

The Electronic Integrated Disease Surveillance System (EIDSS) is a software system which is designed to strengthen monitoring and prevention of human and animal diseases within the One Health concept, and facilitate compliance of International Health Regulations (IHR) 2005. Key system modules include Human Cases module, Vector Surveillance module, Laboratory module, Outbreak module, Administrative module, and Analysis, Visualization & Report (AVR) module with Geographic Information System (GIS) capabilities. EIDSS manages case data, case plus disease specific investigation, aggregate data with corresponding sample, and laboratory data linked to cases. The system collects and distributes data, notifies on the events in near real-time, provides access from desktop, web and mobile devices, which allows it to link together different levels and ministries of a national disease surveillance network in a secure way. EIDSS is customizable for each participating country to hold relevant content: diseases list, specific reports, disease-specific investigation forms, among others.

In 2011 EIDSS was introduced in Ukraine with installations at the following sites:

- Central Sanitary-Epidemiology Station in Kyiv (CSES)
- Ukrainian Research Anti-Plague Institute in Odessa (URAPI)
- Vinnitsa Oblast Sanitary-Epidemiological Station
- Vinnitsa City Sanitary- Epidemiological Station
- Kalynivska Rayon Sanitary- Epidemiological Station in Vinnitsa Oblast
- Zhitomir Oblast Sanitary- Epidemiological Station
- Khmelnitska Oblast Sanitary- Epidemiological Station as regional sites

To date, EIDSS has undergone several iterations: Alpha version, Beta version, Version 1, Version 2, Version 3 and Version 4. Currently, EIDSS version 5 is ready to be implemented, and version 6 is under development. EIDSS was localized introducing an Ukrainian Language interface and relevant geographical data.

EIDSS is a turn-key solution. Implementation includes deployment, personnel training and support. The training program includes basic computer training for users with limited computer skills and in-depth EIDSS training which includes epidemiological and laboratory modules. EIDSS is supported by a multilayer technical support team including a Help Desk hot line and support specialists based in Kyiv and Moscow.

The Beneficiary of the Technical Assistance Project is the Ministry of Health of Ukraine.

The main objective of the program is to implement EIDSS at the sites of the State Sanitary-Epidemiological Service of Ukraine for monitoring and outbreak prevention of diseases including those caused by Especially Dangerous Pathogens.

PATHOGEN ASSET CONTROL SYSTEM

The Pathogen Asset Control System (PACS) is an electronic system for accounting, management and control of biological agents. The application is designed to monitor the reception, transfer, movement and destruction of agents, as well as other actions performed with biological materials. The system allows tracking materials of any kind. Each item in the repository is marked with an unique barcode label. The barcode technology using a barcode scanner allows fast and error-free data input and provides an extra level of pathogen asset tracking security. With the help of barcode technology, the repository process is fast, convenient and secure. PACS offers configurable access rights and user management system. Also it allows users to produce a variety of custom reports.

PACS is a highly customizable tool which can be configured to meet local needs and regulations, simplify the data entry process and optimally organize data. Extensive search and reporting capabilities allow users to output necessary data set in appropriate formats.

PACS was first installed in Ukraine in test mode in November 2009 at the Interim Central Reference Laboratory of the Especially Dangerous Pathogens (ICRL), located at the Ukrainian Research Anti-Plague Institute in Odessa (URAPI). All program interfaces and database information were translated and localized for Ukraine.

PACS is a turn-key solution. Implementation includes deployment, personnel training and support. The training program includes basic computer training for users with limited computer skills and an in-depth PACS training. PACS is supported by a multilayer technical support team including a Help Desk hot line and support specialists based in Kyiv and Moscow.

The Beneficiary of the Technical Assistance Project is the Ministry of Health of Ukraine. The main objective of the program is an inventory support of the especially dangerous pathogens' consolidation within ICRL.

