iProcureNet 2024 Advanced Security Procurement Conference

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NEEDS AND OPPORTUNITIES FOR JOINT SECURITY PROCUREMENT

Innovation by developing a European Procurer



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Bulgarian Defence Institute

- The Bulgarian Defence Institute (BDI) "Professor Tsvetan Lazarov" is established in 2009. It is internationally recognized scientific organization, that has proved its unique expertise in the field of defence and security.
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THE MOST SUCCESSFUL ORGANIZATION IN BULGARIA IN HORIZON 2020, SECURE SOCIETIES AREA (now 2023 even better)

СЕРТИФИКАТ
ЗА ПОСТИЖЕНИЯ
ВИСТОВЦИЯ СВІТИФИНАТ ПО ОТБРАНА
"ПРОФЕСОР ЦВЕТАН ЛАЗАРОВ"
За устойнию раймтию на капацитота и успецью кластране и капълнения
на тосции по ЭТ Хоризонт 2020*

Main BDI's activities

- Scientific Research;
- Ph.D students' education
- Training;
- Providing specific expertise to MoD, MoI and other state institutions and private companies.

OUTLINE

- Introduction;
- Needs identification process;
- Information sources used and analyzed;
- Results;
- Summary.

OUR OBJECTIVES

- To collect and analyze the investment trends included in the plans and other documents from the procurers involved in the consortium and from the Target Groups (TGs)
- To collect and assess the needs for procurement of innovation solutions based on the preliminary market sourcing.
- To process these data and produce the a lists of candidate segments for JP.

The ultimate goal of iProcureNet project is to make procurement a catalyst for security innovation.

NEEDS IDENTIFICATION PROCESS (BEFORE)

- Identify the internal and external partners for the identification and needs assessment process.
- Determine which data are required to identify needs at the strategic, operational, and tactical levels.
- Determine potential sources of data to inform the needs assessment.
- Schedule interviews, create surveys, arrange focus groups, and collect documents to be reviewed.
- Train focus group facilitators, schedule performance observations, and so forth.
- Pilot test interview protocols, questionnaires, and other information gathering tools.
- Collect and assess information using a variety of appropriated tools and techniques.
- Identify common segments to foster innovation and Joint Cross Border Public Procurement (JCBPP)

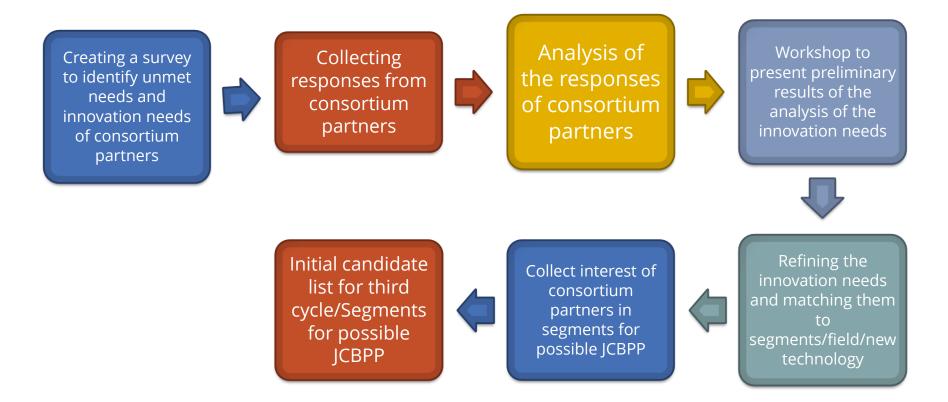
NEEDS IDENTIFICATION PROCESS A NEW APPROACH

What is new in the applied methodology after the initial analysis?

