



AIRPORT & ATCC

CUSTOMIZED SOLUTIONS

iBross
AEROSPACE

30+ YEARS
OF DESIGN & SUPPLY
OF ATC/ATM
AND AIR FORCE
SOLUTIONS



iBross, originally found as ALES Košice in 1991 by Czechoslovak Air Force **Radar and IT professionals, was first successful company from former Eastern Europe supplying Air Traffic Control/Management, Civil-Military Integration and Air Force Command & Control Systems in Eastern Europe.**

- 1989 - CIVIL-MILITARY COORDINATION
- 1991 - RADAR DATA DISPLAY (FIRST PC BASED IMPLEMENTATION IN EUROPE)
- 1991 - ELECTRONICS FLIGHT PROGRESS STRIPS (FIRST IMPLEMENTATION IN EUROPE)
- 1991 - ATC CONSOLE (EUROCONTROL DESIGN)
- 1992 - MILITARY ACC SYSTEM (PRAGUE)
- 1993 - MULTIRADAR PROCESSOR
- 1993 - ACC SYSTEM (BRATISLAVA)
- 1994 - RADAR NETWORKING
- 1994 - CIVIL MILITARY INTEGRATION (TECHNICAL LEVEL)
- 1994 - RADAR DATA EXTRACTOR
- 1995 - AIR FORCE TACTICAL PLANNING SYSTEM
- 1996 - RADAR ATC SIMULATOR
- 1996 - CIVIL MILITARY INTEGRATION (OPERATIONAL LEVEL)
- 1996 - FIRST PROJECT ABROAD (ACC KIEV, UKRAINE)
- 1996 - FLEXIBLE USE OF AIRSPACE
- 1996 - IP BASED NATIONAL RADAR NETWORK
- 1998 - PSR/SSR RADAR UPGRADE
- 1998 - MOBILE AIR FORCE COMMAND POST
- 2001 - ADVANCED ASM/FUA IMPLEMENTATION (UKRAINE)
- 2005 - INTEGRATED ACC/MACC CENTRE (MIL PART, PRAGUE)
- 2008 - PREFABRICATED ATC TOWER CABIN
- 2010 - MOBILE ATC TOWER
- 2009 - FIRST MIDDLE EAST ATC PROJECT (UAE)
- 2015 - FIRST AFRICA ATC PROJECT (GHANA)
- 2015 - MODULAR HELIPOINTS (AZERBAIJAN)
- 2015 - EIGHT MOBILE ATC TOWERS (UNITED NATIONS)
- 2016 - REMOTE ATC TOWER (BUDAPEST)
- 2018 - EIGHT MOBILE ATC TOWERS (AIRPORT AUTHORITY OF INDIA)
- 2020 - TURNKEY ATC TOWER SYSTEM (NAIROBI WILSON AIRPORT)
- 2021 - MOBILE ATC TOWERS (UNITED ARAB EMIRATES)
- 2022 - PREFABRICATED ATC TOWER CABINS (NIGERIA)
- 2022 - PREFABRICATED ATC TOWER CABIN (SAUDI ARABIA)
- 2023 - TWELVE AIRPORT ATC SYSTEMS (NIGERIA)
- 2023 - FOUR MOBILE ATC TOWERS (SLOVAK AIR FORCE)

