Deliverable D5.6: Scenarios, Use Cases and User Requirements

Work Package(s)	Work Package 5
Task(s)	Task 2 - Communication and dissemination
Dissemination Level	PU
Due Date	28/02/2022
Actual Submission Date	28/02/2022
WP Leader	DMI Associates
Task Leader	DMI Associates
Deliverable Leader	DMI Associates
Contact Person	Michel ZAYET

Document History

Revisions	**Author(s)**	**Date**	**Description**
Version 1.0	Michel ZAYET	21/01/2022	first draft
Version 2.0	Michel ZAYET	27/02/2022	final

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No: 101021723

CONTENTS

1. TABLE OF CONTENT

EXECUTIVE SUMMARY

Project HoloZcan's is built on a close interaction with external contributors, for the definition of the technology's future areas of application. This process is identified in the project proposal under Work Package 5 concentrating on User's engagement.

The HoloZcan project employs several techniques to extract scenarios, use cases and elicit the requirements and user needs for the system and its main components. To do so, different tools are identified and set to be operated in a complementary and repetitive manner. The foreseen components include the use of online surveys, special sessions of Stakeholders' Workshops, with a review of documented users' needs and technology gaps. Also, Partners' workshop will be held on a regular basis. Together with DMI Associates, all the Members of the Consortium are involved in the dweling with the users.

Participant Number	Participant Organisation name	Short name	Country
1 (Coordinator)	IDEAS Science Ltd.	IDEAS	Hungary
2	DataSenseLabs Ltd.	DSLabs	Hungary
3	ZugMedical System SAS	ZugMed	France
4	Politecnico di Milano	Polimi	Italy
5	Uniwersytet Lodzki	LODZ	Poland
6	Sioux-CCM BV	Sioux-CCM	The Netherlands
7	Komenda Stoleczna Policji (KSP) Warsaw Metropolitan Police	WMP	Poland
8	DMI Associates	DMI	France
9	Institut Pasteur	Institut Pasteur	France

2. INTRODUCTION

By project Month 10, corresponding to February 2022, the Deliverable 5.6 on “Scenarios, Use cases and User requirements comes to establish a set of guidelines validating our initial findings following the interaction development with Stakeholders since project start, and the physical/online venue of the First Stakeholders’ Worksop.

The First Stakeholders’ Worksop took place as planned during project Month 8, on 15 December 2021 in Warsaw Poland.

Organising stakeholder engagement events is an activity that will occur twice during the project duration. The second Stakeholder Workshops will be organized in project Month 33 or January 2024.

The goal is enabling input generation on users' needs from the stakeholders. The aims of the First Stakeholder Workshop was to support the conceptualization of HoloZcan work, and the identification of potential test studies related to Work Package 4, under the specific task 4.3 foreseing the Demonstration of the fine tuning and bioinformatics evaluation of the system performance.

During first workshop, the following activities were listed

- ⇨ 1. Presenting the proposed technical concept of the HoloZcan system to stakeholders;
- ⇨ 2. Evaluating, reviewing, ranking, filtering and refining the scenarios by the stakeholders;
- ⇨ 3. Providing end-user guidance to the establishment of the suite of use cases;
- ⇨ 4. Collecting end-user requirements for the HoloZcan system.

In order to collect future feedback and recommendations, we started from project kick-off to closely identify groups of Users by setting their profiles resulting from concerned personnels in selected scenarios.

This is the table (Table 2.1) that was developed to curtail the largest applicable group of persons, the project could envisage to interact with, and therefore benefit from them, in terms of advices. We had a certain vision then, although still remain today utterly open to further ramification of the thematics.

