ISSSA®

INTELLIGENT SOLUTION FOR SECURING SENSITIVE ACTIVITIES.

MOBILE INTRUSION AND SMART AUDIO DETECTION SYSTEM

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INTRODUCTION TO ISSSA®

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ISSSA® IS A NEXT-GENERATION INTELLIGENT SOLUTION WITH MILITARY-GRADE CAPABILITIES FOR MONITORING AND SURVEILLANCE OF SENSITIVE SITES AND ASSETS, UTILIZING THE FOLLOWING INTEGRATED TECHNOLOGIES:

A VOLUMETRIC AND DISCRIMINANT DETECTION SYSTEM FOR INTRUSIONS OR CRITICAL SITUATIONS, A8V MIND.

REAL-TIME SMART AUDIO DETECTION OF EMERGENCY SITUATIONS.

MOBILE INTRUSION DETECTION SYSTEM A8V MIND

MOBILE INTRUSION DETECTION SYSTEM

A8V MIND IS A PORTABLE VOLUMETRIC DETECTION SYSTEM.

IT USES **LASER MEASUREMENT AND DETECTION TECHNOLOGY**. AN INVISIBLE LASER BEAM WITH A **COVERAGE RADIUS OF 360°** CONSTANTLY SCANS THE MONITORED SPACE WITH **HIGH RESOLUTION** TO DETECT EVEN THE SLIGHTEST CHANGE IN **3 DIMENSIONS**.

THE EMBEDDED SENSOR ALLOWS **REAL-TIME** MONITORING OF AN AREA UP TO **120 METERS** AND CAN DETERMINE DISTANCE FROM THE DETECTOR WITH AN ACCURACY OF **2 CM**, EVEN IN **COMPLETE DARKNESS**.

IT OFFERS THE POSSIBILITY TO **DEFINE SPECIFIC DETECTION ZONES** WITHIN THE **MONITORED PERIMETER**. THE SECURITY OFFICER IN CHARGE CAN DETERMINE **A PARTICULAR AREA** IN WHICH TO SET THE **TRIGGERING BEHAVIOR** OF THE ALARM.

IN CASE OF AN ALARM, THE SYSTEM IMMEDIATELY INFORMS ABOUT:

- THE **PRECISE NUMBER** OF INTRUDERS IN THE PERIMETER,
- THEIR **EXACT** POSITION,
- THE **SIZE** OF THE OBJECTS,
- THE **SPEED** OF MOVEMENT,
- THE **TRAJECTORY** OF MOVING OBJECTS.

MOBILE INTRUSION DETECTION SYSTEM
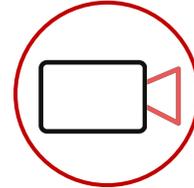
FEATURES OF A8V MIND.

PROTECTION
COMPACT AND **ROBUST** TRANSPORT CASE CONTAINING ALL THE NECESSARY ELECTRONICS AS WELL AS THE SOFTWARE APPLICATION WHICH INCORPORATES ALL THE DETECTION ALGORITHMS.

LASER TRANSMITTER AND DETECTOR
THE LASER IS ATTACHED TO A RIGID POLE AND PROTECTED AGAINST FALLS. IT ALLOWS FOR REAL-TIME DETECTION AND TRACKING OF **PEOPLE**, **ROLLING** OR **FLYING** OBJECTS (VEHICLE, **DRONE**, ETC.).
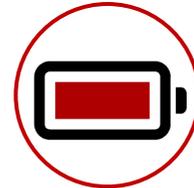
VIDEO
THE DETECTOR HEAD HAS **4 FIXED CAMERAS** THAT PROVIDE A VIEW IN ALL DIRECTIONS.