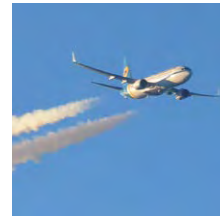
CUSTOMIZED
SOLUTIONS
ATC/ATM

**Listening to clients, project driven philosophy, customized solutions,
system integration, extensive experiences**

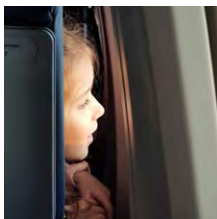
**AIRPORT
UPGRADE**

**REGIONAL
ATC/ATM**

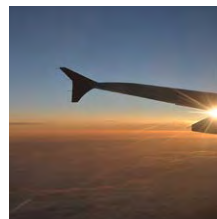
**CIVIL - MIL
INTEGRATION**



**ATC
TRAINING**

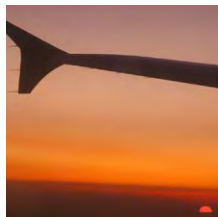


**AIRSPACE
MANAGEMENT**



**FLIGHT
PROGRESS
STRIPS**

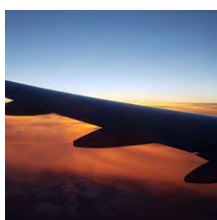
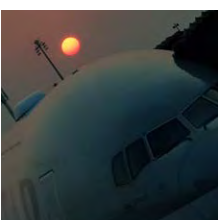
**ATC
CONSOLES**



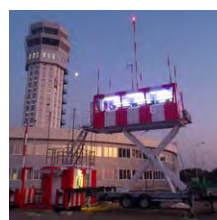
**MOBILE ATC
TOWERS**

**MODULAR
ATC TOWERS**

**MODULAR ATC
CABINS AND
CONSTRUCTION**



**SYSTEM
INTEGRATION**





AIR TRAFFIC CONTROL / MANAGEMENT



AREA ATM

ATC/ATM upgrade from individual subsystems to ACC solution:

- Consoles and special furniture:
- ATC/ATM system:
 - Surveillance data processing
 - Flight plan processing
 - Airspace management level 1-3
 - OAT/AirForce data provision
- Communication systems
- Recording & Reply
- Radar/ATM networking
- Civil & Military coordination



AIRPORT ATC/ATM

Modules and turn-key systems from ATC console to full ATC TWR system:

- Consoles and special furniture:
- ATC/ATM system:
 - SDPS, ASMGs,
 - iEFS, AMAN/DMAN, iNOTAM,
 - Air Force Mission Planning
 - AFTN/AHMS
- AWOS, ATIS
- VHF/UHF/HF and VCS systems
- Recording & Reply
- Video surveillance/remote ATC TWR
- Civil & Military coordination
- ATC/ATM Networking



ATC TRAINING

Visual, Radar, Procedural training from Abinitio to Progressive level system designed by active ATC trainee staff

- Real operational environment simulation (airspace, procedures, surrounding, HMI)
- Open assignment of workstations roles
- Complex exercise creation, testing and validation in less than one hour
- Import real traffic data samples
- Exercise restore and selected point
- Build-in VCS
- Recording & Replay
- Comprehensive ATC and AF operators training by US partner FAA/OCAO certified

