the whooject.	to Expert with all due skill, care and manner. vities with the TL, respective Key or/Project Manager, in accordance



Ref. 21	Pro	ject title	TR81 Region, Estab	lishing A Reg	gional Statist	cs Compilation, Analysis a	and Presentation Plat	tform
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	10.737 EUR	BYS Share: 100% (10.737 EUR) (received all)	2 Experts	Western Black Sea Developmen Agency (BAKKA)	National (Republic of Türkiye)	COMPLETED 26.02. 2018 - 26.12. 2018	BYS Grup
	Deta	ailed descripti	on of project			Type and sco	pe of services provide	ed
TR81 NUTS II statistics com master datab in this databa determined b	The central database has been created from the data sources of the TR81 NUTS II Region (Zonguldak, Karabük and Bartın) within regional statistics compilation, analysis, and presentation platform (statistical master database). Analytical and dynamic analyses can be performed in this database. The provincial and regional statistics which determined by the Beneficiary, have been interactively accessible via web, mobile and tablet.		nin regional (statistical performed ch	Sea Comindia Autoport To genet Ran data Ensi rela curr Abil chai Futu Com Pres ensi Prov mar	sub-region (BAKKA), abining regional and institutators for social and econoromatic statistical data collegals using with "Application give different statistical data hods king of regional data and conformed that individuals, instituted to TR81 Region, performent, and comparative data, ity to display each chart with type and colours by the understood of province and/or sentation of statistical data uring easy and effective readiciding data input with other and etc.)	tional statistics on a single development, ection from internet so Programming Interface of the TR81 region domparison with other tolevel. The programming sectoral or thematical in line with trends a region with other program of the user with the ding of data.	epending on the time series provinces, cities, and Turkey ons which conduct research tic analyses, reach accurate, which chart and to change the .	



Ref. 22	Proj	ect title	Technical Assistance for Developed Analytical Basis for Formulating Strategies and Actions towards Low Carbon Development (TR2013/0327.05.01-01/001, EuropeAid/136032/IH/SER/TR)							
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any		
BYS Grup	Türkiye	20.000 EUR	<b>BYS Share:</b> 100% (20.000 EUR) (received all)	2 Experts	Republic of Türkiye Ministry of Environment and Urbanization	EU	COMPLETED March 2018 – July 2018	BYS Grup(Subcontractor) Hulla&Co (AT)		
etailed descrip	otion of pr	oject			T)	ype and scop	e of services provided			
Project overall			o prepare for medium-	and long-term		•	nent Analysis Requirement Specification	Document		

To increase national and local capacity to prepare for medium- and long-term climate action towards climate resilient low-carbon development, which will gradually align with the ELL climate policy and logication by providing an applytical basis to support

the EU climate policy and legislation by providing an analytical basis to support realisation of low-carbon in the long-term, specifically focusing on cost effective climate change mitigation actions related to buildings, waste, transportation and agriculture sectors of NCCAP.

BYS Group undertook the scope of **Developing National Climate Change Knowledge Portal (CCKP) (Activity 1.4).** Development of web-based inventory of climate change is one of the main activities of the project. In Turkey many policies, strategic plans, studies, articles, development plans related to climate change are published in electronically, however reaching to these resources is not easy for stakeholders and the interested public.

CCKP Software consists of 3 main modules:

- Web Portal
- CCKP Admin Module
- CCKP Admin Mobile Application

- Software Design
  - o Architectural (Conceptual) Design
  - Detailed Design with UML diagrams
  - UI Design
  - Software Design Specification Document
- Software Development
  - .NET C# MVC
  - SQL Server
  - Web Service
  - Custom Framework provided by Ministry IT Unit
  - Xamarin
- Software Deployment
  - o IIS Application Server
  - AppStore for IOS
  - Play Store for Android
- Software Maintenance



Ref. 23	Pro	ject title	TR90 Region, Satisfac	tion and Nee	ds Analysis o	f People with D	isabilities	_
Name of legal entity	_	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	15.370 EUR	BYS Share: 100% (15.370 EUR) (received all)	3 Experts	Eastern Black Sea Developmen t Agency	National (Republic of	COMPLETED April 2018 – July 2018	BYS Grup
		Detailed d	escription of project				Type and scope of se	rvices provided
planned as p. Program" by l carrying out a planned. The programs in th Field research Rize, Trabzon) analysis and pl Activities:  Design Identifi Field re Researce Evaluat Prepara	art of the Eastern Bl research presults of the TR9 reparing recation of presearch the database ation of the eating the eating	e framework of ack Sea Developroject in the r the research conducted on 6 0 region within	arch findings ort	ancement Re the scope o and rural ar for the planr	esult-Focused f the project, eas has been ning of other ane, Ordu,	Sea subsection of the particular areas  Sea subsection of the particular areas Determined the particular areas Determined the particular areas	b-region, both in cities a m identification by disable ication of problems (cul- e disabled individuals ar- ication of educational tence of training centions) operating for persons ning and evaluating the public and NGOs for the mining the level of awarentities in health, transpontant	led groups, tural, educational, financial etc.) and their families are facing, qualities and physical space res (rehabilitation centres and with disabilities colicies, programs and supports disabled, ness of the rights of persons with ortation, education, and social atte sector expectations for the for disabled people to participate



Ref. 24	Proj	ect title	E-Learning Game App (TR2013/0327.05.01-02		ut Climate Char	nge		
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	29.100 EUR	BYS Share: 100% (29.100 EUR) (received all)	3 Experts	Republic of Türkiye Mersin Metropolitan Municipality	EU	COMPLETED July 2018 – November 2018	BYS Grup
Duningt (Chand	Links Cline		escription of project 2013/0327.05.01-02/028	) averall mod	is as fallows:	. Danisa	Type and scope of servi ment Analysis	ces provided
representative that cause clim BYS Group und and educative different aspec this application	s in order to late change lertook the animation its of nature is to bring r slow it by in the app otprint e energy	o create the ba scope of creat videos. Each e events. Targe g awareness to using e-learni	apacity of Mersin with k", to provide adaptation ting a mobile application game has a different seting upper elementary or children about climateng and gamification tec	n and to reduce n that consists cenario which aged childrer e change and	s of 10 game n focuses on n, purpose of	● Software	e Requirement Specification c Design crchitectural (Conceptual) De cetailed Design with UML dia dI Design came mechanics design coftware Design Specification Development Unity Game Engine conimations Deployment coppStore for IOS Play Store for Android Maintenance	esign grams



Ref. 25	Proj	ect title	Education Programm	Education Programme for Syrian Refugees and Host Communities							
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any			
BYS Grup	Türkiye	25.000,00 €	BYS share: 100 % 25.000,00 €	3	Turkish Ministry of National Education	German Federal Ministry for Economic Cooperation and Development (BMZ)		-Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)			

The programme operated in the provinces of Gaziantep, Sanliurfa, Kilis, Hatay, Mardin, Ankara and Istanbul in Turkey, which are very severely affected by the Syrian crisis. Field of activity 1 involves construction measures designed to upgrade the existing educational institutions. The aim was to improve learning conditions as well as access to education for refugees and the host communities. Field of activity 2 was about training teachers to build up their pedagogic, intercultural skills and their abilities to promote social integration. In the 3rd field of activity, the programme worked with young volunteers to develop activities that promoted integrative exchanges between the various groups, such as sports and recreational activities, culture, youth camps and joint events, in a bid to help build social cohesion.

The programme targeted Syrian and Turkish children, youth, and young adults (total age range: 6-35 years) living in Turkey. A focus was placed on the needs of girls, young women, and socially disadvantaged Turkish groups in the context of school and activities that promote social cohesion. The target group also included Syrian and Turkish teaching staff.

#### **Results:**

During the 2017/2018 school year, the project renovated many schools and education centres, including five temporary education centres in the province of Sanliurfa, 22 public schools in the provinces of Hatay, Gaziantep, Kilis and Sanliurfa, and a temporary education centre and three youth and community centres in the city of Gaziantep. 31,514 children and young people (50 per cent of whom are girls and young women) are currently benefiting

The project objective was achieved in three fields of activity:

Promoting formal education. In collaboration with the Turkish Ministry of National Education (MoNE), the project strengthened the capacities of existing educational institutions so that many children and young people in the worst affected provinces of Gaziantep, Hatay, Kilis and Sanliurfa will have access to formal education soon. Public schools being rehabilitated. The project also helped to transport Syrian children and young people to and from school and provided teaching materials for staff and pupils.

Type and scope of services provided

- Improving the quality of formal and non-formal education.
   The project trained teachers and strengthened their intercultural and integration skills so that they can help Syrian child refugees to integrate more successfully into the Turkish school system. Evaluating their employable skill levels which will be part of the economic development of the refugee children.
- Promoting activities that strengthen social cohesion. The
  project implemented measures in Gaziantep, Sanliurfa, Hatay,
  Mardin, Ankara and Istanbul to help Syrian refugees and
  members of the host communities to live well together in a



from the improved school infrastructure. By the end of September 2018, 45,547 Syrian and Turkish children and young people (around 49 per cent of whom were girls and young women) had taken part in the additional intercultural exchanges and leisure activities provided.

By the end of October 2018, 570 teachers of mixed classes of Syrian and Turkish children had taken part in five-day seminars on intercultural skills. 98 per cent of the teachers trained to date have confirmed that their ability to teach mixed classes of Syrian and Turkish children has either improved or improved significantly.

• In the first year of the project, improved school transport has made it easier for Syrian children to attend school and summer schools, providing 4,638 children with access to education.

spirit of trust. Young Turkish and Syrian people were trained by local and international social workers to act as multipliers and were given the resources they need to organise social, cultural, and sporting activities for Syrian and Turkish children and young people. This training allowed young people and staff to take an active part in local community life and to become involved in shaping processes. The German Olympic Sports Confederation (DOSB) acted as a partner for implementing sporting activities and the project collaborated closely with the Goethe-Institute in cultural activities. The most important local partner, besides the municipalities, was the local nongovernmental organisation Association for Solidarity with Asylum Seekers and Migrants (SGDD-ASAM), which specialises in supporting refugees and asylum seekers in Turkey.