CONTROL AND TRANSMISSION
THE SUITCASE ALSO CONTAINS:
- A **ROUTER** TO ENSURE INTERCONNECTION OF ALL COMPONENTS AND PROVIDE A **WIFI ACCESS POINT** THAT CAN BE EXTENDED WITH A **GSM COMMUNICATION MODULE** FOR ALARM TRANSMISSION OVER A **SECURE** MOBILE NETWORK.
- A **RUGGED LAPTOP** FOR CONTROLLING THE ENTIRE SYSTEM.

POWER SUPPLY
A8V MIND IS **BATTERY-POWERED** WITH A CAPACITY RANGING FROM **12 TO 24 HOURS** AND MOUNTED ON A BRIDGE FOR **QUICK AND SAFE** REPLACEMENT.

MOBILE INTRUSION DETECTION SYSTEM

MAIN COMPONENTS OF A8V MIND.

1 LASER **2** BATTERY **3** LASER PROTECTION **4** TRANSPORT CASE (IP 54) **5** RUGGED TABLET (3D CLIENT) **6** A8V MIND IN 'STAND BY' MODE

REAL-TIME SMART AUDIO DETECTION SYSTEM

REAL-TIME SMART AUDIO DETECTION SYSTEM

AN AI (*) POWERED SMART AUDIO DETECTOR THAT PROVIDES DIRECTION OF THE ORIGIN OF SOUNDS EVENTS.

AN OUTSTANDING DETECTION ALGORITHM

AN IMMEDIATE PREDICTIVE MODEL ALERTS IN REAL TIME WHEN AN UNEXPECTED SOUND EVENT OCCURS: GUNSHOT, EXPLOSION, COLLISION, BREAKING WINDOW, BREAK-IN BY DRILLING OR CUTTING, VANDALISM.

24/7 DETECTION AT 360°

AUTOMATIC AND PERMANENT LEARNING OF THE SOUND ENVIRONMENT

SOUND ANOMALY DETECTION

INSTANT AUTOMATIC DETECTION OF SOUND ANOMALIES

ALERT NOTIFICATIONS

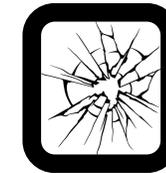THE OPERATION ROOM CAN RECEIVE ALERTS FROM LOCATIONS WHICH WERE TRIGGERED BY NOTIFICATION

Explosion

Gunshots

Car accident

Vandalism

Ram raids

Glass Breakage

(*) ARTIFICIAL INTELLIGENCE

REAL-TIME SMART AUDIO DETECTION SYSTEM

THE AI (*) POWERED SMART AUDIO DETECTOR FEATURES.

STAND-ALONE
THE SMART DETECTOR IS SELF-CONTAINED AND SENDS SIMPLE ALERT NOTIFICATIONS

PLUG & PLAY
EASY TO INSTALL, SIMPLE TO SET UP, USES MINIMAL BANDWIDTH

WIRELESS
ALL INTERACTIONS WITH THE SYSTEM GO THROUGH WIFI, 4G/5G: TRANSMISSION OF NOTIFICATIONS, SETUP AND MANAGEMENT

INDOOR & OUTDOOR
THE 360° MONITORED AREA IS DIVIDED INTO 12 DETECTION ZONES (+1 AT THE FOOT). EACH CORRESPONDS TO A NOTIFICATION

MONITORS THE SOUND ACTIVITY OF THE AREA WHERE IT HAS BEEN INSTALLED. IT CONTINUOUSLY AND AUTOMATICALLY ADAPTS TO THE SOUND ENVIRONMENT: DAY/NIGHT, PEAK HOURS, WEATHER CONDITIONS, EVENTS, ROADWORKS, ETC.