Table 2.1 End-users of the HoloZcan project

End Users:	Description:
CBRN practitioners	CBRN experts within Police, First Responders, Civil Protection Forces, Health Organisation End-user group, Relief workers, Disaster managers, and Crisis managers.
Medical laboratories and health professionals	Hospitals, public spaces, critical infrastructure and service providers
Forensics and Law Enforcement Authorities	Investigation Police, Customs, Borders' Security.
Civil society and Scientific communities	NGOs, Universities, Think Tanks, Training Centers, Biosafety and Biosecurity Associations.
CBRN Military forces operating in civilian crisis/disaster	Military CBRN centers, Special Training centers.
Standardisation bodies and policy makers at EU and EU MS level	EC DG Home, EC DG Enviromment, European Defence Agency, Frontex, Europol, Interpol.
Industrial and Private sector	Companies developing Bio-detection devices
Gender and Population (DEC 2021)	Women in Science – General public Representatives

3. DEFINITION OF SCENARIOS AND USE CASES

Understanding the end users is the key to success. The definition of the scenarios and use cases and technical requirements is an important part of an project. It was started at the beginning of the project, to make the objective of the project clear for all partners, and specify the context of use.

Three techniques were combined with brainstorming sessions, requirements gathering and scenario development meetings.

SCENARIOS IDENTIFICATION PROCESS

The HoloZcan project employs several techniques to extract scenarios, use cases and elicit the requirements and user needs for the system and its main components. The scenarios and user cases are not the same thing. Scenarios are created by users and researchers to help communicate with the design team. The collection of scenarios address various environments, settings and wide range of situations. Scenarios include multiple scenes and follow a common storyline that is in line with the project features. Use cases are created for developers to help with system design and testing: use cases are structured documents that contain requirements and details of what functionality should exist. The use cases will be based on general requirements dictated by the project goals and on specific criteria that will be defined by wide spectrum of actors/users and on criteria that is defined by Encircle and other group of users.

Initial technical requirements have been extracted, addressing both functional and non-functional features of the HoloZcan system. Requirements are extracted via thorough analysis of the scenarios designed, which aim, among others, to address all the potential expectations of Holozcan user groups i.e. police, first responders and health organization end-user group, disaster managers, crisis managers, stakeholders

responsible for public safety, critical infrastructure and service providers, citizens, local authorities, science community. Requirements can be classified in six main categories:

General Requirements	Intelligent Community Orchestration, Interoperability
Deployment Requirements	Networking and Communication, Device management, Run-time Environment
Service and Resource Requirements	Service Infrastructure, Resource Sharing
User Experience Requirements	Context-awareness, Profiles & Preferences, Learning, Reasoning a Prediction, Decision Making & Pro-activity, User Interfacing
Security-related Requirements	Security, Dependability, Privacy & Trust
Non-functional Requirements	Usability, Reliability, Performance, Supportability

The requirements drive the design of the HoloZcan System Architecture and serve as a guide to testing, demonstration and evaluation. Use cases have then been reviewed by the whole consortium and the identified requirements have been harmonised, prioritised and ranked.

From project Month 1 we had a set collaboration path with H2020 Project ENCIRCLE – European Cbrn Innovation for the market CLustEr (Grant Agreement: 740450) that lasted from March 2017 until September 2021, coordinated by the Catholic University of Leuwen, Belgium.

The goal of this project was to collect valuable information on CBRN technologies with market perspectives, and bring this material to SMEs and large industries capable to further develop and invest in the selected best innovations.

Together with Encircle a reflection was conducted that yield an analytical review short paper. Encircle defined the following end-user requests:

> There is a need to built a device which allow to detect contamination on different variety of materials (steel, concrete, wood frame, synthetically materials, rugged materials) and in different conditions (wet, underwater, marine environment, direct flame contact, or thermal radiation). It would ideally take the form of a stand-off device for detection on surfaces, or hand-held in the other cases. Another added-value of the system would be to include a capability to detect residual contamination after decontamination.
>
> Ideally, the device would be small, cheap, light and fieldable. The systems for sampling and/or detection and identification, would be person-borne or mounted on a robot, vehicle or drone. Such system should potentially allow to fulfil all requirements needed to carry out CBRNe forensic investigation. For such systems smart materials should be developed, which would provide better and integrated CBRN functions, less burden, built-in detection, lower-consumption.
>
> There is a need to develop systems for fast detection and identification of biological hazards (such as B agents, toxins, synthetic biological threats) on the scene of incident. Such systems should

allow to improve response time on CBRN actions regarding biological hazards, increase safety of rescuers and endangered people, as well as reduce costs of single biological operation.