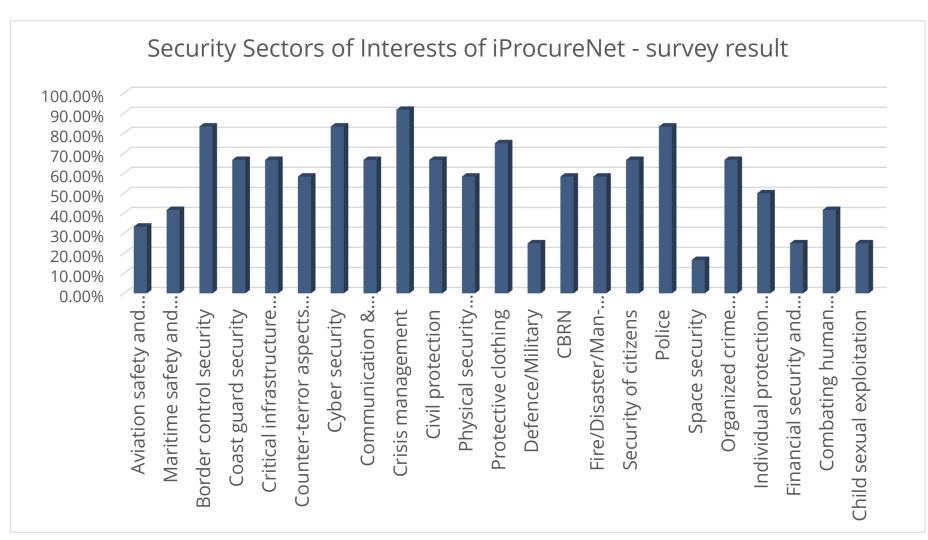
- Preliminary market consultation (PMC);
- Value engineering;
- Functional specifications.

NEEDS IDENTIFICATION PROCESS THE NEW APPROACH

Process of collecting data about innovation needs:



CREATING A SURVEY TO IDENTIFY UNMET NEEDS AND INNOVATION NEEDS OF CONSORTIUM PARTNERS



FINDINGS FROM THE ANALYSIS OF THE SURVEY

- Different organizational concepts of departments influencing innovation uptake;
- Barriers to innovation and solutions;
- Sectors that will become a priority in the future;
- New technologies that could be implemented in the security sector in the future;
- Identified unmet needs that cannot be fulfilled by existing goods or solutions on the market.

| No | Segment/field/new technology | Unmet needs/application domain |
|----|--------------------------------------|--|
| 1 | Climate change and its consequences. | |
| 2 | artificial intelligence | Application using AI for search and rescue mission |
| | artificial intelligence | Use of artificial intelligence in the analysis of data collected through audio-visual and other means application of artificial intelligence in the field of online / offline image evaluation, face reco, search for persons and identifiers in the granetet deepnet, darknete, search in text documents, such as bank account numbers, phrases, etc. |
| | Artificial Intelligence | Criminal investigation - Artificial Intelligence and Machine Learning, causing a disruption in the traditional ways of working, allowing new approaches and greater speed of processes within the scope of Criminal Investigation. |
| 3 | Big data analysis | With the exponential growth of the volume of data to be analysed by the security forces, Big Data and Analytics solutions will enable significant improvements in the quality and analysis of data in real time. |
| | Big data analysis | Even though some solutions are available on the market, they need to be tailored to the specific need of our organisation |

| No. | Segment/field/new technology | Unmet needs/application domain |
|-----|------------------------------|--|
| | Drone/antidrone | Identifying and taking control of unknown UAVs and other devices in order to increase the level of physical security. |
| 4 | Drone/antidrone | Protection against unauthorised use of drones. |
| | Drone/antidrone | Drone management and anti drone control |
| 5 | Drone | unmanned aircraft systems, their operation being useful in making the execution of specific missions of the Ministry of Internal Affairs more efficient. |
| | Drone | Sensors and Robotics can also bring high efficiency in the investigation actions, namely in the use of unmanned vehicle |
| 6 | video protection | flow management, abnormal movement detection, security of goods and people, detection and identification of suspicious packages, infrastructure protection. |
| 7 | Hypervision systems | aggregation of multiple and heterogeneous data) allowing better central coordination/forces deployed in the field |
| 8 | Cybersecurity | |

First cycle of data collection and analysis:

- Gloves for the personnel;
- Information technologies and components;
- Surveillance cameras;
- Different type of specialized vehicles for border security;
- Drones/Unmanned Aerial Vehicles;
- Maritime intervention vessels (boats);
- Shooting training equipment (targets);
- Ballistic vests;
- Travel documents analyzers and scanners;
- Forensic software;
- Personal Protective Equipment;
- Explosive detection equipment.

Second cycle of analysis:

- Drones/Unmanned Aerial Vehicles;
- Metal detectors;
- Ballistic vests;

Third cycle of analysis

- Anti-drones systems;
- Jammers.

SUMMARY

Needs identification process:

- A structured way to identify capabilities requirements and needs to be covered;
- Different types of experts must be included in the process.

Common taxonomy and security sectors for all partners are key for success

The most promising areas for JCBPP:

- Anti-drones systems;
- Jammers.

THANK YOU!



Innovation by developing a European Procurer Networking for security research services

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