In order to achieve these fields of activities BYS Grup A.Ş. was responsible for providing a local/regional evaluator for the project.



entity Country contract value (EUR) out by legal entity (%) provided client funding (start-end) members, if any  Republic of Türkiye Ministry of Labour and Social EU 14.01.2016 - 27.12.2017  Republic of Türkiye Ministry of Labour and Social 14.01.2016 - 27.12.2017  Republic of Türkiye Ministry of Labour and Social 15.10 Labour and Social 17.12.2017	Ref. 26 Project title			Technical Assistance for Improving the MIS of HRD OS (TAMIS) (EuropeAid/136370/IH/SER/TR)							
BYS Grup Türkiye  442.966,75 EUR  BYS Share: 73% 12 LTE (324.694,6 EUR) (1.510 (received all)  Man/Days  Türkiye  Türkiye  Ministry of Labour and Social  EU  14.01.2016 - 27.12.2017  IN2 Ltd.		Country	contract	out by legal entity					Name of consortium members, if any		
Security	BYS Grup	Türkiye	•	(324.694,6 EUR)	1.510	Türkiye Ministry of Labour and	EU	14.01.2016 -	AlmavivA S.A.(IT),		

The Ministry of Labour and Social Security (MoLSS) is responsible for carrying out implementation of Human Resources Development Operational Programme (HRD **OP) under IPA programme as the Operating Structure.** The Ministry conducts several projects on employment, education, lifelong learning, social inclusion, and technical assistance. The European Union Coordination Department (EUCD) of MoLSS is responsible for programming, tendering, contracting, financing, managing, monitoring and evaluation processes of the projects under the Operational Programme HRD OP which is part of the IPA process. For proper management and implementation, the EUCD has been using application software such as HRD-MIS (Human Resources Development Management Information System) and G-MIS (Grant Monitoring Information System).

To evaluate the achievements of the whole Human Resources Development Operational Programme (HRD OP); the present contract aims to update and maintain; the related Management Information Systems, namely HRD-MIS and G-MIS software system where all the duties of the EU Coordination Department of MoLSS are carried out electronically. And to develop and integrate additional modules to existing Systems for proper evaluation of the HRD OP Programme.

It is aimed to fix the problems of HRD-MIS and G-MIS, provide required integration between HRD-MIS and G-MIS, as well as develop and integrate new functionalities and modules for the IPA-II period (2014-2020) and meet the needs of the HRD OS Units.

- Current Situation Analysis of the Programme
- Identification of Target Groups
- o Determination of Data Sources Review of Legislation, Strategic Plan, and other existing documents
- Requirement Analysis for proper evaluation of the programme
  - o Identification of Software Standards, Programming Language, **Development Tools**
  - Identification of New and Additional Software Needs
  - Preparation of SRS Document
- Development of the IT architecture for evaluating HRD OP
  - Development of the database and server architectures,
  - Development of MIS (Management Information System) platforms (HRD-MIS and G-MIS)
  - Identification of user profiling
  - Administration of the management console
  - Penetration and Load Tests
- Support Services for the evaluation Process
  - Technical assistance and support services
  - Training of IT System Usage
  - Technical Trainings in the fields of:
    - SOFTWARE DEVELOPMENT
    - **VISUAL STUDIO 2012**
    - **WINDOWS SERVER 2012**
    - SQL SERVER 2012



## - SECURITY TRAININGS

Name/profile of main staff	Permanent	Number of months
provided	staff	worked on the
		project
Team Leader	No	12
Team Leader in Charge of External Trainings	Yes	5
3 Senior Business Analysis and Modelling Expert	Yes	9
Senior Quality Control and Security Manager	No	1
Senior Database Design Expert	Yes	1
Senior ISO 27001 Expert	No	1
Senior Database Administrator	Yes	1
Senior Web Services Design & Development Expert	No	2
2 Senior Software Developer	Yes	14
4 Junior Software Developer	Yes	40
Senior System Networking Security Expert	No	1
Senior Load and Penetration Tester	No	2
Senior Testing and Deployment Expert	Yes	3



Ref. 27	Proje	ect title	Establishment Of An	alytics, Data	Quality a	nd Data Mining Platform	for Central Bank of The	Republic of Turkey
lame of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	146.736 EUR	<b>BYS Share:</b> 100% (146.736 EUR)	4 experts- 37 man- month	Central Bank of The Republic of Türkiye	National (Republic of Türkiye)	COMPLETED 01.07.2015 - 19.09.2017	BYS Grup
	Detailed	description	of project			Type and scon	e of services provided	

The purpose of the assignment was to establish analytics, data • quality and data mining platform for Central Bank of The Republic of Turkey in order to maintain the price, public finance, • real sector, banking, currency and other statistical calculations, • models and algorithms for the reform of the individually operated IT systems.

SAS Office Analytics (for two cores and unlimited number of • users) and SAS Data Quality Standards (desktop – for one user) Two-Year Lease of Software Licenses and Procurement of • Maintenance Support Service

- Identification of System requirements for Databases (DB2)
- **Current Situation Analysis**
- **Identification of Target Groups**
- Determination of Data Sources Review of Legislation, Strategic Plan and other existing documents
- Preparation of installation guideline
- Installation Requirement Analysis
- Identification of Software Standards, Programming Language, Development Tools
- Identification of Data Transfer Architecture (ETL)
- Formation of System Architecture and Design Document including technical recommendations
- Identification of New and Additional Software Needs
- Preparation of Management Process Document
- Development of SAS database and server architectures,
- Identification of user profiling
- Administration of the management console
- Installation and maintenance of SAS Office Analytics, Data Quality products
- Technical assistance and support services
- Training

Name/profile of main staff	Permanen	Permanent staff? Number of months worked on the					
provided		project					
1 Team Leader	Yes	12 months					
1 Senior Statistician	Yes	12 Months					



1 Junior Statistician	Yes	12 Months
1 Trainer	No	1 Month



Ref. 28	Proj	ect title	Technical Assistance (EuropeAid/136449/IF		g the Employa	bility of People	with Disabilities	
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	60.400 EUR	<b>BYS Share:</b> 100% (60.400 EUR) (received all)	350 man- days	Hulla and Co Human Dynamics KG (Hacettepe University)	EU	COMPLETED 26.12. 2016 – 14.07.2017	BYS Grup
		Detailed de	scription of project				Type of services	provided
the people with to the labour materials and social within this scope Hacettepe VRC Uprocess.  Hacettepe VRC Social Admin Modion Client Regis	disabilities arket in the took the so viding sup ial and self oe, Hacetto Jnit such a software coule tration Module and Report	(PwD) to increase national economic repercent of the Volume of the Volum	g a hospital automation ocational Rehabilitation skills training will be proving ware was developed to lay to day operation and	and facilitate system in VF Centre wher ovided.) meet the r d helping dec	e their access  RC (Result 2 / re simulation	undertakin Preparing a and docum build and d Cost Analys Requireme Data Mode Form Desig Process An. Current Da TEA Integra Current Da Current Da Design and modules ar strategy, pr Developme modules, cand any systems	g product development and processing software ent strategies, standare eployment of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of system of the system of system of the system	re development lifecycle, definerds, and guidelines to direct the



Ref. 29	Project title		Support For the EU Communication Programme in Turkey (EuropeAid/134555/C/SER/TR) - (IPA 2014/339-045, IPA 2015/356-806)						
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	1.479.681 EUR (1 <sup>st</sup> year) 1.499.000 EUR (2 <sup>nd</sup> year)	<b>BYS Share:</b> 60% (1st year 887 860 FUR	7 LTE 8 STE	Delegation of the European Union to Türkiye	EU	COMPLETED 28.02.2014 – 27.02.2016	BYS Grup Zed Management Consultancy, Marka Kongre	
		Detailed de	scription of project			Ту	pe and scope of s	ervices provided	

The overall objective of this communication programme was to communicate the EU's 

policy objectives in Turkey

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The purposes of this contract were defined as follows:

- Promote the EU and its values in particular civil and political rights among the Turkish population with a particular focus on identified target audiences, notably young people (under the heading 'Our Europe, Our Future'), and underline the practical benefits of adopting these values for the Turkish citizens.
- Disseminate information about what the EU is concretely doing for Turkish citizens through its financing instruments to key partners and policy-makers and enhance the visibility of EU-funded projects.
- Promote EU interests in Turkey, whether of an economic nature or aiming at a better understanding of EU policy positions.
- Dispel myths and misconceptions related to the EU and EU-Turkey relations and the accession process.