(*) ARTIFICIAL INTELLIGENCE
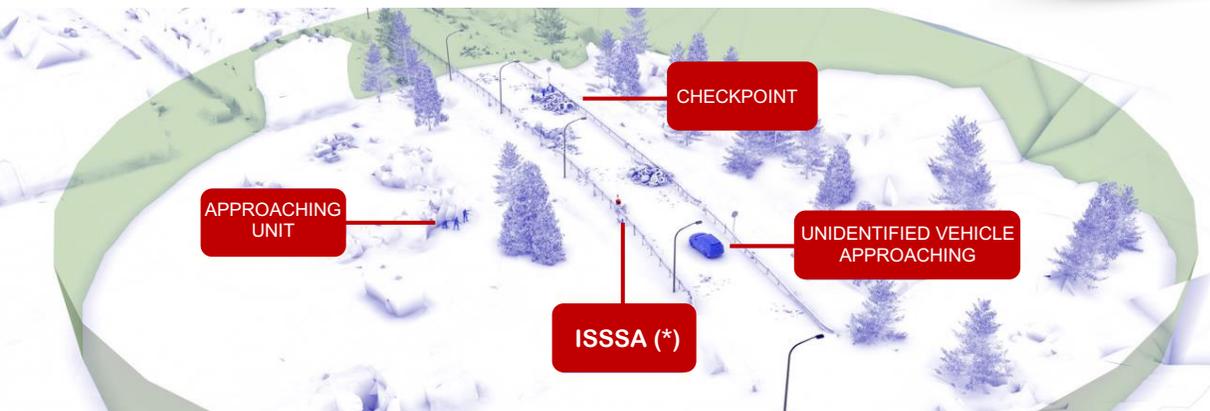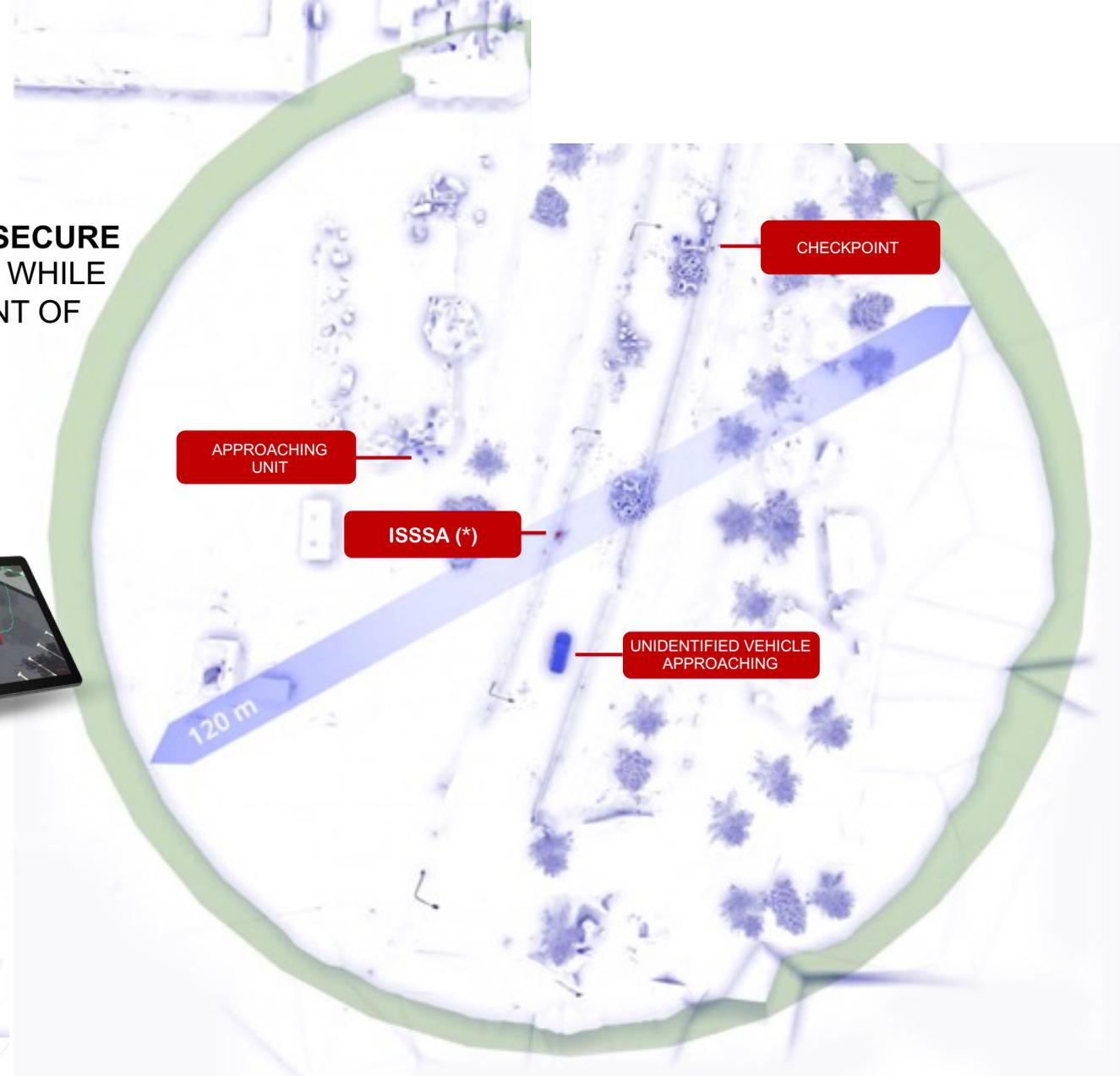
OPERATIONAL USE CASES