Dnipropetrovsk Diagnostic Laboratory Dnipropetrovsk Oblast Laboratory Center 39/A, Filosofs'ka str., Dnipropetrovsk

Fact Sheet

Technical Assistance Project - technical assistance plan for relevant recipients of Ministry of Health of Ukraine.

Donor – the Department of Defense of USA

Beneficiary/Executive Agent - Ministry of Health of Ukraine

Recipient – Dnipropetrovsk Oblast Laboratory Center (former Dnipropetrovsk Oblast SES)

Address: 26, Smidta /39/A, Filisofs'ka Str., Dnipropetrovsk.

POC: Dr. Valeriy Grygorovych Kapshuk, Chief Doctor

Contractor Team - Integrating Contractor: Black & Veatch. Ukrainian Subcontractors: Dnipropetrovsk Domus-Proekt (Designer) & RK-Center (Construction) & Mediamax (Equipment supply).

Design Oversight (Avtornadzor) – Dnipropetrovsk Domus-Proekt

Construction Oversight (Technadzor) – D.V Zyrianov

Expert Examination of Design Approval - The Conceptual Design was approved by MoH Central Regime Commission on August 11, 2010. The Working Design was approved by Dnipropetrovsk "Ukrbudderzhexpertise" on December 01, 2010.

Construction permit - The Construction Permit was signed GASK (State Architectural Construction Inspection in Dnipropetrovsk oblast) on December 21, 2010.

State Acceptance – "Construction Acceptance Act" was signed by the Chief Doctor Kapshuk Valeriy Grygorovych on October 03, 2011 and registered by GASK (State Architectural Construction Inspectorate) on October 03, 2011.

Transfer of Custody and Sustainment Memorandum of Understanding – The TOC and S&T MoU was signed by the Chief Doctor, Dr. Valeriy Grygorovych Kapshuk on January 18, 2012.

EDPs Permit – The permit for working with Pathogens was issued by Regime Commission of MoH on February 15, 2012.

USG Investment - Total cost of laboratory: **USD\$1,935,557** (USD\$1,531,479 for Design & Construction; USD\$404,078 for lab equipment and furniture)

Dnipropetrovsk State Regional Diagnostic Veterinary Laboratory (Dnipropetrovsk RDVL) 48, Kirova ave., Dnipropetrovsk

Information Summary

Technical Assistance Plan - Memorandum for technical assistance to designated recipients of the State Committee of Veterinary Medicine of Ukraine and the National Academy of Agrarian Sciences of Ukraine. Registration Card # 2225-04 on 21.05.2012.

Donor – the United States Defense Threat Reduction Agency (DTRA)

Beneficiary/Executive Agent - State Committee of Veterinary Medicine of Ukraine (currently - State Veterinary and Phytosanitary Service of Ukraine)

Recipient – Dnipropetrovsk State Regional Laboratory of Veterinary Medicine; 48, Kirova ave., Dnipropetrovsk. Malimon Oleksandr Grygorovych, Director

Contractor Team - Integrating Contractor: Black & Veatch Special Projects Corp. Ukrainian Subcontractors: Project Technical Center (Designer) & Mediamax (Construction & Equipment Supplier).

Design Oversight - Project Technical Center, Sergey Volodymyrovych Mutilin

Construction Oversight – Georgii Petrovych Granich

Design-project Expert Assessment - Draft project was approved by the Central Regime Committee of the Ministry of Health of Ukraine on March27, 2012. Working design-project was approved by the Decree of the Director of Dnipropetrovsk SRLVM on June 21, 2013

Construction permit – Declaration for construction works was signed by the Director of Dnipropetrovsk Regional State Veterinary Laboratory (Oleksandr Malimon) and registered in the State Architectural Construction Inspection in the Dnipropetrovsk region on July 19, 2012.

Operational readiness - Declaration of facility operational readiness was provided to the Director of the Dnipropetrovsk State Regional Veterinary Laboratory to sign and submit to the State Construction Inspection. Veterinary Working Group inspected the facility on May 23, 2013. The Black & Veatch has received the comments and sent the answer on July 7, 2013.