- Supporting the Communication activities
- Supporting selected EUIC Network Activities in Turkey
- Updating the EU Delegation's current communication strategy
- Event Management
  - Preparation of an Event Calendar Political and Social Agenda of Turkey
  - 9 May Europe Day organisation
  - o 10 December Human right Film days and short film contest
  - o Organisation of EU Journalists' Visits to Turkey
- Statistical Analysis of the communication environment and target groups' characteristics,
- Design and development of PR, Media and Communication materials, Preparation of Promotional and visibility items for EUD, EUIC's and TESG
- Updating and maintaining list of Team Europe Speakers
- Review and assessment of the Delegation's existing communication strategy, and if requested updating of the strategy and conduction of research in order to assess impact of the Delegation's communication activities
- Development of EUD Turkey's website, <u>www.avrupa.info.tr</u>
- Daily Updating of News, Press Releases, EEAS news and Tender Announcements, Vacancy Posts of the EUD and Events related with EUD Turkey activities announced through the official EUD Turkey website, avrupa.info.tr
- Development of Success Stories database within the website, integration of this new section into <a href="https://www.avrupa.info.tr">www.avrupa.info.tr</a>



- Updating (through a TYPO3 CMS) the other web site (abbilgi.info.tr) used as an official EUD Turkey website serving as an archive of EUD Turkey news and activities
- Other activities under management of the websites: User Interface Design; Domain management; Hosting management; Back-up of databases; Back-up of source code files; Databases optimization and upgrades; Control and analysis of visitor statistics
- Designing and coding the application, Schengen Map module, for displaying the information about the Schengen offices in Turkey and its integration to the official EUD Turkey website, avrupa.info.tr.
- Management of the distribution services and mailing groups of the information distribution system (IDS) used on min.avrupa.info.tr subdomain, under a dynamic CMS on a daily basis.
- Development of Mobile applications for website access: Revising and updating the source codes of the Apps, provided by EUD
- Management of social media tools Facebook, Twitter, Instagram, YouTube (on behalf of EUD)



Ref. 30	Proj	ACT TITIA	Current Situation and of Transport, Maritim	•	•		nagement Informa	tion System of The Ministr
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staf provided		Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	14.500 EUR	<b>BYS Share:</b> 100% (14.500 EUR)	5 experts- 25 man- month	Ministry of Transport, Maritime Affairs and Communication s, Republic of Turkey	National (Republic of Türkiye)	COMPLETED September 2014 – December 2015	BYS Grup
		nment was to w	pe of services provide vork on analysis and de	sign of infra		<ul> <li>Initial Analysis (Ide</li> </ul>	and scope of servicentification of the ex	es provided (pectations of the Directors)
•		•	S) for the reform of t		•		•	
•		ystem to be im	plemented. The benefi	ciary was the	e department of		•	
Statistics in the Objectives:	ministry.				•		Data Sources of MIS	•
-	to the cal	nacity huilding	and institutional str	enathenina	of Ministry of	<ul> <li>Review of Legis documents</li> </ul>	slation, Strategic	Plan and other existing
		fairs and Comr	•	crigarierinig	or willistry or		equate Questionnai	re Forms
•			vide the infrastructure	of the Minist	ry of Transport,		•	e i oriris
Maritime Aff	fairs and C	ommunications	S			•	Software Standards	s, Programming Language
						· ·	ata Transfer Archite	cture (ETL)
						<ul> <li>Decision Support S</li> </ul>		,
					•	<ul> <li>Formation of Syste technical recommend</li> </ul>		Design Document including
						<ul> <li>Identification of N</li> </ul>	ew and Additional S	oftware Needs
					•	<ul> <li>Preparation of MIS</li> </ul>	S Development Prod	ess Document
					•	<ul> <li>Preparation of C Report</li> </ul>	Current Situation a	and Requirement Analyses



Ref. 31	Pro	ject title	Technical Assistance (EuropeAid/131052/D/	e for Alignment in Organ Donation D/SER/TR)					
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	2.300.000 EUR	<b>BYS Share:</b> 38% (867.463 EUR)	731 man- days	Republic of Türkiye Ministry of Health	EU	COMPLETED 29.04.2013 – April 2015	Almaviva Spa (Leader), BYS Grup, Ankara University	

Technical assistance for ensuring quality and safety standards for human organ donation and transplantation in medical treatment. The scope included:

the harmonisation of Turkish legislation with the EU 'acquis' by conducting gap analysis and preparing draft texts for Turkish organ transplantation and donation legislation, training of health personnel in organ transplantation- and donation-related themes, including on ethical aspects,

raising public awareness,

revising statistical collection system and preparing auditing forms for transplant centres, establishment of international cooperation for raising the knowledge of the Ministry of Health's personnel on organ donation and transplantation.

The overall objective of the project was to contribute to the harmonization with and implementation of the EU acquis Communautaire in the area of public health, specifically focusing on increasing cadaveric organ donation in Turkey.

The project included a number of activities and studies in order to ensure quality and safety standards for human organ donation and transplantation in medical treatment. Technical assistance was provided to the Ministry of Health for development of organ donation and transplantation system in line with the EU. In particular, the Technical Assistance Team were responsible for delivering - in cooperation with the beneficiary - the project activities and outputs, which was realized by systematic and detailed analysis of the current legislation in Turkey and EU, preparing the additional legislation, delivering trainings to professionals, revising statistical collection system, increasing public awareness and establishing international cooperation.

- Type and scope of services provided
   Technical assistance for ensuring quality and safety standards for human organ donation and transplantation in medical
- Research study on awareness on organ donation
- Harmonizing Turkish organ transplantation and donation legislation with that of EU
- Preparing Communication Plan

treatment

- 4 bilateral agreements and protocols with EU countries
- Preparing activities for communication and increasing public awareness about organ donation
- Developing statistical data collection system
- Analysis and recommendation of TODS database and Web System in NAT, C#
- Support to integration of Euro Transplant Database and Statistical Reporting Systems
- Reviewing the IT infrastructure to be aligned with EU Norms
- Analysis of MoH current databases (ORACLE, MS SQL servers)
- Revising Statistical Collection System
- Developing auditing forms for Transplant Centres
- Trainings for capacity building:
  - Training of Trainers for 160 specialists,
  - o Training of 1500 specialist doctors,
  - o 2 international symposiums,
  - 4 study visits to selected EU countries,
  - 4 media information meetings,
  - 2 information meetings for Religious Affairs Personnel and NGOs.



Ref. 32	Proj	ect title	Statistical Consultanc Component A: Support					
ame of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	25.000 EUR	<b>BYS Share:</b> 100% (25.000 EUR)	1 KE 2 STE	Republic of Türkiye Ministry of Health	World Bank	COMPLETED February 2012 - January 2014	BYS Grup
		De	tailed description of p	roject			Type and scop	e of services provided
formulating an piloting output	d impleme based fina Support	enting reforms incing for non- for MoH's Sti	re: (i) increasing the effe s in provider payments -communicable diseases rategic Plan for 2010-20 OH Strategic Plan with a	and health s s (NCD) prever 014 (EUR 46.1	ystems perfor ntion and cont I 7 million): T	Health (MOH) in mance; and (ii) crol. This component	<ul><li>Needs assessment</li><li>Data Collection, Date</li><li>Health Statistics Co</li></ul>	<u>-</u>

**Component A:** Support for MoH's Strategic Plan for 2010-2014 (EUR 46.1 7 million): This component supported the implementation of the MOH Strategic Plan with a main objective of converting the MoH into a health sector steward and completing health service delivery reforms. Under the component, the activities to be financed included technical assistance/services, training and goods for eight program areas of the Strategic Plan with an emphasis on the implementation of family medicine, hospital reforms, public health and regulatory reforms and strengthening policy-making, priority-setting and monitoring and evaluation. **Data Sources:** Information on outcomes/results were to be obtained from two sources: (i) routine MoH and SSI data systems (e.g., hospital, family medicine and public health information systems of the MOH, claims and utilization management systems of the SSI); and (ii) baseline and follow-up surveys to be used to

The project targeted to create value to the entire population of Turkey through increased access to quality health services. It aimed to ensure greater financial protection in health and improves financial sustainability of health expenditures while focusing on continued improvements in health outcomes.

monitor Program outcomes (ten-year results of the HTP).

Reporting



Ref. 33	Ref. 33 Project title		Technical Assistance for Upgrading the Statistical System of Turkey Programme Phase III						
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	1.626.840 EUR	<b>BYS Share:</b> 3,3% (53.900 EUR)	3 STE (50 man-day) 1 LTE (24 man-day)	GOPA Consultants	EU	COMPLETED October 2013 – December 2013	BYS Grup	

The purpose of this contract was to further improve the compliance with the EU standards in the selected areas of the statistical system of Turkey and to ensure the efficient coordination by TurkStat. The scope included activities for the improvement of business register system, social statistics, environment statistics and accounts, macroeconomic statistics, business statistics and capacity building and institutional strengthening of TurkStat. The activities carried by the STE were within:

<u>Sub-project:</u> Support to Capacity Building and Institutional Strengthening of TurkStat <u>Component:</u> TurkStat Management Information System

The assignment undertook involved the analysis and design of infrastructure of the Management Information Systems (MIS) for the reform of the individually operated IT systems and implementation of a pilot sub-system.

Objectives were:

- Contribute to the capacity building and institutional strengthening of TurkStat
- Model the MIS modules that will provide the infrastructure of TurkStat
- Define and implement a pilot project in order to evaluate feasibility, time, cost, adverse events, and effect size of MIS

## Type and scope of services provided

- Advising on and documentation of the MIS needs:
- Architectural structure of the TurkStat MIS
- o Work plans and infrastructure for all MIS modules
- Developing the strategy for implementation of MIS and advising on the operational scalability of the proposed solution
- Detailed reporting on recommendations for a MIS model and MIS strategy document including an activity plan:
- Existing Situation: The components, organizational structure and management levels
- Information Availability: Searching the available information, responsible unit
- Information Flows: Showing the origins of information, determining the information flow and target/destination of information
- Improvement Fields: Specifying the fields to be improved, and defining the recommendations and the related benefits for each unit



Ref. 34	Project fifte						uropean Union and Counci ne Prison Reform in Turkey	l of Europe Joint Programme
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	25.000 EUR	<b>BYS Share:</b> 100% (25.000 EUR)	4 KE 2 STE	Council of Europe	EU/CFCU	COMPLETED July 2012 – September 2012	BYS Grup

## Type and scope of services provided



Main objective of the assignment was to administer qualitative and quantitative research methods on the target group and final beneficiaries of the Dissemination of Model Prison Practices and Promotion of the Prison Reform in Turkey Project in order to be able to determine the progress recorded within the life time of the Project.

The target groups of the studies were prisoners, prison staff, public prosecutors, prison teachers, commanders of the

gendarmerie, prison health care staff and prison administrators as shown in the figure.