OPERATIONAL USE CASES

SURVEILLANCE OF A CHECKPOINT

OUR SOLUTION IS UTILIZED WHENEVER THERE IS A NEED TO **SECURE A PARTICULAR AREA** WITHIN A **VERY SHORT PERIOD OF TIME**, WHILE ALSO PROVIDING **HIGHLY PRECISE INFORMATION** IN THE EVENT OF **ANY BREACH** OR **VIOLATION** OF THE MONITORED ZONE.

OUR SOLUTION CAN BE USED TO PROTECT:

- **MILITARY** SITES OR **SENSITIVE STORAGE** FACILITIES
- **FIXED** OR **MOBILE** CHECKPOINTS
- **STATIONARY** MILITARY VEHICLES
- COMBAT **AIRCRAF**T, AND SO ON.

CHECKPOINT

APPROACHING UNIT

ISSSA (*)

UNIDENTIFIED VEHICLE APPROACHING

120 m

CHECKPOINT

APPROACHING UNIT

UNIDENTIFIED VEHICLE APPROACHING

ISSSA (*)

(*) OUR SOLUTION COMPOSED OF A8V MIND & SMART AUDIO DETECTOR

OPERATIONAL USE CASES

SURVEILLANCE OF A CHECKPOINT

- UNIDENTIFIED VEHICLE APPROACHING

- A8V MIND IN OPERATING POSITION MODE

- APPROACHING UNIT

OPERATIONAL USE CASES

SURVEILLANCE OF A CHECKPOINT

CHECKPOINT

- UNIT IN DEFENSIVE POSITION (ALARM ACTIVATED)
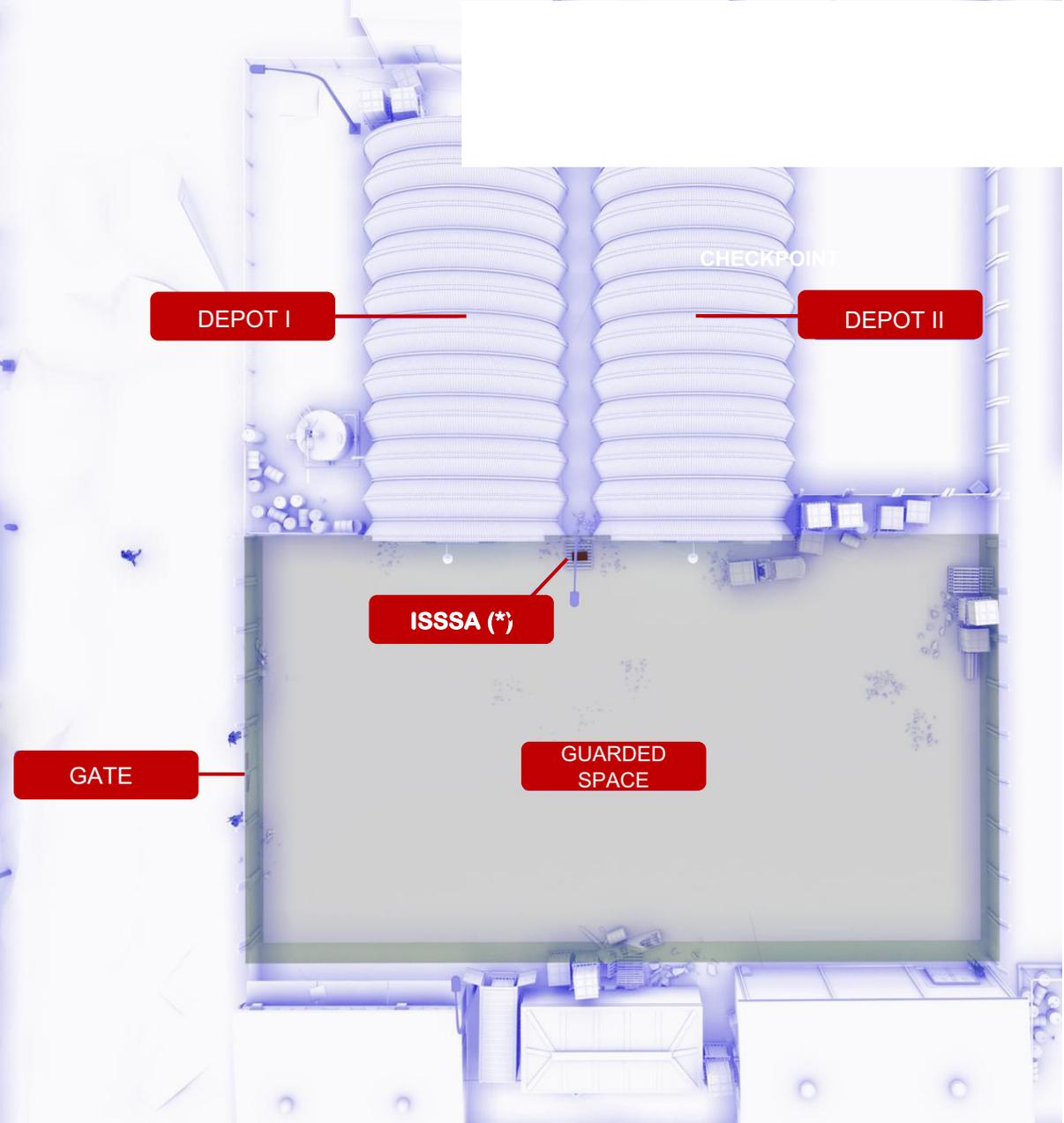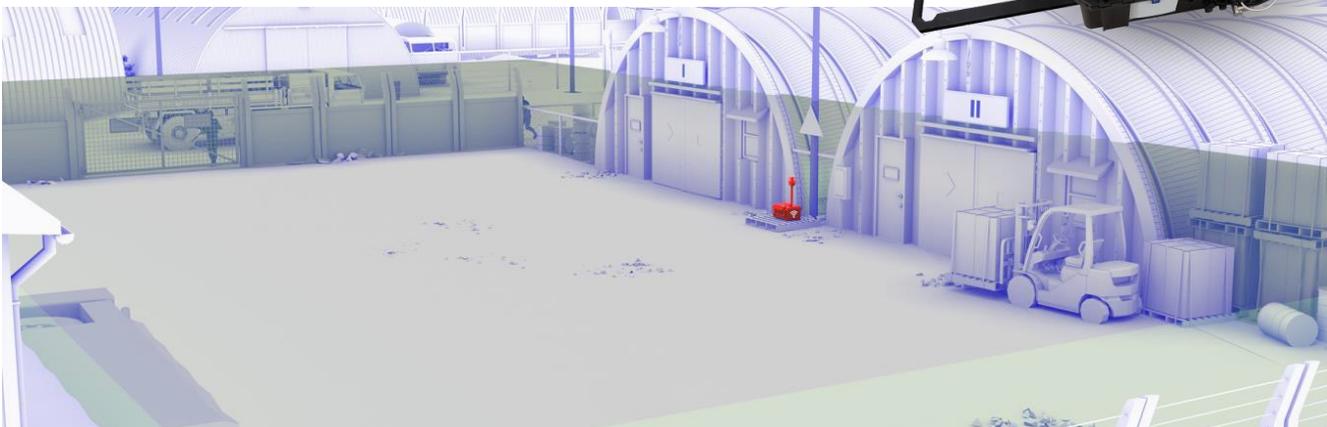
- MONITORING ON A MOBILE TABLET