Transfer of Custody (Acceptance Act) and Memorandum of Understanding – The TOC was signed on April 17, 2013

EDPs Permit – The obtaining of the Permit for working with pathogens is in process.

Certification of Attestation / Accreditation - Certification of Attestation / Accreditation process will be started after obtaining Permit for working with Pathogens.

USG Investment - Total cost of laboratory: **\$1,810,547 USD** (\$1,298,805,19 for Design & Construction; \$511,742 for lab equipment and furniture)

Kharkiv Diagnostic Laboratory Kharkiv Oblast Laboratory Center Pomirky region, Kharkiv

Fact Sheet

Technical Assistance Project - Technical Assistance Plan for designated recipients of the Ministry of Health of Ukraine. Registration card #2225-04 dated 21.05.2012.

Donor – the Department of Defense of the United States of America

Beneficiary/Executive Agent - the Ministry of Health of Ukraine

Recipient – Kharkiv Oblast Laboratory Center (former Kharkiv Oblast SES)

Address: Pomirky region, Kharkiv

POC: Dr. Tatyana Mykhaylivna Kolpakova, Chief Doctor of Oblast Laboratory Center

Contractor Team - Integrating Contractor: Black & Veatch. Ukrainian Subcontractors: Techno Project (Designer) & Macrochem (Construction & Equipment supply).

Design Oversight (Avtornadzor) - Vasyl Petrovich Lysenko

Construction Oversight (Technadzor) - Elena Aleksandrovna Sobol

Expert Examination of Design Approval - The Conceptual Design was approved by MoH Central Regime Commission on September 23, 2011. The Working Design was approved by Kharkiv "Ukrbudderzhexpertise" on May 08, 2012.

Construction permit - The Declaration for start of construction was signed by the Chief Doctor of Kharkiv Oblast SES (Dr. Tatyana Mykhaylivna Kolpakova) on May 28, 2012 and registered at GASK (State Architectural Construction Inspection in Kharkiv oblast) on May 31, 2012.

State Acceptance - "Construction Ready for Operation Declaration" was signed by the Acting Chief Doctor (Dr. Lubov Stepanivna Makhoya) on December 25, 2012 and registered at GASK (State Architectural Construction Inspection in Kharkiv oblast) on December 29, 2012.

Transfer of Custody and Sustainment Memorandum of Understanding - Transfer of Custody is in process.

EDPs Permit - Permit for working with Pathogens will be obtained after signing TOC and MoU.

USG Investment - Total cost of laboratory: USD\$1,638,375 (USD\$1,195,398 for Design & Construction; USD\$442,977 for lab equipment and furniture)

State Regional Laboratory of Veterinary Medicine Luhansk Regional Diagnostic Veterinary Laboratory (Luhansk RDVL) 9a, Krasnodonnaya Str. Luhansk

Fact Sheet

Technical Assistance Project - Memorandum on technical assistance for project recipients of the State Committee of Veterinary Medicine of Ukraine and National Academy of Agrarian Sciences of Ukraine

Donor – the Department of Defense of the United States of America (DoD)

Beneficiary/Executive Agent - the State Committee of Veterinary Medicine of Ukraine (nowadays – the State Veterinary and Phytosanitary Service of Ukraine)

Recipient – State Regional Laboratory of Veterinary Medicine Address: 9a Krasnodonnaya Str. Luhansk. POC: Dr. Valeriy Nikolayevich Bondar, Director

Contractor Team - Integrating Contractor: Black & Veatch. Ukrainian Subcontractors: Project Development Center (designer) & Mediamax (Construction & Equipment supply).

Design Oversight (Avtornadzor) – Sergiy Vladymyrovych Mutili

Construction Oversight (Technadzor) - Dmytro Vyctorovych Zyvianov

Expert Examination of Design Approval - The Conceptual Design was approved by MoH Central Regime Commission on March 13, 2012. The Working Design was approved by Luhansk Director of the Laboratory, Dr. Valeriy Mykolayovych Bondar, on June 06, 2012.