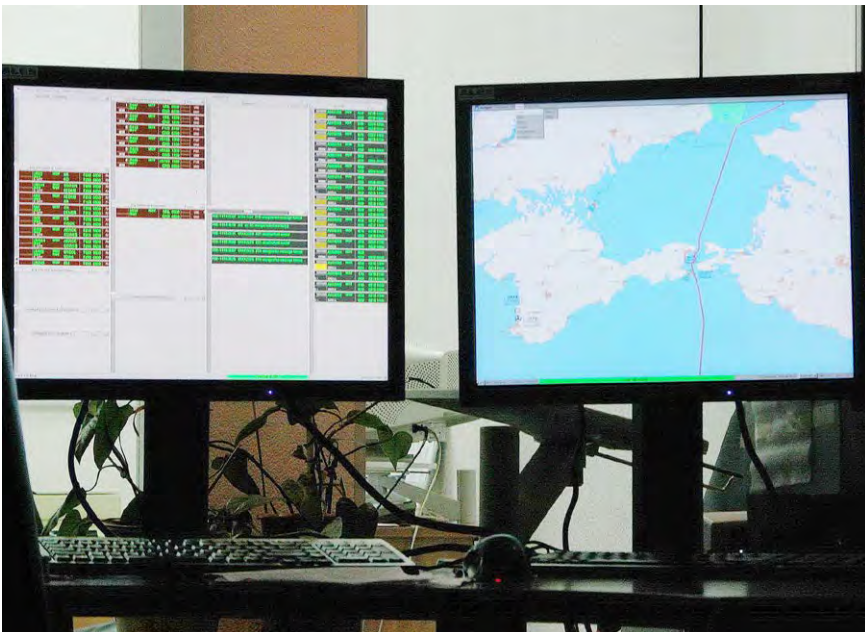


AIR TRAFFIC CONTROL / MANAGEMENT



CIVIL - MILITARY INTEGRATION

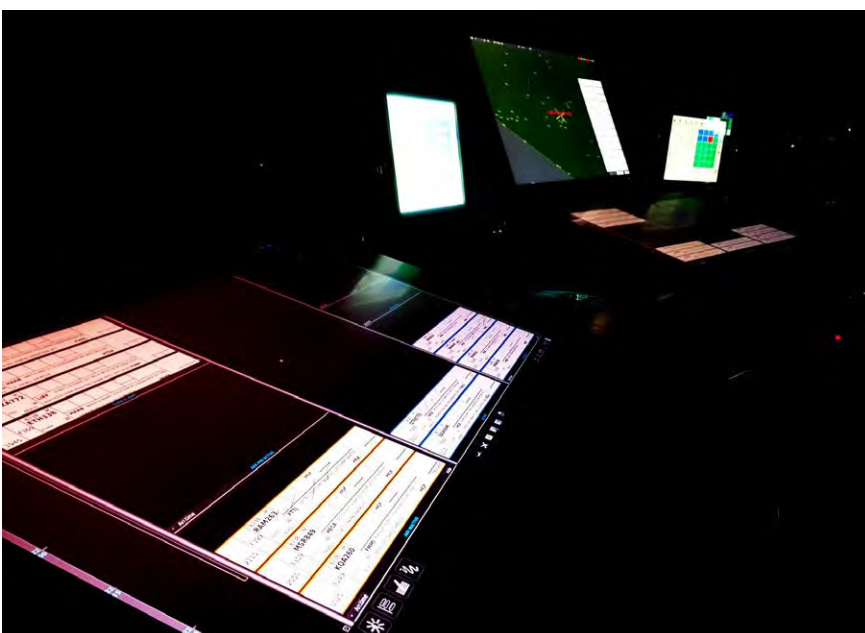
- Integration on all of 1-3 Levels (Coordination, Technical, Operational):
 - GAT data provision to MATC
 - Approved OAT data sharing to ATC
 - Integrated GAT/OAT ATM workplace
- OAT and GAT data provision to Air Command & Control system
- Air Force Mission Planning
- Enhanced Airspace Management, Enhanced Flexible Use of Airspace
- Flight permission evaluation



AIRSPACE MANAGEMENT

Enhanced Flexible Use of Airspace Management 1-3 Levels implementation at FIR and AoR:

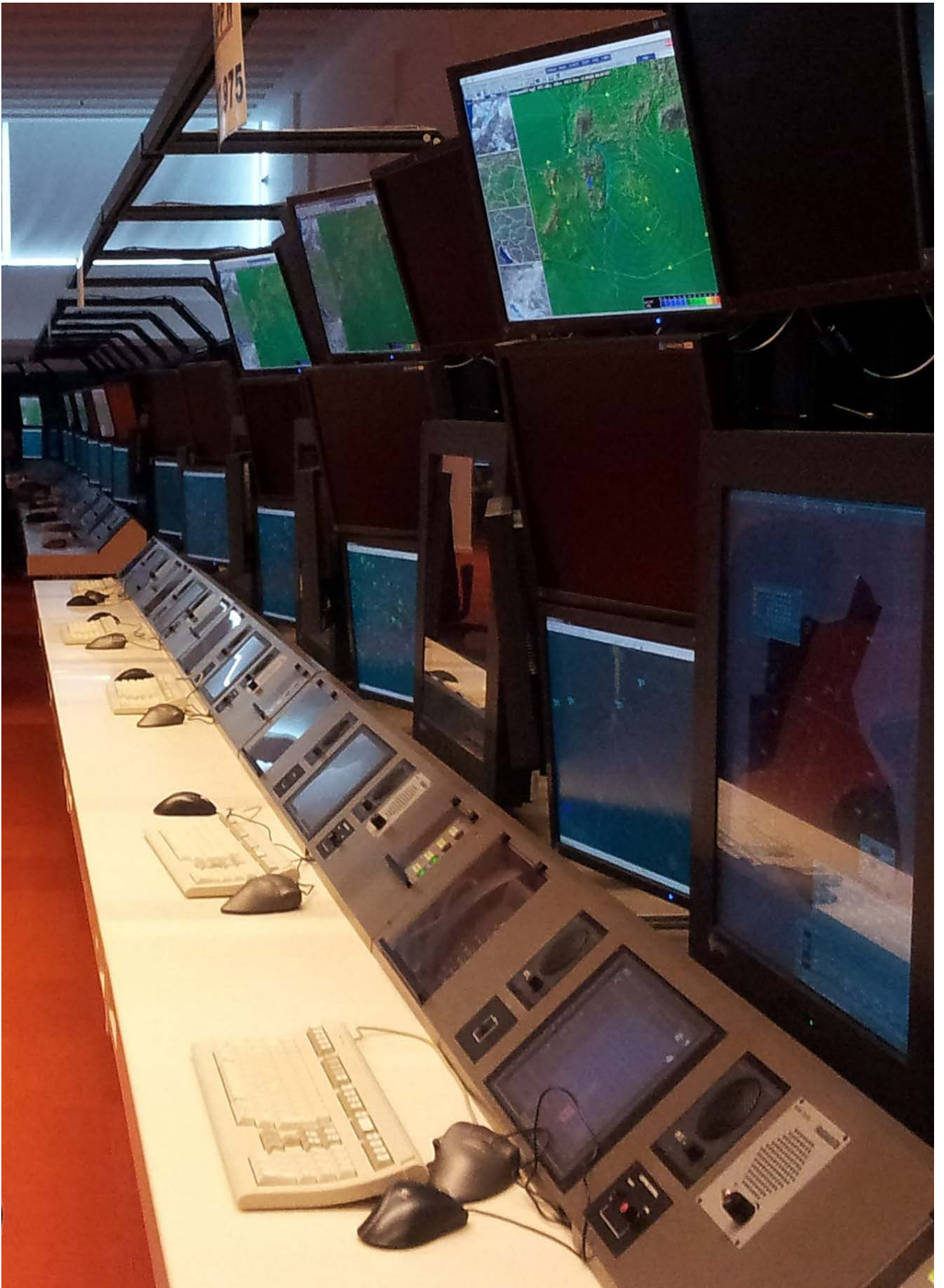
- Airspace Management Cells
- AA Data provision
- OAT planning and monitoring
- Conflict evaluation across requests and monitoring messages in all levels (Areas/CDR/RCA/OAT FPL/NOTAM)
- NOTAM generation
- AIS and specialised data provision
- FMP/ACC systems data provision



FLIGHT PROGRESS STRIPS

On-glass replacement of paper strips:

- Interactive flight strips tablet enabling on-screen strip hand write&draw
- Paper strip "e-copy" with advanced control and optional advanced formats to present more strips
- Customization for each airport: strip format and control, arrangement, processing, life-cycle
- Strip presentation and processing of other data: OAT/MPS, NOTAM, ASM, MET
- Open communication interface
- Local SDPS/FDPS system integration



ATC CONSOLES AND TOOLS



CONSOLES FOR ATCC

Smart design technological furniture:

- Individual design for each client
- Modular construction, technological gadgets, individual functional features
- Optional desktop elevation, slant angle setting, monitor position adjustment
- Highest hygienic features granted by Dupont Corian and other ultimate materials
- Durable frame construction: standard steel or modern alluminum frame
- Rack system
- Unlimited life cycle