- Desk-top Review
- Review of existing project documents such as the project fiche, description of the action, progress reports, expert reports, other relevant documents and existing sources of verification
- 20 In-depth interviews with the project stakeholders, the target group and the final beneficiaries,
- Development of the "data collection forms" for different target groups,
- Training of the field workers,
- Identification of sampling frame and sampling methodology,
- 3.000 Face to face interviews conducted,
- Analysing statistical analysis,
- Ex-post evaluation of the Project,
- Reporting.

### Project aimed:

- To generate data to establish and strengthen the sources of verification,
- To review existing project related data together with the data to be produced within the framework of the studies proposed here and to determine the level of progress based on the objective verifiable indicators,
- To demonstrate whether the expected results of the project achieved through administration of qualitative and quantitative research methods,
- To assess results in an evaluation report



Ref. 35	Project title		Technical Assistance for Strengthening the Statistical Capacity of Ministry of National Education						
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	1.559.750 EUR	<b>BYS Share:</b> 100% (1.599.750 EUR)	1 KE 2 Senior STE Statistician and BI Specialist, 4 LTE	SOGETI (Lux.) & KMO information Systems	EU	COMPLETED September 2011 – April 2012	BYS Grup	
Detailed description of project							Type and scope of service	es provided	

The purpose of the contract was to upgrade the data collection system of the Ministry of National Education (MoNE) according to the EU, especially to the Eurostat standards in the area of education by developing a system. The system enables all beneficiaries to get reliable, coherent data on finance, personnel, student enrolment, graduations and dropouts align with national and international definitions and acts as the main source in the decision-making process.

This Project was designed in a way to meet priorities as defined under the 9th Development Plan and EU Regulations. Statistical data to be obtained within the scope of this Project had to be compliant with EU standards and definitions. The scope included producing data in compliance with UOE (UNESCO-UIS/OECD/EUROSTAT) database; meeting and fulfilling the statistical deficiencies as per EU negotiations; developing necessary indicators to constitute a basis for decision making processes. Additionally, required analysis and synthesizes on e-projects were conducted within the scope of this Project.

The technical assistance team identified data dissemination procedures, reviewed the current data collection system, prepared guidelines, conducted IT and training need analysis, organised trainings, seminars, workshops and study-tours in order to strengthen the statistical capacity of the MoNE and undertook activities to increase the awareness and publicity of the project.

- Assessment of needs and comparison
  - Assessment of Data collection and dissemination system of MoNE; comparison with best practices in EU countries
  - Assessment of IT/ICT infrastructure and software portfolio of MoNE and comparison with best practices in EU countries.
  - o Identification of Training needs
  - Explaining and promoting EUROSTAT educational statistics methodology within MoNE
- Adaptation and upgrading
  - Adaptation of EUROSTAT educational statistics methodology to MoNE specificities
  - Improvement of technical and managerial capacity of policymakers, decision makers and technical staff
  - Upgrading MoNE databases to be aligned with EU standards and for reliable, coherent and analysable data which are compatible with EUROSTAT norms/standards



								innovative idea:
Ref. 36	Pro	ject title	Smart Platform for Ro EUREKA ITEA3 20231	bot Manage	ment and Coordii	nation with Al	powered Cloud (R	RoboNimbus)
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	2.392.600 EUR	BYS Total Share: 20% [Received amount: 141,192,13 EUR	5	EU – Eureka ITEA Cluster	EU	ONGOING 01.01.2021 – 01.01.2024	BYS Grup Polonom Robotics; Korean Institute of Robotics & Technology (KIRO); GES Engineering Co., Ltd.; Hytton Technologies AB; Samaratug Ltd.;
		Detailed o	description of project				Type and scope of	services provided
material transicommon. In a recognizing the During the mice supporting me plants or field the need of sm. In RoboNimbur obots perform it provides services will alsapplied to ground The management operation that system also more of the mastrategies between time and worknumber and valin RoboNimbur and va	fer, loading addition to a significar list of the glical staff a hospitals sart manages proposating variou vices as "A so be develond mobile ent system needs to point or sthe jor challen veen the resing space ariety of rolls, AI pow	g, unloading, pomanufacture in benefits that global COVID-19 and limiting the taffed by robot lement and small, an AI powers kinds of dutie nything as a selepped with a selepped with a selepped with a selepped with a selepped with a selepped with a selepped with a selepped with a selepped with a selepped with a selepped with a selepped with a selepped with a selepped with a selepped selepped out robot health periods that enable. Without AI bettered capabilities	priorities and selects the c, based on capability, p arameters. Robot Systems is to des ble them to perform ope ased techniques, efficie	assembly and uch as healt outs can offer ad to be particled. Robot-led renet of Thing a centrally. ement system del. Various a ificial intelliged most suitable cosition, and ign appropriations efficiency will drop avigation, vis	d inspection are theare are now to cularly useful by d manufacturing is devices bring on for corporate hology stack and applications and ence techniques e robot(s) to the availability. The enter coordination ently in terms of or rapidly as the ual recognition,	o Project o Data m o Biannu o Gende o Final re o Use case re o Exploitation o Dissem o RoboN o Brochu o Exploit Application smart voice o Developme	r balance report eport equirements manage n and dissemination ination and commodination website ures, posters, newsloation plan and algorithm de e, AI and DL/ML Mei ent of smart mainte	gement n of project outputs unication plan etters development for smart sensing, thodologies



Ref. 37	Pro	ject title	<b>Demonstration of int</b> <b>European borders (ST</b> H2020 Innovation Action	AMINA)	on support f	or pandemic c	risis prediction and man	agement within and across	
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	11.020.801 EUR	<b>BYS Share:</b> 1,5% (168.750 EUR)	22 man/months	EU	EU	September 2020 – August 2022 (extension March 2023)	38 partners from EU, Tunisia, Turkey (BYS Grup) and the UK	
		Detailed de	scription of project		Type and scope of serv	rices provided			
	STAMINA develops an intelligent decision support tool set for pandemic prediction and management and demonstrates its use by practitioners at national and regional levels								

STAMINA develops an intelligent decision support tool set for pandemic prediction and management and demonstrates its use by practitioners at national and regional levels within and across EU borders. The STAMINA toolset enables national planners and first responders to anticipate and respond to the "known-unknowns" in their daily effort to enhance health security. Main functionality of the toolset includes:

- Real-time web and social media analytics aiming at public trust monitoring and flagging possible disease outbreaks
- POCT and smart wearable diagnostic devices for first line screening
- Predictive modelling of pandemic outbreak and its impact, along with decision-making support in implementing mitigation strategies,
- Early Warning System
- Crisis management tool defining the roles and actions of key actors during crisis management
- Scenario Generation tool for creation of training scenarios
- Common Operational Picture as the main interface of the solution enabling timely and coordinated response

The toolset is accompanied by a set of Guidelines on effective implementation of risk communication principles and best practices in cross-organisational preparedness and response plans. The use of the STAMINA toolset will be demonstrated through 12 national and regional small-scale demonstrators and one large-scale cross-border simulation exercise involving all consortium partners.

The goal of this task is to identify and characterize the input data that the STAMINA toolset will exploit. The existing data sources, either open or available within the consortium/project, will be mapped and integrated and a strategy for employing this data will be defined. The characteristics of each data source will be specified, including the size of the data (volume and velocity), its type, and the format in which it is provided. Furthermore, an analysis of their quality and reliability will be done, including the completeness, consistency, duplication, correctness, temporal stability, spatial stability, contextualization, predictive value and reliability, with special attention to the multisource variability and the temporal shift. The partners that are in charge of national demo support will lead the data collection for each country with the support of the rest end-user partners.



Ref. 38	Pro	ject title	GCAT - Development o	of A Psycholog	gical Assessr	nent Tool		
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	6.469.176,00 TL [1.408.210,01 EUR (Based on the EUR exchange rate on 15.11.2017)]	(631.950 EUR) [The project received	6 Long Term Experts	Republic of Türkiye Ministry of National Education	The Scientific and Technological Research Council of Turkey, KAMAG 1007 Program	ONGOING Original project calendar: <b>15.11.2017- 15.03.2021</b> Extension to 24.12.2022. Suspension on 08.11.2022 Extension to <b>17.12.2024</b>	BYS Grup Ankara University, Hacettepe University, Doğuş University
		Detailed de	scription of project				Type and scope of serv	rices provided
Developing a sustainable, interactive, adaptive assessment tool to identify the mental skills and abilities of 3-23 years old individuals. The tool will be a National Intelligence Scale in computer adaptive testing (CAT) background.  The project scope includes 3 parts:  Developing Computer Adaptive Test Software and system design  CAT software was developed with the C# programming language under the .NET framework environment and consists of 4 modules:  Manager Module Measurement and Evaluation Module, Application Module CAT software consists of 2 prototypes and 1 final version, CAT software is developed after every pilot test CAT software is developed to be compatible with touch screen PC Creation of CAT database where intelligence items are included Preparation of system security reports as a result of penetration tests  Developing adaptive intelligence scale The items are applied in each pilot study and item statistics are analysed according to the Item Response Theory Sampling of students of 3 to 23 years old is applied for pilot studies								



- As a result of Item Response Theory Analysis, insignificant items are removed from the test battery
- Creating intelligence scale items
  - o Creating scale items according to the CHC (Cattell-Horn-Carroll) and WISC-R theory
  - o Creating of computerized adaptive sub-test and paper-pencil sub-test
  - o Creating 8 parallel forms with different difficulty for each age group



Ref. 39	Project title		Gaming Platform for Restoration of Cognitive Functions of the Elderly People (COGNIPLAT)							
Name of legal entity	Country	Overall project value (EUR)	Proportion carried out by candidate (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any		
BYS Grup	Türkiye	130.270.00 EUR	BYS Share: 270.539 \$ (received all)	-	TÜBİTAK	EU 7th Framework Programme	ONGOING 01.09.2018- 24.06.2021 +extension	BYS Grup ENBISYS (Russia) UoA (Greece) FRONTİDA ZOIS (Greece)		

This project aims to create a game platform to recover the cognitive functions of the elderly with Mild Cognitive Impairment (MCI). Within this project a prototype of a software will be developed for mobile platforms which includes rehabilitation activities for elderly with MCI. The developed platform will contain the following features, like Speech development, Reacquisition of Writing, solving math problems, Establishing verbal relationships.