OPERATIONAL USE CASES

SURVEILLANCE OF SENSITIVE STORAGE FACILITIES

A8V MIND ENABLES DEFINING A **PRECISE DETECTION ZONE** WITHIN THE **AREA SCANNED** BY THE **INVISIBLE LASER SURVEILLANCE BEAM**.

THE SYSTEM CREATES A **VIRTUAL IMAGE** OF THE ZONE, RECORDING AND COMPARING ALL CHANGES IN **REAL-TIME**, INCLUDING THE APPEARANCE OF NEW OR UNWANTED OBJECTS (E.G., DRONES, VEHICLES) OR INDIVIDUALS.

IT CAN **DIFFERENTIATE** BETWEEN **HUMANS**, **ANIMALS**, AND **OBJECTS**.
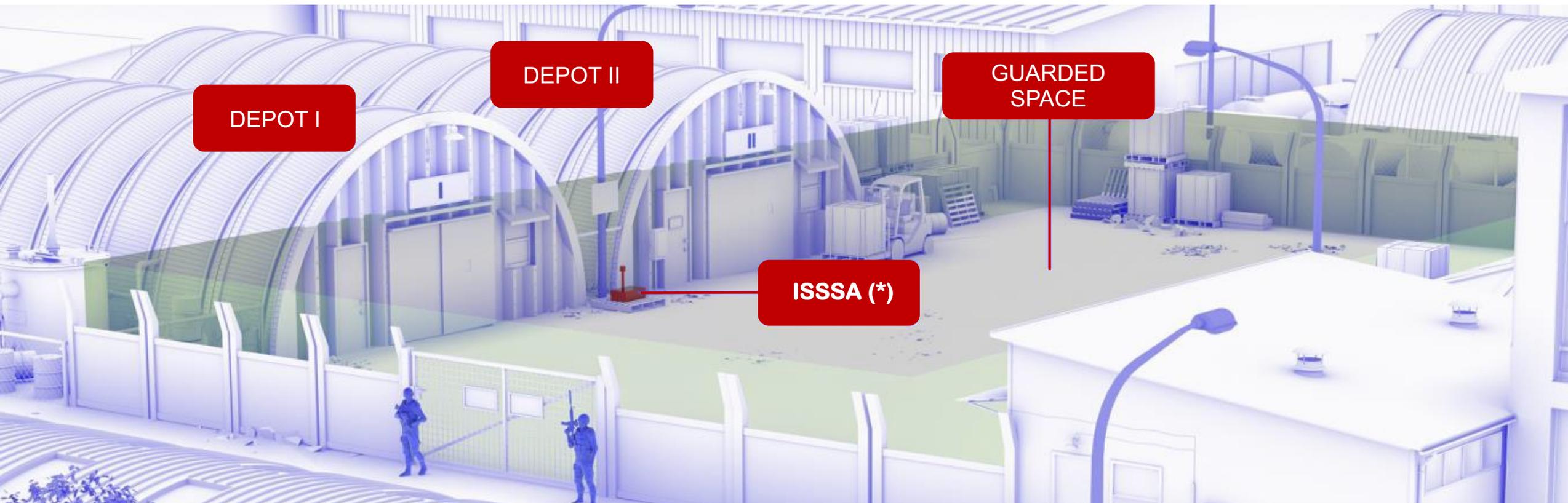
CHECKPOINT