Construction permit - The Declaration for start of construction was signed by the Director of Luhansk State Regional Laboratory of Veterinary Medicine (Dr. Valeriy Mykolayovych Bondar) and registered at GASK (State Architectural Construction Inspection in Luhansk oblast) on May 31, 2012

State Acceptance - Construction works completed, all furniture and equipment were installed. O&M training continues and ready for final inspection on February 14, 2013.

Transfer of Custody and Sustainment Memorandum of Understanding - Transfer of Custody is in process.

EDPs Permit - Permit for working with Pathogens will be obtained after signing TOC and MoU.

USG Investment - Total cost of laboratory: USD\$1,746,312 (USD\$1,267,124 for Design & Construction; USD\$479,188 for lab equipment and furniture)

Lviv Diagnostic Laboratory Lviv Oblast Laboratory Center 27, Krupyarskaya Str. Lviv

Fact Sheet

Technical Assistance Project - Technical Assistance Plan for Designated Recipients of the Ministry of Health of Ukraine. Registration card #2225-04 dated 21.05.2012.

Donor – the Department of Defense of the United States of America

Beneficiary/Executive Agent – the Ministry of Health of Ukraine

Recipient – Lviv Oblast Laboratory Center (former Oblast SES)

Address: 27, Krupyarskaya Str. Lviv

POC: Dr. Lubamira Evgenivna Shepelenko, Acting Director of Laboratory Center

Contractor Team - Integrating Contractor: Black & Veatch. Ukrainian Subcontractors: Central Design Institute - Lviv (Designer) & RK-Center (Construction) & Mediamax (equipment supply).

Design Oversight (Avtonadzor) – Central Design Institute, Lviv - Evgeni Vasiliovich Svetlichniy

Construction Oversight (Technadzor) - Bogdan Ivanovich Ostrovskiy

Expert Examination of Design Approval - The Conceptual Design was approved by MoH Central Regime Commission on August 11, 2011. The Working Design was approved by Lviv "Ukrbudderzhexpertise" on August 12, 2011.

Construction permit - The Declaration for start to construction was signed by the Chief Doctor of Lviv Oblast SES (Dr. Roman Mikhailovich Pavliv) and registered at GASK (State Architectural Construction Inspection in Lviv oblast) on July 13, 2010

State Acceptance - "Construction Ready for Operation Declaration" was signed by the Acting Chief Doctor, Dr. Mikola Vasilievich Urbanvoich, and registered at GASK (State Architectural Construction Inspection in Lviv oblast) on December 25, 2012

Transfer of Custody and Sustainment Memorandum of Understanding - The TOC and S&T MoU were signed by the Chief Doctor of Lviv Oblast SES, Dr. Roman Mikhailovich Pavliv, on July 24, 2012.

EDPs Permit - The permit for working with Pathogens was issued by Regime Commission of MoH on July 2, 2012.

USG Investment - Total cost of laboratory: **USD\$1,927,158** (USD\$1,523,080 for Design & Construction; USD\$404,078 for lab equipment, furniture, and installation)

State Regional Laboratory of Veterinary Medicine Lviv Regional Diagnostic Veterinary Laboratory 7, Promislova Str. Lviv

Fact Sheet

Technical Assistance Project - Memorandum on Technical Assistance for Project Recipients of the State Committee of Veterinary Medicine of Ukraine and National Academy of Agrarian Sciences of Ukraine

Donor – the Department of Defense of the United States of America (DoD)

Beneficiary/Executive Agent - the State Committee of Veterinary Medicine of Ukraine (renamed the State Veterinary and Phytosanitary Service of Ukraine)

Recipient — State Regional Laboratory of Veterinary Medicine Address: 7, Promislova Str. Lviv POC: Dr. Roman Petrovich Simonov, Director of Laboratory

Contractor Team - Integrating Contractor: Black & Veatch. Ukrainian Subcontractors: Project Development Center (designer) & Mediamax (Construction & Equipment supply).