This platform will consist of 6 blocks. The diagnostic block will show the degree of impairment in the patient's cognitive functions: articulation exercises; examining the patient's pictograms in the cognitive block; the patient's perception of sounds function will be restored; restore the patient's reading and writing functions; correction of functions for solving math problems and mathematical examples.

Type and scope of services provided

There are 7 work packages within the scope of the project. Although BYS Group is responsible for the 1<sup>st</sup> and 6<sup>th</sup> work packages, 70% of the game platform to be created is completed. The following activities are carried out under the project under the leadership of BYS:

- Project Management and coordination activities: further elaboration on work packages and allocations, mobilizing experts, establish approval mechanisms, project coordination and reporting
- Analysing literature sources and obtaining a set of experimental data required to develop a game platform: the real rehabilitation of the elderly with mild cognitive impairment (MCI) will identify the problems, acquire a set of experimental data required for the later development of a game platform to restore the cognitive functions of the elderly. Neuropsychological examination of elderly people with MCI. Based on the analysis of literature sources and experiments, the most effective rehabilitation methods will be selected.
- Development of neuropsychological methods that will form the basis of the game platform: the applicability of the selected methods for the rehabilitation of the elderly with MCI will be evaluated and a technique based on propositional framework modelling that will form the basis of the game platform will be developed.
- Adaptation of functional magnetic resonance imaging (fMRI) method to evaluate the effectiveness of the gaming platform: the applicability and suitability of fMRI in evaluating



- the game platform will be analysed and methods to increase the validity and reliability of fMRI will be developed.
- Development of an Ontology to model the evaluated operational rules of the game platform to restore cognitive functions of the elderly with HBB: A semantic repository will be responsible for maintaining the information model that captures information about the environment in which the application is applied. In this way, data from game applications will be obtained, such as symptoms and semantic information about the patient's respective profile, medical history, age.
- Developing and testing a game platform to restore cognitive functions of elderly people with MCI: system design, software development and testing / implementation will be done. In addition, machine learning algorithms will be used
- **Evaluation of the game platform:** The gaming platform will be evaluated both medically and technically using a variety of approaches including fMRI.



Ref. 40	Proj	ect title	AI Based E-Care Syste	Care System to Support Patients with Dementia (RODE)					
Name of legal entity	Country	Overall project value (EUR)	Proportion carried out by candidate (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any	
BYS Grup	Türkiye, Indonesia, The Philippines	408.384 EUR	<b>BYS Share:</b> 36% (147.017,44 EUR)	-	TÜBİTAK	TÜBİTAK R&D 1071 Fund	ONGOING 2021 – 2023	BYS Grup Center for Informatics (CFI), University of San Agustin (USA), The Philippines; Indonesia Medical Education and Research Institute (IMERI), Universitas Indonesia, Indonesia	
		Detailed de	scription of project				Type and scope of		
ensu • ano • cultu • per	carry out gure e-care sycarry out redevelop mother BYS Grulocalize the ure, etc.as pcarry out pi	rstem fits for property and dules of elderlup project) and e-care system er requirement lot cases (the vas available),	cal science research an urpose, lysis in the Philippines of y care ICT tools that fit their integration, in for the target countr t analysis report), Philippines and Indone	and Indonesia s in the platfo	, rm (Alz-e-Med: ct of language,	ensur work,  Deve phase new I  Integ scena devel perfo Integ integrithe w  Close command If targe the fi and	lopment of Softwares for design/redesign CT features. Interpretation of Module arios will be prepare opment tasks. Intermance test will be ration testing will be ration with the system hole system. Incout of Project: The recialization of ROD Project: The ration with the system and to contail status of deliver	tablishment of a project charter to tion and integration of the project re: Software development life cycle in the customer-based features for res and Controlled Tests: Test dismultaneously with design and gration test, functional test and reconducted on the test activity. The realized to test new features remanded to the effective realized to the effective remanded in the effective results. This includes dissemination plan las communication activities in the compile a close-out report showing ables, issues, changes, risks, costs Learned review meeting conduct	



Ref. 41	Proje	ect title	JROGIA FOSSIS3 – Forecasting of Spatial Solar Irradiation and Support in 3D for Urban Areas EU2030-19-3								
Name of legal entity	Country	Overall project value (EUR)	Proportion carried out by candidate (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any			
BYS Grup	Türkiye	597.315,68 EUR	BYS Share: 20.9% (125.158,28 EUR) (Payment not received as of July 2023)	-	EUROGIA	TÜBİTAK R&D 1509 Fund	ONGOING March 2023 – March 2026	BYS Grup KLC Soft VOXEL 3D			

Type and scope of services provided

Aim of the project is to create a clean energy planning tool for solarThere are 9 work packages within the scope of the project. BYS Group is responsible for 3 of the energy estimation and analytical approaches to support physicalwork packages. The following activities are carried out under the project under the leadership of improvement strategies in the building sector. The goals of the BYS:

project are: Transferring building structure models to the map environment; Storage of building geometry models to the map environment; Creation of a sample 3D city model; Producing new and innovative modelling solution with CityGML data format, Calculation of solar radiation values incident on the surface; Estimation of the future solar potential; Compliance analysis; Providing thematic display of solar radiation values on the map on residential basis; Developing a business model for different customer groups as an info/date provider; Paving the way for new project proposals that can improve the R&D capabilities with field specific analysis solutions on building structure models (BIM); Acquiring technological skills that can be transferred to different fields.

- Project Management and Reporting
- Specifications and Requirements
- Semantically Enriched 3D City Model Concept
- FoSSIS3 Architecture
- FoSSIS3 Use Case Definitions
- FoSSIS3 Web Development
- FoSSIS3 Solar Radiation Calculations and Data Analytics Platform
- Integration, Demonstration and Validation
- Dissemination and Exploitation of Results

These will be achieved with the following provision of the following services:

- Project Management: Project Integration Management, Project Scope Management, Project Time Management, Project Cost Management, Project Quality Management, Project Human Resource Management, Project Communications Management, Project Risk Management, Project Procurement Management, Project Stakeholder Management
- Informatics: Mobile Technologies, IoT, Database Design; Data Modelling; Big Data, Data Integration; Data Collection, Data Cleaning and Data Management; Data Warehouse, ETL (Extract Transform Load) Processes; Design and Application of Data Mart and OLAP Cubes; Data Mining; Software Development and Process Management; Smart Test Systems Software Computer Adaptive Testing (CAT); Item Bank Calibration.
- Analytics: Statistical Analysis Applications; Multivariate, Longitudinal and Clustered Data Analysis; Simulation, Projection and Supply-Demand Forecasting; Sampling Selection, Application and Effect Prospecting; Data Mining, Processing, Analysis and Reporting;



- Application and Adaptation of International Statistical Classification Systems Statistical Modelling and Programming.
- Data Mining: Anomaly Detection; Fraud Detection; Forecasting; Credit Scoring and Score Card Design; Improvement of Data Quality; Risk Management; Churn Analysis; Customer Behaviour Analysis; Customer Lifetime Analysis; Customer Segmentation; Market Basket Analysis; Principal Component Analysis; Social Media and Sentimental Analysis; Text Mining.



Ref. 42	Pro	ject title		_		•	•	d Repair Service Procuremen I Host Communities in Turke
Name of legal entity	Country	Overall project value (EUR)	Proportion carried out by candidate (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	145,199.58 EUR	BYS share: %100 (40.500,00 EUR has been received as of 21.12.2023)	3	Ministry of Industry and Technology	European Regional Development Fund	ONGOING September 2022 December 2024	-
		Detailed de	escription of project				Type and scope of ser	vices provided
SEECO MIS Proj	ect is part	of the SEECO P	roject: "Türkiye'de Mül	teci ve Ev Sah	iibi Topluluklar	Preparation of	MIS Needs Assessmen	t Report,
•	•		me ve Uyum (SEECO)	•		Preparation of	Project website,	
•	-	_	re) and needs assessm			Delivery of the	e pre-beta version of	the software developed for
_		-	Industry and Technolo		•	testing,		
•		Development A	gencies and Communit	y Implementa	ation Partners)	Design of traini	ng materials and deliv	ery of trainings,
is to be carried						Preparation of		
		•	for all hardware and p	_		, , ,	•	– latest version of MIS stage,
			of the needs analysis a	nd preparation	on of technical	Implementation	n of Maintenance, Rep	air and Technical Services.
specifications fo								
		-	types/categories					
Preparation of o		•		. Ima mla ma a mta	tion Doutness			
			orting flow (Community ementation Unit and					
Technology)	Agencies>	Project Imple	ementation only and	WIIIISH Y OI	industry and			
Identification of	required	modules/tools/	reports					
			) that allow users to	visualize an	d evaluate an			
application that	has not ye	et been develop	oed					
Coding special oriented archite			ing user-friendly interfa )	aces (must su	upport service-			
	publishing		version of the develope	ed software f	or testing (for			
	=	aterials and trai	ning of all stakeholders	on how to us	se MIS			
•	_		ized software ready for					
			should be added to the	-	oftware			



When the MIS is completed, transferring the site to the Administration's servers so that the site can be broadcast (Server(s) will be provided by the Administration.)

Providing and operating security-related and other needs of MIS such as SSL certificates as defined for the website

After the commissioning of MIS and throughout the project, operation and maintenance support and necessary technical changes are provided throughout the project.

Delivering the latest updated source codes and all printed and digital documents used in the development phase to the Administration at the end of the project.