DEPOT I

DEPOT II

ISSSA (*)

GATE

GUARDED SPACE

(*) OUR SOLUTION COMPOSED OF A8V MIND & SMART AUDIO DETECTOR

OPERATIONAL USE CASES

SURVEILLANCE OF SENSITIVE STORAGE FACILITIES
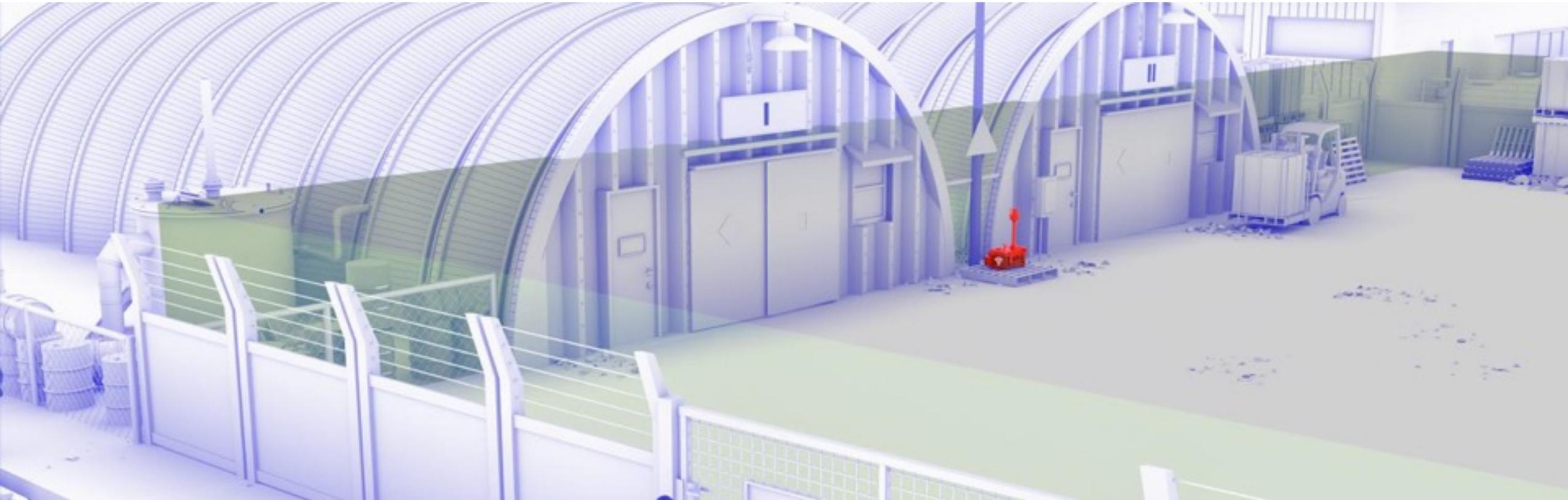

DEPOT I

DEPOT II

GUARDED SPACE

ISSSA (*)

ABILITY TO DEFINE A **SPECIFIC DETECTION ZONE** WITHIN THE LASER SCANNING FIELD

(*) OUR SOLUTION COMPOSED OF A8V MIND & SMART AUDIO DETECTOR

OPERATIONAL USE CASES

SURVEILLANCE OF SENSITIVE STORAGE FACILITIES

3-DIMENSIONAL DETECTION ZONE (LASER SCANNING FIELD)

OPERATIONAL USE CASES

SURVEILLANCE OF SENSITIVE STORAGE FACILITIES

INDOOR MONITORING

Thank you!