

GENERAL INFORMATION

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<p>Profile Title</p>	<p>Max 256 characters</p>
<p>Danish SME ReallyARobot with innovative wildlife monitoring technology looking for collaboration partner to refine and expand the capabilities of their product.</p> <p>Open for participation in Horizon Call Digital for nature – Destination 1: Biodiversity and Ecosystem Services HORIZON-CL6-2024-BIODIV-01-2: Digital for nature (Innovation Actions) Funding & tenders (Digital for nature)</p>	
<p>Short Summary</p>	<p>Max 500 characters</p>
<p>Danish company has invented an innovative wildlife monitoring technology, offering capabilities beyond those of traditional wildlife cameras. Its versatility makes it ideal for a multitude of applications—from providing remote monitoring for animal traps, thereby alerting users to captures in real-time, to tracking elephants in dense jungles. The modular design allows for customization to suit a wide array of specific requirements and use cases.</p>	
<p>Full Description</p>	<p>Max 2000 characters</p>
<p>The innovative device is the brainchild of a team of skilled technical professionals, who have collaborated with Danish wildlife experts. Their collective vision focuses on reducing unintended wildlife captures ("bycatch") on land and bolstering biodiversity.</p> <p>The technology offers various features, such as a user-friendly mobile application, wireless communication and advanced sensors and cameras. Read the details of the different features under Advantages and Innovation</p>	
<p>Advantages and Innovation</p>	<p>Max 2000 characters</p>
<p>APP/WEB INTERFACE: The product integrates with a user-friendly mobile application, which facilitates straightforward device registration, GPS coordinate setting for installation locations, and provides real-time data from each device, including signal strength, battery level, captured images, and activation details. A web interface is also available for streamlined activity tracking in larger projects.</p>	

WIRELESS COMMUNICATION:

The device is equipped with a GSM module, enabling mobile network connectivity up to 4G. Depending on the project's needs, the device can be outfitted with alternative technologies like 5G or LoRaWAN, Sigfox, VHF or low-frequency GSM. Customized communication solutions can be explored to ensure optimal performance in specific scenarios.

SENSORS:

With an emphasis on rapid and flexible customization, the product comes standard with a PIR (Passive Infrared) sensor for motion detection and a REED/MAGNET/TEAR-OFF sensor to note the removal of a magnetic disc—particularly useful for projects with moving components. The device also provides headers for additional sensors, and it has been tested with ultrasonic range finders, mechanical switches, and supplementary lighting. Swapping sensors, like vibration or tilt sensors, are seamless and don't require any software changes.

CAMERA:

The camera module includes an automatic IR (Infrared) cutoff filter, intelligently switching between RGB imaging for daylight and IR for nighttime use. The module can be exchanged to meet specific quality requirements and desired fields of view.

BODY:

The housing of the device is constructed from PET-G, a material chosen for its recyclability and exceptional durability. Its water-repellent properties and resilience to extreme weather conditions make it superior to other materials. The 3D-printed housing enables us to customize the shape and form to each unique application, ensuring performance even in the harshest environments.

BATTERY:

We use high-capacity rechargeable LiPo (Lithium Polymer) batteries. These batteries are designed for quick and easy replacement.

AI:

Our AI capabilities are in development both on the device and in the database. The on-device AI will specialize in selective image capturing and responsive actions, while the database AI, once equipped with complete datasets, will classify images by the presence and type of animal, relegating unidentifiable images to a separate folder for further analysis.

We have already implemented an AI algorithm that analyzes the images sent to the database and can remove images where no trace of animals is found. This reduces the time of seeing empty images significantly.

PARTNER SOUGHT

Expected Role of the Partner

Max 4000 characters

The company seeks collaborative partnerships to refine and expand the capabilities of their technology across various domains where reliable animal data and imagery are vital. Their goal is to collect extensive datasets on diverse animal species to enhance and train their AI algorithms.

By joining forces with the Danish company, partners have the opportunity to contribute to the conservation and study of wildlife, leveraging cutting-edge technology to make meaningful advancements in the field.