MIS modules to be developed will include, as a minimum, the following;

- Management panel
- Project implementation per component
- Sub-grant application
- Financial management
- Procurement and Contract Management
- Monitoring and Evaluation (Iz&De)
- Environmental and Social Framework Management
- Grievance Mechanism (GRM)
- Records Management Module



	Proj			he Literacy, Nu	meracy and Dig			tive, Web-based Assessmo Qualified Adults in Turko
Name of legal entity	Country	Overall project value (EUR)	Proportion carried out by candidate (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	TR, Trabzon	31.200 €	100 %	KE1 (Project Manager), 4 NKEs, Backstopping team	Eastern Black Sea Development Agency (DOKA)	EU	Dec. 2019 – Dec 2020	-
		Detailed des	cription of project			Ty	ype and scope of service	s provided
adults or, unde determine the r Expected results - Design a valid a of literacy, arith	r relevant eliability a are two: and reliabl metic and a docume	circumstance nd validity of the e online, adapt digital skills as nt which can en	al skills/qualifications s, of designated gro his tool." ive assessment tool wh well as creating perso nable low skilled adults aduates aging 18-40	ups of top prionich can report to nal reports, sto prove their s	rity and - the levels skills and	Software desig Architectur Functional Database d Design of I	al design design esign ntegration needs n of CDD and SDD (Systen elopment:	n Design Description) docs



Ref. 44	Proj	ject title	E- Medical Primary Ca	re System fo	r Alzheimer's	Patients (ALZ-	e-MED)	
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	Phase 1: 487.840,31 EUR Phase 2: 508.573,20 EUR Phase 3: 116.709,54 EUR	BYS Share: Phase 1: 100% Phase 2: 100% Phase 3: 100% (1.113.123,04 EUR)	170 man- month	The Scientific and Technologica I Research Council of Turkey (TÜBİTAK)	EU Framework Programme 7 Lead Era Programme	COMPLETED Phase 1: 01/12/2012 - 28/05/2015 Phase 2: October 2019 -December 2021 Phase 3: January 2022 - May 2023	BYS Grup

#### Type and scope of services provided

Developed as an R&D project, Alz-e-Med serves for the Alzheimer's patients and their Phase 1 Activities: relatives. With Alz-e-Med, in order to ensure the continuity of the physical and psychological wellness of the Alzheimer's patients, primary health and care service can be provided at home. Alz-e-Med, created by utilizing information and communication technologies (ICT), will help to facilitate the challenges of daily life for the Alzheimer's patients to live independently in their own homes. Through digital skills introduced to the users in a tablet, Alz-e-Med will create value for primary health care services at home. The system will also be installed on the Smart TV infrastructure and it will be an integrated software system that consists of three modules, Health Module, Rehabilitation Module and Training/Caregiver Module.

The most important goal of Alz-e-Med is that with the help of information and communication technologies (ICT), Alzheimer's patients' quality living will be achieved. Alz-e-Med will have the following impacts;

- Innovative interactions with related ICT products
- Providing solutions to broad strategic, social, environmental and economic challenges caused by Alzheimer's
- Strong-healthy elderly population
- Creation of appropriate framework conditions for Alzheimer's patients and their families

- Research, Design, Development the mobile software
- Design and creation of the database in ORACLE 11G
- Establishment of connection between the client and Server using MVC framework
- Development of Software in Android Operating System, JDK6+ for Mobile Software development; in C#, .NET for Web Development
- Conducting field research to collect initial indicators.
- Development of a portal for dissemination of statistical outputs
- Identifying requirements on current legislation in Turkey and EU regarding data and information security of users and making required adjustments
- Development of a website
- Training the pilot staff for usage of IT system

## The work packages are:

- WP1 Preparation Work Package
- WP2 1st Version Analysis Work Package
- WP3 1<sup>st</sup> Version Design Work Package
- WP4 1st Version Development Work Package
- WP5 1st Version Test and Pilot Work Package



Ensuring that the measures to be implemented taken concurrently with the public policy via Alz-e-Med data analysis

In order patients to be able to access to the public transportation services, the GIS portal has been developed and included within the tablet. Based on the location-based Phase 2 Activities: information received from Alzheimer Patient, the web-based command control system can monitor the location of the patient and their caregivers. This portal contributes to the mobility of Alzheimer Patients.

The developed System consisted of Basic Functions as listed below, which contributed the digitization of care-giving processes:

- Cognitive and Mental Exercises: They help memory development, object recognition, and display of behaviour conforming to social life by the patient with measurements of attention and arithmetic and spatial functions.
- Medicine Reminding Service and Management: It is ensured that the medicines used by the patient are recorded and followed up. Detailed medicine records are possible.
- Easy Follow-up by the Doctor: Important parameters such as the mental condition of the patient, the nurse's aide details, and detailed medicine follow-up can be easily followed up from distance.
- Training Videos for Nurse's Aides: Through videos guiding nurse's aides in the process of care for the Alzheimer's disease and put into scenarios by specialist doctors, it is ensured that the patient receives the right care while the nurse's aide does his job correctly.
- Daily Activities Reminding Service: This is the social activities, planning and agenda application.

- WP6 2<sup>nd</sup> Version Analysis Work Package
- WP7 2<sup>nd</sup> Version Design Work Package
- WP8 2<sup>nd</sup> Version Development Work Package
- WP9 2<sup>nd</sup> Version Test and Pilot Work Package

- Technology transfer to R&D firms;
- Training and capacity building activities for the usage of ALZ-e-MED application.

#### Phase 3 Activities:

• Technology transfer to R&D firms



Ref. 45	Pro	ject title	Innovative ICT solution	n for patient	empowerme	nt and self-man	agement of type 2 diabe	tes mellitus (T2DM) (DCoach)
Name of legal entity	Country	Overall project value (EUR)	Proportion carried out by candidate (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	199.314 EUR	BYS Share: 1.631.913,00 TL (Finalized by TÜBİTAK). Amount wholly paid till 31.03.2021: € 165.210,97 (Forex buying: 1 € = 9.7688 TL)	-	ТÜВİТАК	EU EUREKA programme	COMPLETED 08.02.2019 (Contract date with TÜBİTAK) - 31.03.2021	BYS Grup (TR), Grupo Pulso (Spain)

### Type and scope of services provided

D-Coach is a personalized diabetes management solution considering all aspects of care for type 2 patients, conformed by different devices, an App and a Web platform and an intelligent system in charge of running the corresponding algorithms required to achieve the overall solution functionalities.

d-Coach aims to represent an innovation in terms of the technology used and integrated into the solution, but also in terms of conceptualization as it intends to solve the existing gaps the current diabetes treatment workflows, which are: (1) Person-centred care and self-management support, which will lead to a continued care; (2) Personalised care, which will result in improved treatment adherence and outcomes; (3) Multi-disciplinary care, allowing interaction between the different stakeholders to deliver a more integrated model of care; (4) Early detection, which is critical for glucose control, diabetes management, and complication prevention; (5) Self-help and peer-support, offering the possibility to avoid some relational and behavioural important aspects such as isolation, low self-esteem, low self-confidence, etc.; and (6) Critical points identification and management, to prevent patients' withdrawal and maintain their motivation and adherence.

D-Coach will be a new product consisting of a more effective diabetes management solution for T2DM patients, aiming to empower diabetic patients and reduce the incidence of complications and the resources consumed. d-Coach will be confirmed by different devices, an App and a Web platform. Underlying these interfaces and platforms, there will be an intelligent analysis system in charge of running the corresponding algorithms required to achieve the overall solution functionalities, which include: F1. Identification of

Result for the project is the development of d-Coach, an ICT-based solution for managing T2DM with the following modules:

- **(F1) Undiagnosed type 2 diabetes patients:** by running an algorithmic module that uses patients available existing data or, alternatively, by providing an online risk calculator (FINDRISK questionnaire) for citizens to calculate their risk.
- **(F2) Users enrolment:** allowing the enrolment of new users: centre administrator, physician / case manager, patients, their informal caregivers and other healthcare specialist professionals.
- **(F3) Patient's level of knowledge:** both via electronic questionnaires and ChatBot, certain patient characteristics will be collected related to the patient's knowledge, attitude, capability and emotional/behavioural state towards different topics.
- **(F4) Patient segmentation**: which will allow to present similar rules and recommendations for patient groups. Centre based clustering methodologies will be used.
- **(F5) Diabetes Shared Care Plan**: a common electronic document with relevant information about the patient to monitor and help manage the disease, including: (1) Patient clinical information: parameters for assessing the condition will be monitored, which will be obtained manually, from lab tests, through devices such as Lifevit and Nokia Go, through intelligent techniques such as photo recognition, speech



patients which might be at risk of having or might have T2DM; F2. Enrolment of new users (physicians, patients, informal caregiver and other healthcare specialists); F3. Collection of patient characteristics related to the patient's knowledge, attitude, capability and emotional state; F4. Patient segmentation to offer a personalised care plan, information delivery and communication; F5. Shared Care Plan, which consists on a common electronic entity/document that uses relevant information about the patient's diabetes to monitor and help manage the disease; F6. Personalised diabetic training, in order to increase the patients' motivation; F7. Online community platform for patients to identify and engage with peers and communicate about their disease, and for professionals to be able to exchange ideas with colleagues and provide advises to patients; F8. Smart data analytics and intelligent system acting as a Virtual Coach for adjusting patient's care plan, training

plan and sending alerts, notifications, recommendations to patients or medical doctors.

patterns or facial recognition. (2) Setting and tracking of personalised goals: regarding targets which diabetic patients strive to achieve. Competitiveness will be introduced. (3) Medication and dosage: entering the prescribed medication and monitoring the intake. (4) Scheduling and reminding events. (5) Recording of issues.

**(F6) Training:** The system will propose which aspects the patient needs to be familiarized with. Training topics will be combined with a test for knowledge gain.

**(F7) Community:** A platform for diabetic patients to identify and engage with peers and communicate about their disease and, for professionals, to be able to exchange ideas with colleagues and provide advises to patients. In terms of chat, different chat rooms will be created. In terms of forums, different thematic self-help groups will be provided.