Design Oversight (Avtonadzor) - Sergey Vladimirovich Mutilin

Construction Oversight (Technadzor) - Bogdan Ivanovich Ostrovskiy

Expert Examination of Design Approval - The Conceptual Design was approved by MoH Central Regime Commission on March 27, 2012. The Working Design was approved by Lviv "Ukrbudderzhexpertise" on May 31, 2012.

Construction permit - The Declaration for start of construction was signed by the Director of Lviv State Regional Laboratory of Veterinary Medicine (Dr. Roman Petrovich Simonov) and registered at GASK (State Architectural Construction Inspection in Lviv oblast) on June 01, 2012

State Acceptance - "Construction Ready for Operation Declaration" was submitted to the Director of Lviv State Regional Laboratory of Veterinary Medicine for signature on October 22, 2012. Veterinary working group inspection completed on December 3-4, 2012. Black & Veatch received their comments and responded on December 27, 2012.

Transfer of Custody and Sustainment Memorandum of Understanding - The TOC and S&T MoU were submitted for signature to the State Veterinary and Phytosanitary Service of Ukraine on January 10, 2013.

EDPs Permit - The Permit for working with Pathogens is in progress.

USG Investment - Total cost of laboratory: USD\$1,734,971 (USD\$1,253,803 for Design & Construction; USD\$481,168 for lab equipment, furniture, and installation)

Vinnytsia Diagnostic Laboratory (Vinnytsia DL) Vinnytsia Oblast Laboratory Center 11, Malinovskogo str., Vinnytsia

Fact Sheet

Technical Assistance Project – Technical Assistance Plan for designated recipients of the Ministry of Health of Ukraine. Registration card #2225-04 dated 21.05.2012.

Donor – the Department of Defense of the United States of America

Beneficiary/Executive Agent – the Ministry of Health of Ukraine

Recipient – Vinnytsia Oblast Laboratory Center (former - Vinnytsia Oblast SES)

Address: 11, Malinovskogo str., Vinnytsia

POC: Dr. Valentina Grigoryevna Zaytseva, Head of the Laboratory Center

Contractor Team - Integrating Contractor: Black & Veatch. Ukrainian Subcontractors: Vinnytsia Design Institute of MoH-Lviv (Designer) & RK-Center (Construction) & Biolabtech (Equipment supply).

Design Oversight (Avtonadzor) – Architectural Construction Engineering Company Vinnytsia

Construction Oversight (Technadzor) – O.I.Kuprienko

Expert Examination of Design Approval - The Conceptual Design was approved by MoH Central Regime Commission on November 06, 2009. The Working Design was approved by Vinnytsia "Ukrbudderzhexpertise" on November 13, 2009.

Construction permit - The Construction Permit was signed by GASK (State Architectural Construction Inspection in Vinnytsia oblast) on May 05, 2010.

State Acceptance – "Construction Acceptance Act" was signed by the Chief Doctor (Valentina Grigoryevna Zaytseva) on August 30, 2010. Building Certificate Compliance was signed by GASK (State Architectural Construction Inspection in Vinnytsia oblast) on August 31, 2010.

Transfer of Custody and Sustainment Memorandum of Understanding - The TOC and S&T MoU were signed by the Chief State Doctor Valentina Grigoryevna Zaytseva on December 01, 2010.

EDPs Permit – The permit for working with Pathogens was issued by Regime Commission of MoH on December 22, 2010.

USG Investment - Total cost of laboratory: **USD\$1,504,840** (USD\$1,106,610 for Design & Construction; USD\$398,230 for lab equipment and furniture)

Zakarpartska Diagnostic Laboratory Zakarpartska Oblast Laboratory Center 96, Sobranetska Street., Uzhgorod

Fact Sheet

Technical Assistance Project - Technical Assistance Plan for designated recipients of the Ministry of Health of Ukraine. Registration card #2225-04 dated 21.05.2012.