Finally, there is a need of development for multipurpose CBRN threats detectors embedded in buildings. A standardisation and validation process for these kind of detectors have to be established, with a low level of false/negative results. This kind of detectors should be connected to the net and give information about a level and area of contamination. This kind of tools should provide a complex CBRNE protection against threats.

REVIEW OF SCENARIOS BY STAKEHOLDERS

The definition of scenarios was carried out in several rounds. The first round of scenarios were defined in a broad sense as application areas and presented on the HoloZcan website.

Border control	Security industry
Law Enforcement Agencies	Military
Diagnostics	Monitoring
Hospital safety	Laboratory safety
OEM Building safety	Academic research sector Duct pipes
Air conditioning systems	Shipping industry
Gender / Women in Science	

We collected gradually confirmations from each of our stakeholders – during their registration process with the signature of the Letter of Intent – on the selection of these application areas. The very bottom of the table one, came as a last addition after we consulted amoung the Partners to review missing segments. It was obvious when thinking of the very device users that Women in Science would be pivotal for an assessed 50% of the future operators (as per our selected scenarios).

PREPARATION OF THE SCENARIOS FOR DISCUSSIONS

A project meeting was held in Hungary two months before the First Stakeholders' Meeting of December. Three Project Partners gathered to discuss the four senarios to be debated during the sessions in focus-group mode.

To begin with we considered the Safety and Security dimnension as their distinction allows already to specify a series of users cases.

From this basis we divided and further detailed to obtain a Session 1 on Biosafety entitled:

"Transmission Threat in a Biosafety Context Session" *with two sub-topics:*

- Breath analysis detection
- In-doors ventilation of public buildings

And a second Session devoted to Security, and named:

"Biosecurity and Emerging Threats Session" *also with two sub-topics:*

- Terrorist bomb and mapping of a contaminated area
- Post mail and parcel threat

This was then framed into the agenda distributed to all the interested participants.

4. HOLOZCAN FIRST STAKEHOLDERS'S MEETING

PREPARATION OF THE FIRST STAKEHOLDERS' MEETING

In October 2021 a preparation meeting was conducted in Hungary to discuss in coordination with the key project Partners the modalities of the meeting. Given the future joint involvement of DMI in charge of the task with the Warsaw Metropolitan Police for next year Training activities, and considering the presence of University of Lodz, the choice of location was in favor of Poland. From a travel point of view, Poland has a very convenient airline company with a large number of destinations across Europe. Benefiting from this hub, the Stakeholders were inclined to travel as a direct flight was identifiable for each of them.

This location allowed also to have several Users based in Poland, and future Trainers, to physically join. As a result, we collected on that day six new letters of Intent and grew our number of Stakeholders. The situation with Covid and travel regulations, impaired the event with a total of eight Stakeholders and Project Partner having to cancel their trip to Warsaw.

We managed to have four Stakeholders coming from France, Georgia and the Netherlands, two project Partners from Hungary and France, and 12 persons from Poland including Project Partners from Warsaw Metropolitan Police and University of Lodz.

Using a Zoom meeting link, we had a hybrid Online and in presence meeting. In total we had 36 persons connected, which in addition to the persons in the room totaled 50 persons.

Just after the stakeholder meeting, we met with experts from the Warsaw Metropolitan Police, where the project was also presented.

THE WARSAW MEETING

This meeting aim was to support the conceptualization of HoloZcan work, and the identification of potential test studies.