**(F8) Virtual coach:** A smart data analytics and intelligent system will be acting as a Virtual Coach module, which will be monitoring and delivering personalised information in different formats: Alerts, when there are deviations from pre-set information, monitored parameters or recurrent events; Guidance and recommendations regarding the patient's status; and Notifications, which will be sent for scheduled check-ups, community messages. Additionally, another derived result includes the identification of the diabetes evolution critical points, its predictors and correlation, patterns and possible mitigation actions.



Ref. 46	Project title \	Virtual Reality Platform for Hazardous Chemical Management (ETKİ-VR)						
Name of legal entity	Overall Country contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any	
BYS Grup	Türkiye 110.480,52 EUR	<b>BYS Share:</b> 10,5% (12.186,45 EUR) (received all)	3	TÜBİTAK	TÜBİTAK	COMPLETED 01.11.2020 – 01.05.2022	Daysoft Bilişim Mühendislik Elektronik Sanayi Ve Ticaret Limited Şirketi BYS Grup Proscon Mühendislik Sanayi Ve Ticaret Anonim Şirketi	

Project Description: ETKİ-VR is a virtual reality platform that consists of modules to measure and improve the competencies of the groups that manage the activities such as production, storage, maintenance and engineering in the institutions that deals with dangerous chemicals.

**Aim of the Project:** Humankind has accelerated its industrialisation to fulfil its needs and increase its welfare. This led to increased production and decreased costs, along with industrial hazards and technological disasters.

The increase in the industrial risks has led to process accidents caused by dangerous chemicals. According to the research, it is seen that a great majority of these accidents have been caused by human error. Process safety aims to prevent the deaths as well as commercial and environmental losses by averting the accidents.

The technological developments in the fields of virtual reality and augmented reality in the world and our country will allow the human resources in the relevant sectors to experience what needs to be done before and during chemical hazards.

### Innovative Aspects of the Project:

- Allowing practices on subjects that were previously unpracticable
- Dynamic platform

# Type and scope of services provided

There are 8 work packages within the scope of the project. WP7 and WP8 is under BYS Grup's responsibility.

- WP1: Requirements Analysis and Conceptual Design
- WP2: Project and Quality Management
- WP3: Establishing Software Architecture
- WP4: Assessment and Evaluation Platform
- WP5: 3-D Modelling
- WP6: Software and VR Integration
- WP7: Test Activities and Documentation:
  - In this WP, test procedures of the largely developed system will be prepared and testing and development activities will be carried out. The end product of the project should be tested component by component. Within this scope, user tests and stress tests will be applied to the integrated and ready-to-use system. Standard software and system testing methodologies will be applied.



- Laying down the foundation for multiple projects
- Modular design each facility can prepare its own unique solution
- Tracing of personal gains
- Establishing the competition environment
- Preparation of game-based training material
- Processing statistical data

- The set of documentation required for the software (user handbook, programmer handbook, validation handbook etc.) will be created.
- WP8: Usability Test and Pilot Activities
  - Identification of parameters such as the companies that operate with dangerous chemicals, their operation type, their region, staff count, staff quality
  - o Identification of pilot industrial companies for the VR Platform according to the identified parameters and target market
  - Carrying out testing and pilot activities in the identified companies
  - Preparing a final testing and pilot activities report



Ref. 47	Pro	ject title	Living Anatomy					
Name of legal entity	Country	Overall project value (EUR)	Proportion carried out by candidate (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	254.135,94 EUR	BYS Share: 13.5% (34.308,35 EUR) (received all)	-	TÜBİTAK	TÜBİTAK R&D 1511 Fund	COMPLETED 01.11.2018 02.12.2021	BYS Grup An Grup Ltd. Şti., Elaa Teknoloji Ltd. Şti.

The aim of the project is to create an interactive presentation environment (room) that can be used in education, promotion and R&D processes. Interactive training, presentations and testing will be carried out on human anatomy in the developed presentation environment. The system works on interactive visuals created in a closed environment synchronized by more than one projection device. It will convey the human anatomy of the environment to be visualized to the user's using interactivity. The system, which enables collective training and promotional activities to be transferred to users with high visibility, has both an educational and instructive architecture. Since the content to be used in the system will be remotely managed, sustainable and renewable, the product to be obtained from the project output can serve different subjects and purposes. With the interactive presentation environment to be developed, a system will be created to provide education on the anatomy of living things, which is the first subject of education, thanks to the hologram and 3D interactive visuals. At the same time, since it is possible to change its content, holograms and 3-dimensional images prepared for different themes can be uploaded to the system.

#### Type and scope of services provided

- Project Management: Mobilizing experts, preparing and following up detailed business plans, establishing and following up protocols and communication rules, establishing and monitoring the project management system
- Interactive Hologram System Design / Application Studies: Establishment of optical systems for hologram writing, Calculation of diffraction patterns from three-dimensional objects, writing diffraction patterns on holographic films, Installation of the system that allows the lighting of holograms to change according to the user's choice, setting up the system to determine the selection places in the holograms, Testing and optimizing the hologram system.
- Visual System Simulation **Software** and Development: Installation and positioning of the main construction (trusst) system, Projection systems to the trusst system, Production of aluminium parts and mounting legs of projection systems, Production of aluminium curtain carrier parts, Installation of sound system, Wiring operations, Production of external cover, Production of top cover, Production of floor covering, Projection integration of systems (Surround), Warping and Edge blending processes, Development of simulation software, Integration of simulation software with interactive sensors, Integration of simulation software with hologram system, Scrum Software development life cycle method, Development of Measurement and Learning Test Engine, Within the test according to Item Response Theory determining the difficulty



levels of the questions / problems to be designed, Development of mobile control software, Mobile control software - simulation software integration, Making the measurement and learning test engine integrated with the simulation software.



Ref. 48	Proj	ect title	Technical Assistance f Training And Research				n Capacity of The Centre TR	for Labour And Social
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	BYS Fee: 27.000 EUR	BYS Share: 100%	1	Centre for Labour and Social Security Training and Research (ÇASGEM) of the Republic of Türkiye	EU	COMPLETED 25.06.2020- 05.02.2021	Hulla&Co Human Dynamics GmbH and Co KG (DAI) Sub-contractor: BYS Grup
		Detailed de	escription of project				Type and scope of serv	rices provided
to enable the Ç The project inclu	ASGEM standes the foling the name of the managem	off to manage to the second of	•		system The ta Addition Contral approx At leas (after Report Prepai	n of CASGEM. sks and responsibilities in onal fixing and fine-tuning oct duration until the fixed by the Beneficiary/CA at 2 training sessions for CA the system is established).	of the pilot software during the nal PPMS is developed and is received. ASGEM staff on using the PPMS	



Ref. 49	Proj	ect title	Elder Tablet (ELTAB	)				
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Türkiye	423.325 EUR	<b>BYS Share:</b> 50% (211.325 EUR)	89 Man-month	The Scientific and Technological Research Council of Turkey (TÜBİTAK)	EU FP7 Lead Era 0	COMPLETED 1.01.2014 – 30.11.201	BYS Grup CTI -DAISy Unit (CTI Research Academic Computer Technology Institute- Dynamic Ambient Intelligence Systems) (Greece); Analogies S.A (Greece)
		Detailed d	lescription of project	:		1	Type and scope of so	ervices provided
by wide user p actions and por Elder Tablet, do need in this are The ELTAB system The first mode health measus temperature, environment of gateway interact of the senior act instructing act staff, if necessary The second m offers links to as the services of Family and cleaning sched	rofiles. Elde licies, but a eveloped as ea.  The mean two wile is the rement insulation presents of the condition of the cond	er population desplications had an R&D project of modules:  The bealth-care metruments (metruments (metruments), evaluation, etc.), evaluation, etc.), evaluation in the social inclusion in the social sources and Directorate of locies, Home Cay of courses the supplications in the social sources and projection in the social sources and projection in the social sources and projections in the social sources are social sources and projections in the social sources are social sources and projections in the social sources are social sources and projections in the social sources are social social sources and projections in the social sources are social social sources and projections in the social social sources are social soci	gh speed and the curynamics and needs have not yet been incorect, introduces digital should be assuring parameters are yeryday devices (e.g. a, humidity, motion says layer that continuous essary to prevent determined services. For Turke Disabled and Elder Affare Services of Ministat are offered by the rigards to the available of the services.	ollects daily info ollects daily info such as hear , a weight sca ensor, etc.) via a usly assesses the erioration of the rmation to relat in the tablet info y, these could be airs formed with try of Health a municipalities, e	ormation from t pulse, body le) and home a gateway. The e health status health status, ives or medical orms elderly or the summarized on the Ministry and free house	<ul> <li>develop</li> <li>test and</li> <li>Overall project</li> <li>Overall Turkey</li> <li>Manage</li> <li>Designin reminde</li> <li>Design a studies statuses</li> <li>Design evaluati</li> <li>Current betweer</li> <li>Conduct</li> <li>Develop outputs</li> </ul>	ment of the ELTAB symonitoring of the contect and admitted and admitted and admitted and development of the elderly people and development of the elderly people and development of the elderly people and development of the elderly people and development of the elderly people and development of the elderly people and development of the elderly people and development of these modules are these modules are the elderly people and provided and provi	inistrative management of the ne project partners and NCP in cialization studies at of the reporting pages and ule  ELTAB Social Care module pilot and monitoring of daily health e f a web-based monitoring and al staff oviding tests of and integration collect initial indicators. for dissemination of statistical