CONSOLES FOR MOBILE UNITS

Rugged smart design technological furniture

- Mobile ATC towers,
- Transportable ATC units / shelters,
- Trucks / armoured trucks
- Other shelter applications to furnish equipment, office resting places
- Individual design and configuration
- Highest ergonomic, hygienic, safety features granted by ultimate materials used
- Advanced rack system
- Vibration and shock resistance (CAT A-B)
- MIL-STD-1472G compliance



VIDEO SURVEILLANCE, REMOTE ATC TOWERS

- Improved surveillance (RNWY, APRON)
- Remote ATC towers modules
- Remote ATC towers
- A-SMGS collaboration
- Optional features:
 - Perimetric control
 - Security Video Surveillance
 - SCADA features for real time control of various facility processes (Airfield lighting, CCTVs, Access control, Fire alarm, Power supply, Air conditioning...)



MOBILE AND MODULAR ATC TOWERS



MOBILE ATC TOWERS

- Individual design and configuration
- Numerous & proven designs
 - Cabin elevation 6 - 12m
 - Cabin size for 2 - 8 operators
- Deployment in 30-60 min
- Air transportable versions
 - C 130 Hercules
 - C17 Galaxy
 - C29J Spartan
- Optional features:
 - Truck platforms
 - Ballistic protection
 - Drone protection
 - Expandable shelter system



MODULAR ATC TOWERS AND HELIPORTS

- Cost effective alternative for long-term MATCT operation
 - Maintenance free of vehicle and lifting system
 - Construction permission not needed
 - Quick deployment/collapse (1-5 days)
 - Transportation by truck/train/airplane
- Individual design and configuration from TWR cabin installed shipping containers to complex facility with balcony, engineering & equipment room, external/internal staircase, resting room, kitchen, washroom
- Optional heliport landing and transportation platform / trailer



PREFABRICATED ATC TOWERS CABINS

- Factory produced tower ATC tower cabin designed to fit:
 - Existing tower masts
 - Steel structure
 - Container platform
- Individual design and configuration
- Easy and precise assembling
- Optional configuration: balcony, walkable rooftop, antenna masts, lightning protection up to LEVEL I class, power distribution, safety system, fire protection, access system, HVAS, ATC consoles, basement with equipment room

PRINCIPAL PROJECTS

ATC / ATM SYSTEMS

EU: Czechia, Hungary, Slovakia
CIS: Azerbaijan, Georgia, Ukraine
Middle East: UAE, Yemen
Africa: Ghana, Kenya, Nigeria
Asia: Thailand
OEM: Jotron

CIVIL - MILITARY INTEGRATION

EU: Czechia, Hungary, Slovakia
CIS: Ukraine

AIRSPACE MANAGEMENT

EU: Czechia, Hungary, Slovakia
CIS: Ukraine

FLIGHT PROGRESS STRIPS

EU: Czechia, Hungary, Slovakia
CIS: Azerbaijan, Ukraine
Middle East: UAE, Yemen
Africa: Ghana, Kenya, Nigeria
OEM: Jotron