Agenda of the meeting on 15 December:
"Introduction to Holozcan's Project" Györgyi Bela, Project Coordinator, Ideas Science, Hungary **"Presentation of Stakeholders' Role"** Michel Zayet, DMI associates, France **"HoloZcan Concept, how it revolutionizes aerosols and airborne bio-detection on field"** ⇨ From lab to field Janos PALHALMY, DataSense Labs and Béla MIHALIK, Ideas Science, Hungary **"From Human to Exhaled Breath Condensate Samples: matrix and viruses"** ⇨ Medical perspective Rémy ARTUS, Institut Pasteur, Paris, France **"Current Bio-detection use and applications"** ⇨ Military and Law enforcement perspective Marcin NIEMCEWICZ, University of Lodz and Krzysztof PACULA, Warsaw Metropolitan Police ⇨ Detection of Biological Threats – the Activities of the Warsaw Police EOD Team Lt. Adam FECHNER **Interactive Sessions:** ⇨ Scenarios 1,2 Transmission Threat in a Biosafety Context ⇨ Scenarios 3,4 Biosecurity and emerging threats

THE SCENARIOS PRESENTED

The discussion following the series of presentations took the form of a continuous open exchange between the online and physical participants mostly with the Project Partners in charge of the initial technological concept. Here is a synthesis of all the points touched upon.

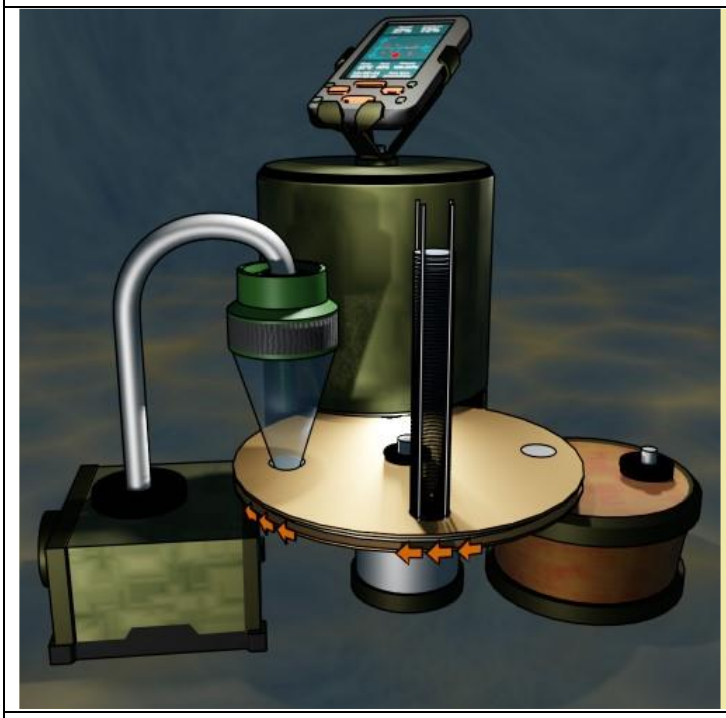
1.

Scenario: Infectious diseases cause serious cross-border health threats. Current entry and exit screening (at ports, airports, land crossing points, other public places such as hospital entrances) is inadequate to control the spread of diseases. Healthcare workers who are repeatedly exposed to the disease are at high risk of getting an infection.
What if the HoloZcan makes screening more effective by providing users with a highly accurate filtering tool to identify those who should be screened further (secondary screening undertaken in isolation room by medical doctor or clinical nurse). The project develops a workplace screening tool that identifies infection-free healthcare staff and patients who could work safely in close proximity to each other without fear of horizontal transmission of an infection.

Detection purpose: Event-specific object classification and pathogenic load calculation. AI (ML, DL, DT) supported detection of the bioinformatic features related to specific and validated signal components. Detection of pathogenic components within the sample. Separation of the pathogenic/non-pathogenic components at the bioinformatic level.

System characteristics: Manual sampling system with on-site analysis. Building on existing medical technologies, including an Exhaled Breathing Concentrate sampling unit as well as other EBC collection devices. Separated sampler, analytic and maintenance modules.

2.A



Automatized and continuous indoor air bio-agent monitoring with integrated dry-collector

Scenario: In a crowded indoor environment or one with limited ventilation, infection of more people occurs. In this indoor environment, the risk of infection through aerosol, i.e. a suspension of solid particles or liquid droplets in the air, is high as aerosols and particles can act as carriers of microbial components. Aerosols can cause the airborne transmission of a variety of diseases, from SARS-CoV-2 to avian influenza and measles, at a distance of about 2 m from the source, i.e. the infected person. A disease spread by air condition.
What if the HoloZcan project is developing a system that can monitor and detect certain infections. The system will continuously measure background patterns and detect possible deviations from the normal background. It can be used to monitor the ventilation system or to check the indoor air quality in public spaces.

