iProcureNet 2024 Advanced Security Procurement Conference

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ESTABLISHING PROCUREMENT PATHWAYS



Innovation by developing a European Procurer Networking for security research services



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WHAT DO WE DO IN IPROCURENET?

1. compare investment plans 2. Based on it, identify segments for possible JCBPP 3. choose the most promising segment for JCBPP 4. Feasibility study of segment – legal and financial

WHAT DO WE DO IN IPROCURENET?



8. Based on it, general methodology is produced.



And we repeat the process three time – 3 cycles of iProcureNet

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INNOVATION NEEDS

New method for collecting JCBPP needs was introduced in the third cycle

- Investment plan analysis identifies potential JCBPP segments that are COTS
- The new methodology identifying the consortium partners' innovation needs through surveys and follow-up workshops and meetings

WORKSHOP ON TECHNICAL DESCRIPTION

- In deliverable 2.5, two potential segments for JCBPP were identified, and eight segments with innovation needs
- for in-depth analysis of these segments/innovation needs; we need to narrow down the numbers and describe the technical description/innovation need in more detail.
- During the workshop, the participants focused their attention on three out of the eight identified segments.

WORKSHOP ON TECHNICAL DESCRIPTION

- Participants focused on 3 segments which were chosen as most promising either because of
 - Interest of the consortium partners,
 - Urgency
 - Benefits it can bring to LEAs
- The segments that received further attention
 - Mitigation and adaptation to climate change
 - Use cases of artificial intelligence by LEAs
 - Drones and in-drone technology.

WORKSHOP ON TECHNICAL DESCRIPTION



STEPS IN WP4



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USE CASES

identified segments and connected use cases:

- Segment no. 1 Climate change and its consequences
 - Use case no. 1 Waste fires
- Segment no. 2 Artificial Intelligence
 - Use case no. 2 AI in the analysis of data collected through audio-visual and for video protection (flow management, abnormal movement detection
 - Use case no. 3 Hypervisor systems with AI
- Segment no. 3 Drone/antidrone solution
 - Use case no. 4 Detection, identification and neutralizing of drones

Segment no. 1 - Climate change and its consequences

Use case no. 1 – Waste fires

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Background:

- Tracing criminals causing fires or illegal dumping at waste sites is difficult. Being able to compare pre- and post-fire conditions helps quantify burnt waste and environmental damage.
- The same technology can verify if reported waste amounts match actual amounts dumped.
- Currently, there's a shortage of measures to prevent cross-border impacts and usable data for criminal evidence.

Foreseen steps involve:

- Assessing monitoring capabilities to identify improvements.
- Identifying commonly dumped illegal substances.
- Creating a model comparing waste amounts preand post-incident.
- Aggregating data from past incidents.
- Developing measures to address these incidents.
- Establishing quick communication between relevant entities.
- Implementing interventions to prevent illegal activities and mitigate damage.
- Standardizing reporting and data collection for court admissibility.

Goal:

The aim is an alert system preventing illegal waste dumping and fires at waste sites, mitigating cross-border damage.

 The system would quantify burnt waste and environmental damage, verify reported waste amounts, and standardize reports for court proceedings.

RESULTS OF MARKET ANALYSIS – USE CASE WASTE FIRES



RESULTS OF MARKET ANALYSIS – USE CASE WASTE FIRES

- While the responses provide a promising outlook on the current status of technological developments addressing waste fires, it is clear that more work needs to be done.
- Most of the existing solutions focus on detection and monitoring, leaving a gap in solutions that can actively prevent waste fires or mitigate their impact once they occur
- Voverall, this suggests that while each of these products offers unique capabilities, none can single-handedly tackle all the challenges related to waste fires and illegal dumping.

RESULTS OF MARKET ANALYSIS – USE CASE WASTE FIRES

 In conclusion, no single organization can tackle all challenges with one solution

 Therefore we recommended that EBG or interested organisations starts the process of PCP

 or look into possiblity to include the specific use case in the proposal addresing the climate changes and adaptation

USE CASE NO. 2 – AI IN THE ANALYSIS OF DATA COLLECTED THROUGH AUDIO-VISUAL

Segment no. 2 - Artificial Intelligence

Use case no. 2 – Al in the analysis of data collected through audio-visual and for video protection (flow management, abnormal movement detection

USE CASE NO. 2 – AI IN THE ANALYSIS OF DATA COLLECTED THROUGH AUDIO-VISUAL

Background:

- involves AI neural networks for monitoring extensive CCTV footage, including tracking unusual individual behavior.
- Camera systems are deployed due to security challenges and to guard public spaces against potential terrorist threats. But, monitoring footage requires significant time and attention.
- Al can greatly assist in processing large amounts of video footage.
- Over 50% of recordings are not analyzed due to the time-consuming process.
- This is also true for social media monitoring where only 10% of content can be analyzed.

USE CASE NO. 2 – AI IN THE ANALYSIS OF DATA COLLECTED THROUGH AUDIO-VISUAL

Goals:

- Identify suspicious behavior in public spaces.
- Prevent terrorist attacks and identify other illegal activities.
- Provide real-time analysis with security alerts for the Police Force.
- Improve monitoring and analysis efficiency from 10% to 70%.
- Use AI to reduce response time and increase camera system operator efficiency.
- Identify up to 23 entities in an image, alerting the operator upon detection.
- Enable active search mode for specific target patterns or characteristics.
- Ensure GDPR compliance and personal data protection, even with face recognition.

RESULTS OF MARKET ANALYSIS – AI IN THE ANALYSIS OF DATA



RESULTS OF MARKET ANALYSIS – AI IN THE ANALYSIS OF DATA

- ✓ 21 responses in total, 13 offered COTS, 8 feedback that the challenge can not be tackled by existing solutions
- In conclusion, analysis presents a panoramic view of the diverse AI-based video analytics solutions available in the market
- Whether it's monitoring crowd movement, detecting suspicious behavior, identifying specific individuals, or alerting to potential security threats, these solutions are playing a pivotal role in leveraging AI for a safer world.

RESULTS OF MARKET ANALYSIS – AI IN THE ANALYSIS OF DATA

- In conclusion, there seems to be solutions already available on the market that can adressed challneges mentioned in the use case.
- EBG can start the process of JCBPP if they want to procure the COTS
- If the partners would like to adress challenges that the presented solutions cant tackle they can include the specific use case in the proposal for Horizont Europe funding

THANK YOU!

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