TWR SIMULATORS

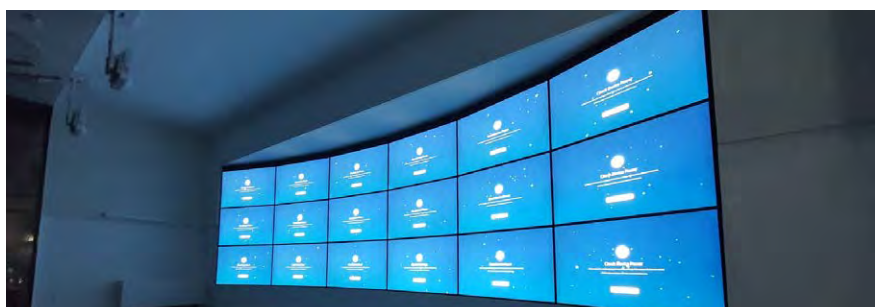
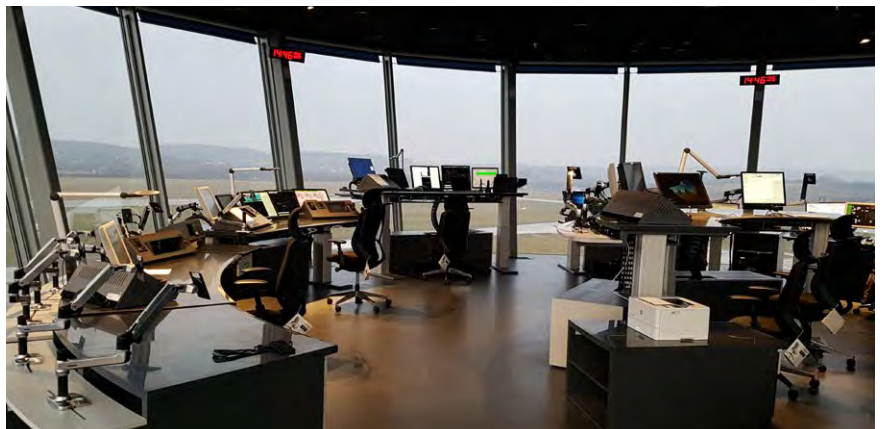
EU: Romania
America: USA

ATC CONSOLES

EU: Czechia, Hungary, Poland, Portugal, Slovakia
CIS countries: Armenia, Azerbaijan, Ukraine
Middle East: Iraq, KSA, Jordan, UAE, Yemen
Africa: Ghana, Kenya, Morocco, Nigeria, Uganda
OEM: Jotron, Rohde-Schwarz

MOBILE/MODULAR/REMOTE TOWERS

EU: Poland, Slovakia, Hungary
CIS: Azerbaijan, Ukraine
Africa: UN
Asia: India
America: Haiti
OEM: Rohde-Schwarz





SYSTEM INTEGRATION AND TURN KEY SOLUTIONS PARTNERS

System integration and Turn-key solutions are provided in cooperation with EU/US partners.



COMMUNICATION

- VHF/UHF, Voice Communication Switching, Recoding & reply

AVIATION WEATHER

- AWOS, ARWIS, AWOSS, IMS, ATIS/VOLMET

AIRFIELD OPERATIONS

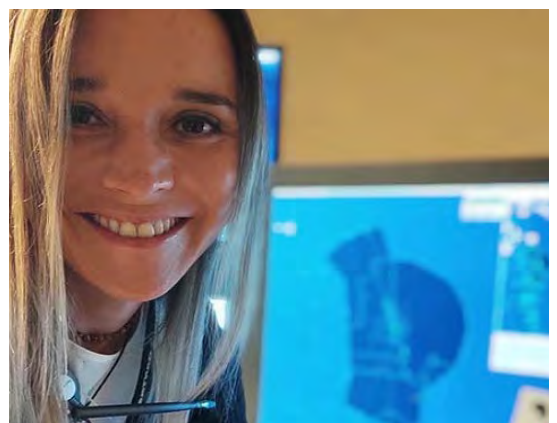
- Video surveillance (remote towers)
- Bird collision avoidance
- Drone radars
- Terminal equipment