Detection purpose: AI (ML, DL, DT) supported separation of the bioinformatic feature fluctuations related to the changes in the properties of the background noise and the selected signal components. Monitor and track typical background profiles and detect changes from what is perceived as "normal", move away from addressing merely the select agents and focus on the broader applicability of anomaly detection

System characteristics: Impact/electrostatic/water-based, active and passive samplers with complex sample preparation Point of care detection. The automated real-time monitoring and detection system may be connected to a fast-acting actuator which may switch the airflow to a high filtration side channel. The real-time monitoring algorithm may be driven by a machine learning based decision support system, which may also have a human supervisory control and human interaction interface.

2 B.

Micro-fluid setup for aerosol continuous monitoring

Scenario: Biological terrorist attacks in indoor spaces pose specific challenges for prevention and preparedness, Infectious agent can be sprayed over a public space.
What if the HoloZcan project develops a system capable of detecting the presence of certain biological agents within a fast response time (seconds to a few minutes). The system can operate for longer periods of time without the need for reagent replenishment, the principles of holographic microscopy detection are the most appropriate and best applied. This may result a fully automated fast action protection for the first responders in a high-risk indoor facility.

Detection purpose: Detect a sudden increase in biological content in the air and or the appearance of some known pathogenic agent in the sample.

System characteristics: Impact/electrostatic/water-based, active and passive samplers with complex sample preparation Point of care detection. The system also integrates other (optical) techniques, e.g. spectral and fluorescence modularity, to ensure more stable measurements and more accurate detection.

3.

Handheld or light setup with different sampling heads for parcel scan and on-site works

Scenario: Unknown biological agent delivered by mail.

What is, the HoloZcan project develops a third-generation optical-based bio-detection system that combines a confocal and a digital holographic microscope (DHM) and other modalities for mail and parcel detection and detecting new potential threats.

Detection purpose: The system optimized for detecting the mass presence of very small nanoparticles, and a holographic laser imaging (DHM) that is capable to see/detect small particles like bacteria and viruses. Detection and classification of bacillus anthracis even in sporadic form, as white powder detection and its differentiation from common inorganic materials. By using spectroscopic methods and analysis of holographic patterns the biological level of particles can be estimated, and in many cases sub-categorization is possible.

System characteristics: The system includes a sample collection technology and subsystem for the initial assembly of biological data sets for further processing. Manual sampling system with different sampling heads for parcel scan and on-site analysis. A GUI interface with feedback information and an emergency screen about the level of alert, possible consequences, useful protection equipment, necessary actions, and proposed decontamination.

4.

HoloZcan on a disposal robot with remote control.

Scenario: Biological terrorist attacks in outdoor spaces pose specific challenges for prevention and preparedness. Immediately after their arrival, first responders should identify the sources of danger and detect whether there is biological contamination in the area.

What if the HoloZcan project develops a system capable of detecting the presence of certain biological agents within a fast response time (seconds to a few minutes).

Detection purpose: Detect biological content or the appearance of some known pathogenic agent in the sample.

System characteristics: Impact/electrostatic/water-based, active and passive samplers with complex sample preparation Point of care detection. The system also integrates other (optical) techniques, e.g. spectral and fluorescence modularity, to ensure more stable measurements and more accurate detection. The system includes automatic sampling technology and the analysis and evaluation of the results is done on the spot. The sampling system can be mounted on an unmanned platform (e.g. robot) with different sampling heads. The system is equipped with a GUI interface that provides an emergency screen with information on the alert level, possible consequences, useful protective equipment, necessary actions and recommended decontamination.