Ref. 50	Proj	ect title	PRINTECELISA (Printe	d Electrochei	nical ELISA)			
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start-end)	Name of consortium members, if any
BYS Grup	Spain	652.606 EUR	<b>BYS Share:</b> 71% (467.606 EUR)	70 Man- month	The Scientific and Technological Research Council of Turkey (TÜBİTAK)	EU FP7-Manunet 0	COMPLETED 1.10.2013 – 20.05.2016	BYS Grup DropSens (ES)
		Detailed de	escription of project				Type and scope of servi	ces provided
ELISA Systems	. The deve er sectors	loped systems	a, was to develop effect enable to move the pr Linked Immunosorber	inting techno	logies already	<ul> <li>Protein</li> <li>Elisa Op</li> <li>End Der</li> <li>Standar</li> <li>Biostatis</li> <li>Data Ma</li> <li>Dissemi</li> <li>Industri</li> <li>Marketis</li> </ul> Others: <ul> <li>Pesticide</li> <li>Opioid ac</li> <li>ECELISA I</li> </ul>	stics anagement and Data Ver nation of Results al Implementation ng and Advertising detection in water samp	ion and Detection Steps ification les n milk and milk products



Ref. 51	Pro	ject title	Data Mining	g Consulta	ncy for Axa Sigort	a		
Name of legal entity	Country	Overall contract value (USD)	Proportion carried out by legal entity (%)	NO Of	Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any
BYS Grup	Türkiye	Subcontracting Budget: ~151,800,00 USD (VAT excluded)	100%	1 expert	Axa Sigorta	IDS (Subcontracting)	14.12.2015- 14.12.2016	IDS BYS Grup (Subcontractor)

This project is designed to enhance customer retention strategies through the development and implementation of a Churn Modeling system using data mining techniques. The primary objective is to analyze customer data structures and behaviors to predict and mitigate customer attrition risks effectively. The system will leverage advanced data mining algorithms to process and analyze vast amounts of data, identifying patterns that indicate potential churn. This will enable proactive measures to enhance customer engagement and retention. Using customer info and data, creation of different modelling algorithms and implementation of a winner model to increase customer loyalty, based on machine learning algorithms clustering customers to their churning rates.

Key components of the project include:

- Data Structure Analysis: Examining the existing data architecture to ensure it supports efficient data mining and analytics.
- Churn Modelling: Developing predictive models to identify customers at high risk of churning. This involves selecting and implementing suitable algorithms that can handle the complexity and volume of the data.
- Algorithm Implementation and Management: Setting up and fine-tuning data mining algorithms that are tailored to the specific needs and dynamics of the customer base.
- Technical Support and Monitoring: Providing ongoing support and updates to ensure the churn prediction system operates effectively and adapts to changes in customer behaviour and company strategies.

## Type and scope of services provided

- Development of Data Mining Processes:
   Implementing robust data mining methodologies to track processes and analyze data structures, enabling detailed insights into customer behaviors and patterns.
- Churn Model Development and Implementation:
   Building and integrating churn prediction models using advanced
   analytical algorithms. This includes training the models with historical
   data to enhance their accuracy and reliability.
- Technical Oversight and Algorithm Adjustment:
   Continuously monitoring the performance of the algorithms, making necessary adjustments and updates to improve efficiency and effectiveness in real-time churn prediction.
- System Integration and Deployment:
   Integrating the churn modeling system with existing customer relationship management (CRM) and data warehousing systems to ensure seamless functionality and data synchronization.
- Technical Support and Maintenance:
   Providing ongoing technical support and maintenance to handle any issues that arise with the system, ensuring its continuous operation and optimization to reflect evolving market and customer dynamics.



#### **Other Projects**

Ref. 52	Projec	t title	CONTRIBUTI	E Project				
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any
BYS Grup	Türkiye	N/A	BYS Share: N/A	1 expert	International Centre for Migration Development (ICMPD)	UK Embassy	21 Aug 2023 - Ongoing	BYS Grup
De	Detailed description of project					Type and scope of	services provided	

The CONTRIBUTE project aims to address the complex challenges posed by migration flows towards Turkey and through Turkey to Europe. With Turkey's evolving role from a transit country to a destination, the project focuses on strengthening the Presidency for Migration Management (PMM) to effectively respond to migration dynamics. This includes enhancing policymaking, operational capacities, and technical capabilities, particularly in managing irregular migration, risk analysis, return procedures, and fostering regional cooperation.

The project's activities are structured under three main components:

- Impact and SWOT Analysis
- Feasibility Study for Risk Analysis System
- Scenario-Based Analysis

Within the project, co-developing and co-drafting Impact analysis and SWOT Analysis for the evaluation of the CONTRIBUTE project will be carried out.

- Policy Development and Analysis: Co-developing methodologies for Impact Analysis and SWOT Analysis, conducting in-depth policy analysis, and providing recommendations for policy improvements related to irregular migration and return.
- Operational Support: Assisting PMM in implementing return procedures, developing collaboration with regional stakeholders, and guiding discussions in regional consultation meetings.
- **Technical Expertise:** Utilizing migration and data experts to lead research, analysis, and scenario-based assessments on migration routes, international protection, and risk analysis systems.
- **Capacity Building:** Enhancing PMM's operational and technical capacities through training, methodology development, and knowledge transfer activities.
- Coordination and Communication: Facilitating ongoing communication and coordination among experts, stakeholders, and partner institutions to ensure a cohesive and integrated approach to migration management.



Ref. 53	Project fifle		Technical Assistance for Institutional Capacity Building for The Implementation of Employment, Education and Social Policies Sectoral Operational Programme (EESP Sop) Under IPA-III							
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any		
BYS Grup	Türkiye	N/A Subcontacting	100%	1 KE	-	EU	-	BYS Grup		

Type and scope of services provided

The purpose of the interim evaluation is to provide an overall independent assessment and evidence on the contribution of EU IPA II support to the achievement of the objectives and intended impact in the policy area of human resource development by addressing employment, entrepreneurship, migration, development and labour market shortcomings, the effectiveness of social protection and social inclusion policies, promoting job creation, enhancing social dialogue, and improving the quality and access to education and training systems for the period 2014-2020.

- The result & output-based indicators of the projects under the operational programme have been reviewed, monitored, evaluated, and reported to the beneficiary and the EUD.
- Contribute to desk research, interaction with the OB's, grant beneficiaries and drafting inputs to the Evaluation Report.



Ref. 54	Proj	ect title	Enhancing Analysis and Operational Capacity to Improve Legal Migration Policy in Turkey (ANAPOL)								
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any			
BYS Grup	Türkiye	N/A Subcontacting	-	1 expert	International Center for Migration Policy Development (ICMPD)	UK Embassy	May 2022 – Ongoing	BYS Grup			
	Detailed description of project							Type and scope of services provided			
<ul> <li>improve institution of legal migration.</li> <li>enhance institution evidence-based and support the devergacilitating institut Legal Migration poin-depth interview</li> </ul>	ies in legal mi en migration p of Legal Migr ledge-base and	<ul> <li>Needs assessment study for Statistics Group within the Presidency for Migration Management (PMM);</li> <li>Conducting trainings Sessions on Statistical applications for migration driven data sets.</li> <li>Moderating the "Workshop on Analytical Approaches on Migration Policies and Data Management";</li> <li>Preparation of statistical models for 3 different migration policy topics.</li> <li>Evaluation of the model performances of the policy topics.</li> </ul>									



Ref. 55	Project title		PIAAC (Programme for the International Assessment of Adult Competencies)						
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of	Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any	
BYS Grup	Türkiye	19,079 EUR	100%	2 experts	Ministry of Labor and Social Security Directorate of European Union and Financial Assistance	EU	June 06,2016 – Nov. 24, 2016	IDS BYS as Subcontractor	

#### Type and scope of services provided

"The Programme for the International Assessment of Adult Competencies (PIAAC) is the largest international adult survey ever conducted to draw the current framework for countries to have a more qualified workforce in the 21st century and to overcome related problems.

It is jointly conducted by the Education Directorate of the Economic Development and Cooperation Organization and the Employment, Labour and Social Affairs Directorate. The overall objective of the program is to contribute to a more efficient and effective transfer of the skills of the workforce into the economy.

As a result of Turkey's participation in the 'International Program for the Measurement of Adult Skills' between 2012 and 2016 under the Ministry of Labour and Social Security Directorate of European Union and Financial Assistance, it has become necessary for the staff of the institution to check and confirm the data obtained through field studies, as well as to ensure the comprehensibility of the reports created by the OECD in order to formulate policies for the benefit of the country. In order to observe demographic characteristics, factors such as age, gender, and education level of individuals are indicated in graphs and tables. To make detailed breakdowns within the scope of the study, sample topics are presented to the reader in order to make meaningful inferences from the data set.

There are a total of 22 cities in the data set where these analyses were conducted. In this context, the aim of this study is to understand the statistical infrastructure of the PIAAC study and to transfer the experience and knowledge of the process carried out with CAT to the relevant staff. As a result of the discussions on the studies carried out by using data mining techniques with the formation of similar studies in the future periods from the data obtained at the end of PIAAC, the issue of positive and negative evaluation of the results of the PIAAC study has gained importance. It was aimed to carry out training activities on evaluation processes in the computer environment and to reinforce these trainings with meetings and workshops. The study was designed under five main headings. These are

- Needs Analysis Study
- Trainings
- Workshops and Meetings
- Building Analytical Platform and Algorithms Obtained Data and inspection of Obtained Data.
- Creating a Result Output
- Preparation of Supporting Documents regarding the approach on education and employment.



Ref. 56	Proj	ect title	ELIT- Electroi	nic Legislat	ion Inventory Tool			
Name of legal entity	Country	Overall contract value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (Start-end)	Name of consortium members, if any
					Ministry of Transport			
BYS Grup	Türkiye	Subcontracting	100%	1 expert	and Infrastructure,	EU	16.08.2022 - 2023	-
					Republic of Türkiye			
	D	etailed descrip	tion of proje	ct	Type and scope of services provided			
The Project aim	esign and Developmen	t						
with the EU acq		•	•		Data Management and Integration Legislative Analysis and Compliance Assurance Capacity Building Performance Monitoring			
is established o	-	_		•				
air, sea, land a	-	•						
project. The we departments ur		•	-					



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