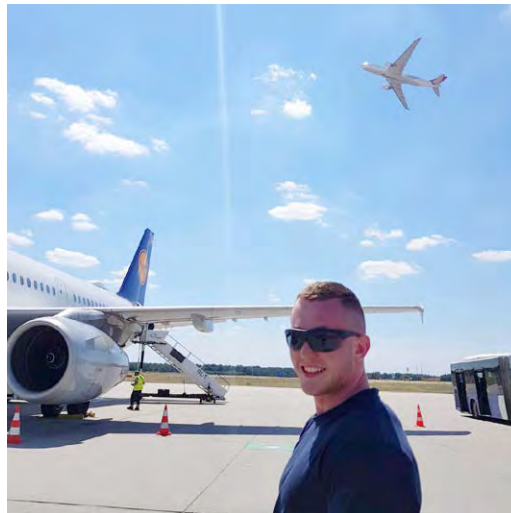
SURVEILLANCE

- Surveillance data processing and distribution
- Radar Networking
- ADS-B



ATC TRAINING

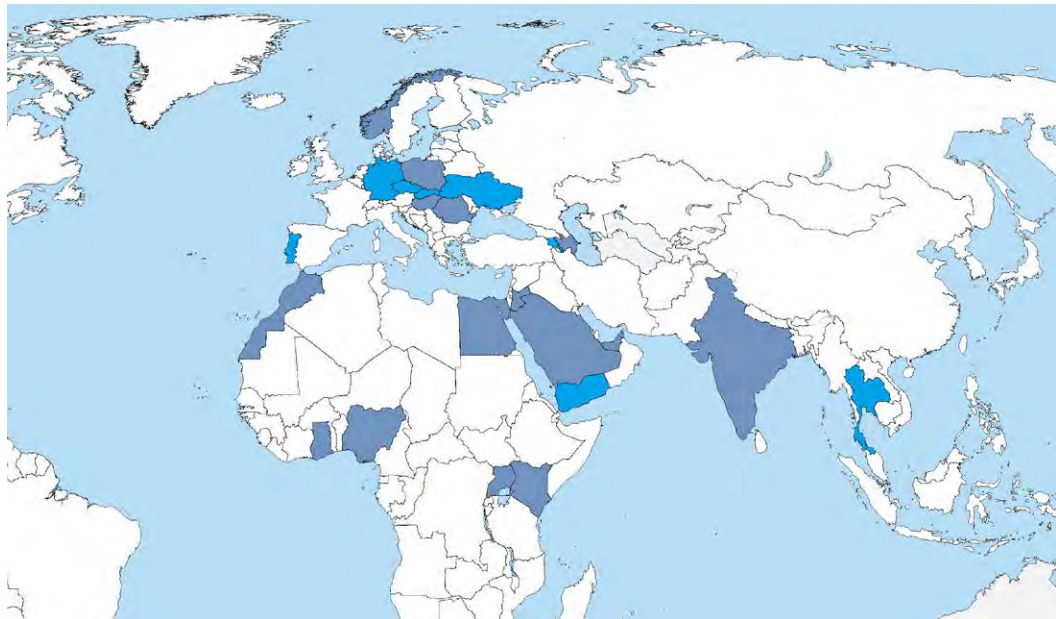
- Aerodrome Course
- Radar or non-radar approach and area course.
- Supervision and Management of Air Traffic Services
- Course to use RNAV procedures
- Advanced Aviation English Course





TESTIMONIALS

1991 - 1997/2012 
2013 - 2023 



"iBross provided us with very innovative ATM facilities customised to our needs at the Nairobi Wilson Airport. The new ATM system promises to be a model not just in the country but also in the region."

James W. Nderitu
KCAA Project Manager Kenya

"I am fully satisfied with the product. It's a fantastic solution for Airports, where we may need to place air traffic control immediately. Good solution. Moreover, all products are of high quality. Good. Hopefully we may go ahead with such towers in many more airports in India..."

Arindam Chakraborty
AGM (CNS), AAI Durgapur Airport, Kolkata, India

"Thank you. I am glad that we enjoy our cooperation. We rely on you for our part of the business."

Farhan Guliyev
AZANS, Director General, Azerbaijan

"I am very pleased with the long and constructive cooperation. All systems and equipment work efficiently. Thanks for the partnership and success in new projects."