FEEDBACKS AND QUESTIONS FROM STAKEHOLDERS

1. In general:
   - - It was important to present the scenario visons to receive input based on the needs and possibilities, but stakeholders were rather interested in the core technology.
   - - The gap between the core technology and the field application was recognized by the stakeholders in connection with the reproducibility sample preparation and sampling.
   - - The most important keywords based on the stakeholders' interest (regarding the core technology): detection limits of specific bacteria, reproducibility, reliability.
2. How to place the device (HoloZcan method) in the detection and verification sequence? How can the basic technology and the other methods mentioned (complementary technologies such as spectroscopy) be integrated?
3. Many, or all of the biological detection methods that have promising performance under laboratory conditions fail during the validation tests on the field, because of the sudden temporal spikes deviating from the baseline. These spikes (elevations of microbiomic measures proportional with intensity or quantity) naturally occur on the field. Stakeholders suggested to start with controllable air sampling protocols under close to ideal conditions.
   - - Air cleaning system or device integration with the DHM technology: non continuous, but periodic sampling.
   - - Controllable release of low BSL objects (viruses and bacteria) to test the sampling and detection limits under laboratory conditions.
4. According to the stakeholders, the anomaly detection in baseline parameters is possible with the core technology , but they were critical about specific detection of certain pathogens or unexpected new objects.
5. Stakeholders pointed our attention to the fact that viruses -like bacteria- can form clusters generating a "grape" like appearance, which decreases the possibility of morphology-based detection even in the case of very high-resolution optical methods.
6. "Reproducible sample preparation" and "sample positioning" mentioned several times as an important issue to consider.
7. Importance of cleanability (decontamination) was mentioned also several times. Integrated H2O2 fluidic solution was suggested to avoid cross contamination induced false positive results.
8. Legal aspects of applicability and certification have been thoroughly discussed in case of forensics and 1st responder related scenarios/use-cases.
9. Bertin Technologies https://bertin-technologies.com/ mentioned, they succeeded in sampling COVID-19 from the air. Bertin Technologies https://bertin-technologies.com/ suggested to use the following Biological Alarm Monitor product from Proengin (https://www.proengin.com/) to benchmark the HoloZcan solution:
   http://www.proenginusa.com/common/PDF%20files/Bio%20Detector/MAB.pdf
   They tried many different sensor technologies in the field of biothreat detection, but all of them failed they are really interested in the success of the HoloZcan project.
10. For scenario 1 (Exhaled breath collection device and cartridge system for microscopic analysis):
    - The combination of the HoloZcan system with other techniques for screening infectious diseases, such as measuring body temperature, heart rate, respiration rate and integrating measured parameters into new metrics, can be an effective tool for early detection of infections.

- The HoloZcan system may not be as effective in the area of mass screening. The HoloZcan system can be used to test all persons working in a given workplace or work environment (offices, schools and hospitals), including those who do not show symptoms of illness.
- An invasive sampling technique, such as that used by the HoloZcan system, is inappropriate or difficult to apply for mass screening of sites. Currently, mass screening systems are generally non-contact thermographic systems for fever detection.

11. For scenario 3
    - Providing accurate detection of CBRNE materials and to avoid disturbing the postal workflow as far as possible.
12. For scenario 4
    - Do not place the sampler on a disposal robot, as they would be very difficult to clean if it is contaminated. Such a system should be developed for simpler robotic platforms, as there is no need for such precision movements for sampling.
    - In the case of a bioterrorist attack, a fast response time is important, so it is good if not only the sampling is done in the field, but also the analysis.
    - The question is how to re-aerosolize the deposited contamination. Usually by the time you get to the site and first responders have the contamination settled. The instrument must be able to absorb the deposited sample.
    - Identifying biothreats in the field quickly and accurately requires technology that is robust, reliable, and culture-independent.
    - Operating within dynamic and challenging environments also requires the ability to multitask and be proficient at sampling and detection using a variety of equipment and test kits.
    - Each situation is also challenged with the need for rapid turnaround time for results, multiple reporting structures and changing priorities.

REQUEST FOR POST-MEETING ANSWER GRIDS AND EVALUATION

To assist in this collection process, a document was drafted to guide Stakeholders in noting their ideas. It was named the **Answer Grid** and had been sent by email.

In addition a second form was also sent to receive feedback from all the event participants. The **Evaluation Form** contained questions on the overall quality of our gathering, and also on the future preferred formats for the next coming consultations.