Donor – the Department of Defense of the United States of America

Beneficiary/Executive Agent - the Ministry of Health of Ukraine

Recipient - Zakarpatska Oblast Laboratory Center (former Zakarpatska Oblast SES)

Address: 96, Sobranetska Str., Uzhgorod

POC: Dr., Vladimir Mikhailovich Markovich, Director if the Oblast Laboratory Center

Contractor Team - Integrating Contractor: Black & Veatch. Ukrainian Subcontractors: - Ekzotika LTD-Uzhgorod (Designer) & RK-Center (Construction) & Mediamax (Equipment supply).

Design Oversight (Avtonadzor) - Ivan Andriyovych Mygalko

Construction Oversight (Technadzor) - Sergey Yurievich Petrovsiy

Expert Examination of Design Approval - Conceptual Design was approved by the MoH Central Regime Commission on August 11, 2010. The Working Design was approved by Zakarpatska Oblast "Ukrbudderzhexpertise" on December 07, 2010.

Construction permit - The Construction Permit was signed by GASK (State Architectural Construction Inspection in Zakarpatska oblast) on December 29, 2010

State Acceptance - "Construction Acceptance Act" was signed by the Chief Doctor (Dr. Vladimir Mikhailovich Markovych) on July 15, 2011. Building Certificate Compliance was signed by GASK (State Architectural Construction Inspection in Zakarpatska oblast) on July 23, 2011.

Transfer of Custody and Sustainment Memorandum of Understanding - The TOC and S&T MoU were signed by the Chief Doctor (Dr. Vladimir Mikhailovich Markovych) on February 16, 2012.

EDPs Permit - The permit for working with Pathogens was issued by Regime Commission of MoH on March 02, 2012.

USG Investment - Total cost of laboratory: **USD\$1,920,432** (USD\$1,516,354 for Design & Construction; USD\$404,078 for lab equipment and furniture)

Institute of Veterinary Medicine of the National Academy of Agrarian Sciences Fact Sheet

Technical Assistance Project – Memorandum on technical assistance for project recipients of the State Committee of Veterinary Medicine of Ukraine and National Academy of Agrarian Sciences of Ukraine. Registration card #2225-04, dated 05.21.2012

Donor – The Department of Defense of the United States of America (DoD)

Beneficiary/Executive Agent - The State Committee of Veterinary Medicine of Ukraine (now the State Veterinary and Phytosanitary Service of Ukraine)

Recipient - Institute of Veterinary Medicine of the National Academy of Agrarian Science

Address: 30, Donetska street, Kiev, Ukraine

POC: Dr. Serhiy Nychyk, Director

Contractor Team - Integrating Contractor: Black & Veatch. Ukrainian Subcontractors: Project Technichniy Center (Designer) & Mediamax (Construction & Equipment supply).

Design Oversight (Avtornadzor) – Mutilin Sergey Volodimirovich

Construction Oversight (Technadzor) - Ziryanov Dmitro Vicktorovich

Expert Examination of Design Approval – The Conceptual Design was approved by the MoH Central Regime Commission on July 11, 2012. The Working Design was approved by Dr. Nychyk, Director of IVM on August 29, 2012.

Construction permit – The Declaration for the beginning of construction was signed by Dr. Nychyk, Director of IVM and registered by GASK (State Architectural Construction Inspection in Kiev oblast) on September 07, 2012.

State Acceptance - "Construction Ready for Operation Declaration" was signed by Dr. Nychyk, Director of IVM on April 08, 2013 and applied for registration by GASK (State Architectural Construction Inspection in Kiev oblast) on April 15, 2013.

Transfer of Custody and Sustainment Memorandum of Understanding - Transfer of Custody is in process.

EDPs Permit - Permit for working with Pathogens is in process.

USG Investment - Total cost of laboratory: **\$2,109,375.23 USD** (\$1,217,164 for design and construction and \$762,134 for equipment and furniture)