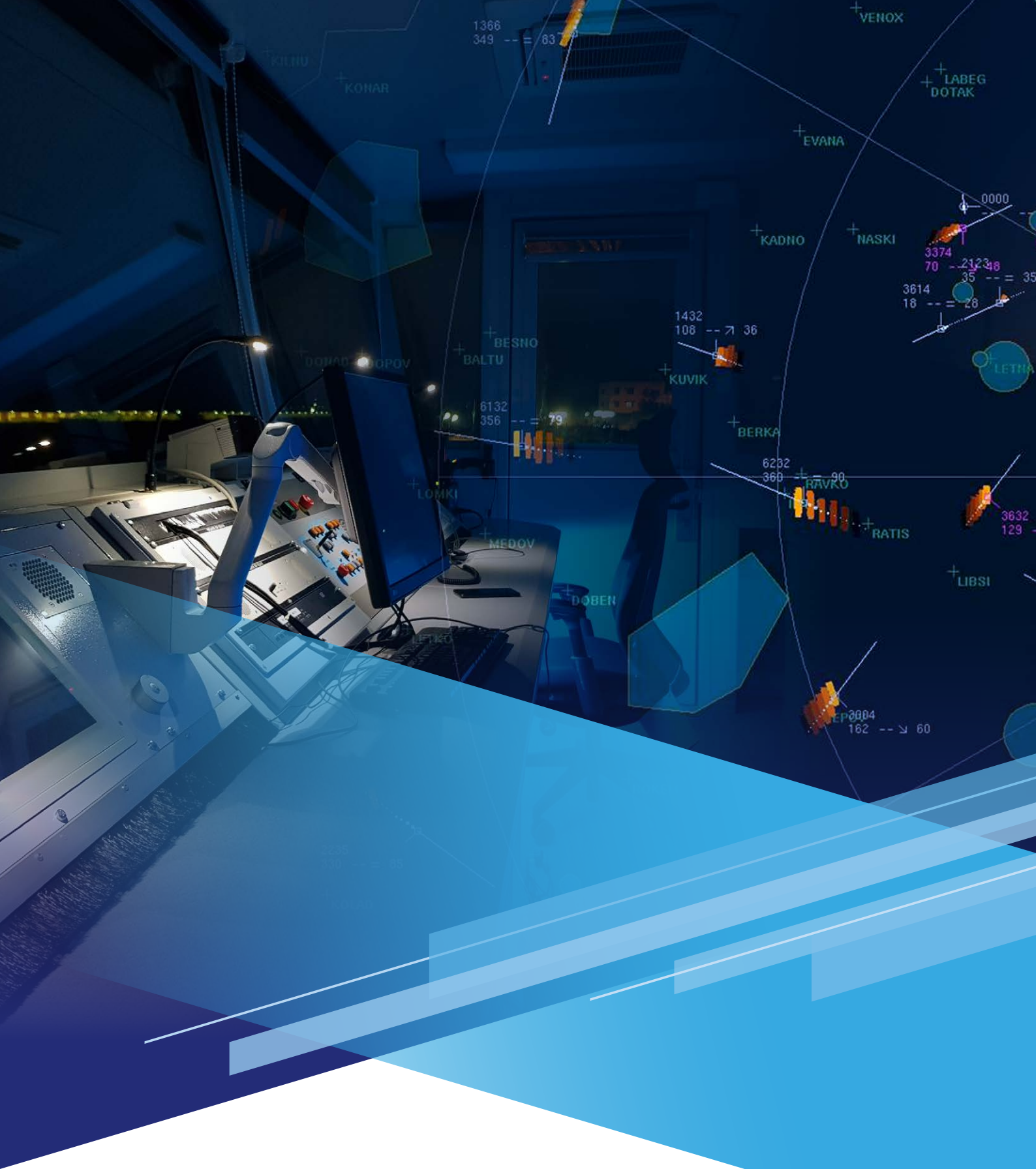
Gennadij Davidov
Head of CNS Kyiv, UKSATSE, Kiev, Ukraine

"Thanks for your great support during your stay in Morocco, please note that the plane of the Emir of Qatar has landed today successfully, I kindly thank you for your help and patience."

Bahae Rray
Maghrebnet, Morocco

"Good one. I know you are doing everything to make sure we have a very nice experience with the system. Your customer service and prompt response are greatly appreciated. Thank you very much for good job done."

John Kwofie
Civil Aviation Authority, Ghana



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