The satisfaction evaluation of the participants

Elements evaluated	Rating
How do you rate the quality of the presentations	Very Good
Time allocated to Stakeholders to provide comments	Very Good
Quality of answers provided to Stakeholders' questions	Very Good
Assessment of using a written "Answers' Grid"	Very Good
Additional comment	You should have issued the "Answers Grid" at the start of the meeting giving us the chance to consider the questions and provide "live" feedback.

Recommandation for future Stakeholders' Meeting or Consultations

The next planned Stakeholders' discussion are very likely to take place online. We consider also the possibility to conduct some regional workshops with more limited numbers of Users and Stakeholders.

Proposals	Yes	Maybe	No
Conduct special Stakeholders' consultations Scenario-specific	xxx	xxx	
Conduct Hybrid meetings eventually hosted by a Stakeholder	xxxx	xx	
Keep all consultation meetings always open to all Stakeholders	xxxx	x	x
Keep consultation meetings within a one our duration	xx	xxxx	
Have consultation meetings with more input from HoloZcan	xxx	xxx	
Have consultation meetings with more input from Stakeholders		xxxxxx	
Hold consultation meetings on a quarterly basis (3 months)	xx	x	xxx
Hold consultation meetings on a half-year basis (6 months)	xxxx	xx	

5. COLLECTION OF HOLOZCAN SYSTEM OVERALL REQUIREMENTS

This is an initial list, that will be further revised throughout the continuation of the project.

- General Requirements: The HoloZcan system shall demonstrate improved detection/classification performance compared to the current state-of-the-art detection technologies. Become interoparable with sensor networks.
- Deployment Requirements: The time needed for the HoloZcan system to make a classification shall be equally good or improved while at the same time the false alarm rate must be reduced, compared to the current state-of-the-art detection technologies. Ability to communicate using 3G, LAN, Wifi, Wifi-direct, Bluetooth etc.
- Service and Resource Requirements: The training should provide guidance on the deployment of holographic microscopy system for the different scenarios.
- User Experience Requirements: The HoloZcan system will automatically provide certain information when certain events happen, and could include a related user alert.
- Security-related Requirements: Secure Data Storage, Secure Communication Channels.
- Non-functional Requirements: user-friendly sg., reliable data, automated services/actions, maintainability, configurability, compatibility with CBRN protocols etc.

6. CONCLUSIONS

Project activities related to the creation of scenarios have resulted in all consortium partners having a clear idea of the scenarios and use cases, and thus of the objectives of the developments during the project. The system architecture and the design of services, testing, demonstration actions, planning and evaluation are driven by user needs.

This deliverable documents the process of designing scenarios and use cases. It provides a high-level description of the scenarios in the form of user stories that the HoloZcan project intends to use for its development. The definition of scenarios and use cases is not static but will evolve throughout the project due to the complexity of HoloZcan.

The output of this activity will be fed into the agile process of system development. The use cases will provide input for the design of the functionality architecture and for validation and demonstration activities.

7. ANNEXES

ANNEX 4.1 PRESS-RELEASE / FIRST STAKEHOLDERS' MEETING

Deep Learning Powered Holographic Microscopy for Biothreat Detection on Field

The project Holozcan is announcing its first Stakeholders' Meeting on Wednesday 15 December 2021, in Warsaw, Poland.

Funded by the European Union's Horizon 2020 research and innovation programme, the project develops comprehensive and innovative means of respiratory, ventilation and environmental biological data sampling that can be used in real-time, standoff or in mobile context, to detect bio-threats in the form of pathogens and bacteria.

In order to identify the most needed range of applications, a consultation and exchange process with relevant Stakeholders has to be engaged, to best define users' needs.

This meeting aim is to support the conceptualization of HoloZcan work, and the identification of potential test studies. More specifically, the following activities will be done: 1. Presenting the proposed technical concept of the HoloZcan system to stakeholders; 2. Evaluating and reviewing selected scenarios; 3. Ranking, filtering and refining suggestions made during open discussion 4. Providing end-user guidance to the establishment of the suite of use cases; and, 5. Collecting end-user requirements for the HoloZcan system.

The venue will combine in-presence attendance, with an online teleconference simultaneously, so all project Partners and Stakeholders can attend in full, listen to the presentations and interact with each other's.

More information about the project can be found at www.HoloZcan.com , and also on LinkedIn at https://www.linkedin.com/company/holozcan/mycompany/ as well as on Twitter @HoloZcan / Contact details: INFO@HoloZcan.com

ANNEX 2.: EVALUATION FORM / FIRST STAKEHOLDERS' MEETING

EVALUATION
211209

EVALUATION

1. How do you rate the quality of the presentations?

A	B	C	D	E
Perfect	Very Good	Good	Average	Poor

2. How were the Stakeholders engaged?

2.1 Time allocated to provide comments?

A	B	C	D	E
Perfect	Very Good	Good	Average	Poor

2.2 Quality of answers provided to Stakeholders' questions?

A	B	C	D	E
Perfect	Very Good	Good	Average	Poor

2.2 Assessment of using a written "Answers' Grid"

A	B	C	D	E
Perfect	Very Good	Good	Average	Poor

3. STAKEHOLDERS' MEETING MODALITIES

The next planned Stakeholders' discussion will take place online following prior written communications to the Stakeholders. Please place crosses [X] in all the fields that apply.

Proposals	Yes	Maybe	No
Conduct special Stakeholders' consultations Scenario-specific			
Conduct Hybrid meetings eventually hosted by a Stakeholder			
Keep all consultation meetings always open to all Stakeholders			
Keep consultation meetings within a one our duration			
Have consultation meetings with more input from HoloZcan			
Have consultation meetings with more input from Stakeholders			
Hold consultation meetings on a quarterly basis (3 months)			
Hold consultation meetings on a half-year basis (6 months)			

4. Other comments and suggestions

Thank you very much.

All answers will be handled confidentially, only anonymous extracts will be eventually used for our reporting needs.

SECURITY SENSITIVITY ASSESSMENT

Objective

This form is related to the Security Sensitivity Assessment procedure which will assure that no sensitive information will be included in the publications and deliverables of the HoloZcan project.

Security sensitive information means here all information in whatever form or mode of transmission that is classified by Council Decision on the security rules for protecting EU classified information (2011/292/EU) and all relevant national laws and regulations. The information can be already classified, or such that it should be classified.

In practice the following criteria is used:

- Information is already classified
- Information may describe shortcomings of existing safety, security or operating systems
- Information is such, that it might be misused.
- Information that can cause harm to
  - European Union
  - a Member State
  - society
  - industry and companies
  - third country
  - citizen or an individual person of a country

Document Information

Project	HoloZcan: Deep Learning Powered Holographic Microscopy for Biothreat Detection on Field Grant Agreement No: 101021723
Deliverable:	D 5.6
Dissemination Level	PU
EU Project Officer	RISCHITOR Patricia Elena
Actual Submission Date	28/02/2022
WP Leader	DMI Associates
Authors	Michel Zayet

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No: 101021723

Assessment form for the main author

Please fill in the form below:
This is: pre-assessment □ final assessment □

List the input material used in the publication/deliverable: ---

List the results developed and presented in the publication/deliverable:

The draft publication
□ is attached to this statement
□can be found in link: --

This publication does include any data or information that could be interpreted as security sensitive.
□ Yes □ No □ Not sure

If not sure, please specify what are the material / results that you are not sure if they are security sensitive? Why?

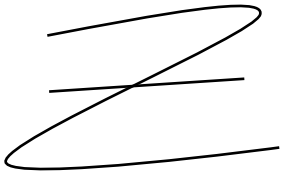
Date: 27 February 2022

Signature of the Responsible Author: 

Comments from the SAB member

☒ The publication can be published as it is.
Comments:

□ Before publication the following modifications are needed: - -
Comments:



Date 28 February 2022
Name: On behalf of the Security Advisory Board (SAB) Dr. Marcin Niemcewicz

Signature of the member of the SAB .  ..