



Australian Government

Department of Agriculture, Fisheries and Forestry

# Developing a future-ready biosecurity system



# RESEARCH & INNOVATION

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Innovation, Legislation and  
Education

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Biosecurity Strategy  
and Reform Division

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Department of Agriculture,  
Fisheries and Forestry

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# About us

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## Innovation Pilots

Test innovative technologies that are available now to optimise how we work today.

Pilots are run in short, sharp cycles to test ideas in the field which involves pilot design, sourcing assets and supporting pilot activities right through to evaluation & final recommendations.

## Biosecurity Innovation Program

Invests in new technologies and approaches to enhance Australia's biosecurity system – with applications open to the public.

It supports collaboration between industry and government and helps Australia maintain our favourable pest and disease status and our access to export markets.



# Some of our Innovation Pilots ...



## **'temi' the telepresence robot**

Discovering new ways of doing things without the need to be physically present



## **Remotely Operated Vehicles**

Testing the effectiveness of ROV's to conduct biofouling inspections



## **Livestreaming**

Further testing our livestreaming capability with new technology





# Some of our BIP projects



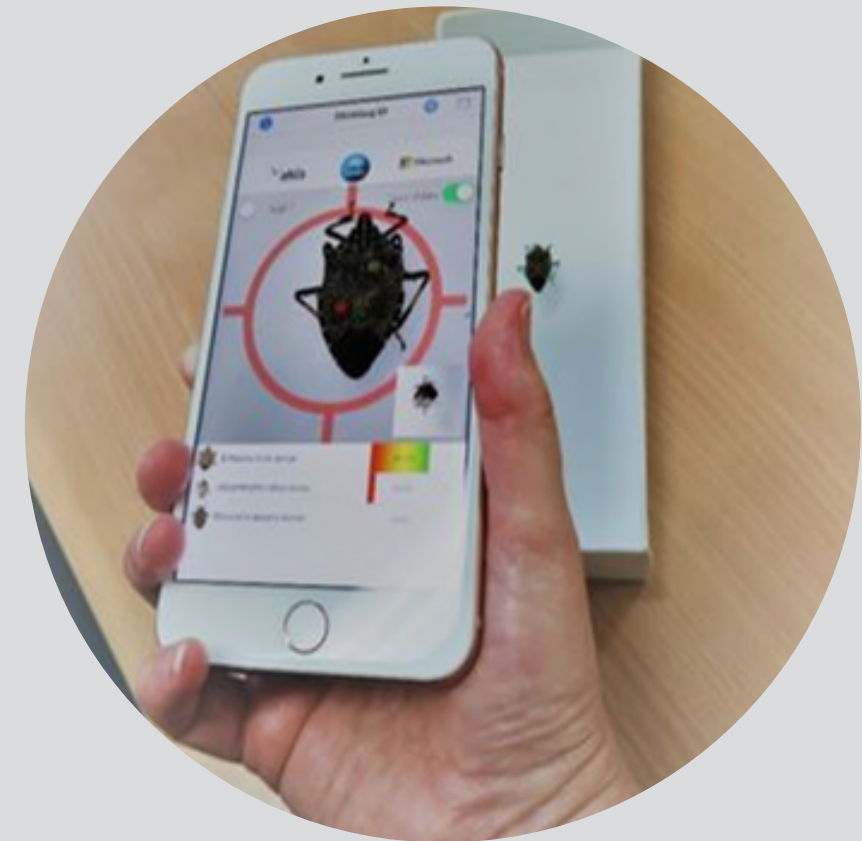
## Cloud repository for AI training data

Scope and design a solution for a cloud-based AI training repository



## eDNA for biosecurity identification

Testing eDNA technology to detect pests, parasites and diseases



## Brown Marmorated Stink Bug App

Mobile identification of brown marmorated stink bug





# Boston Dynamic's 'Spot'

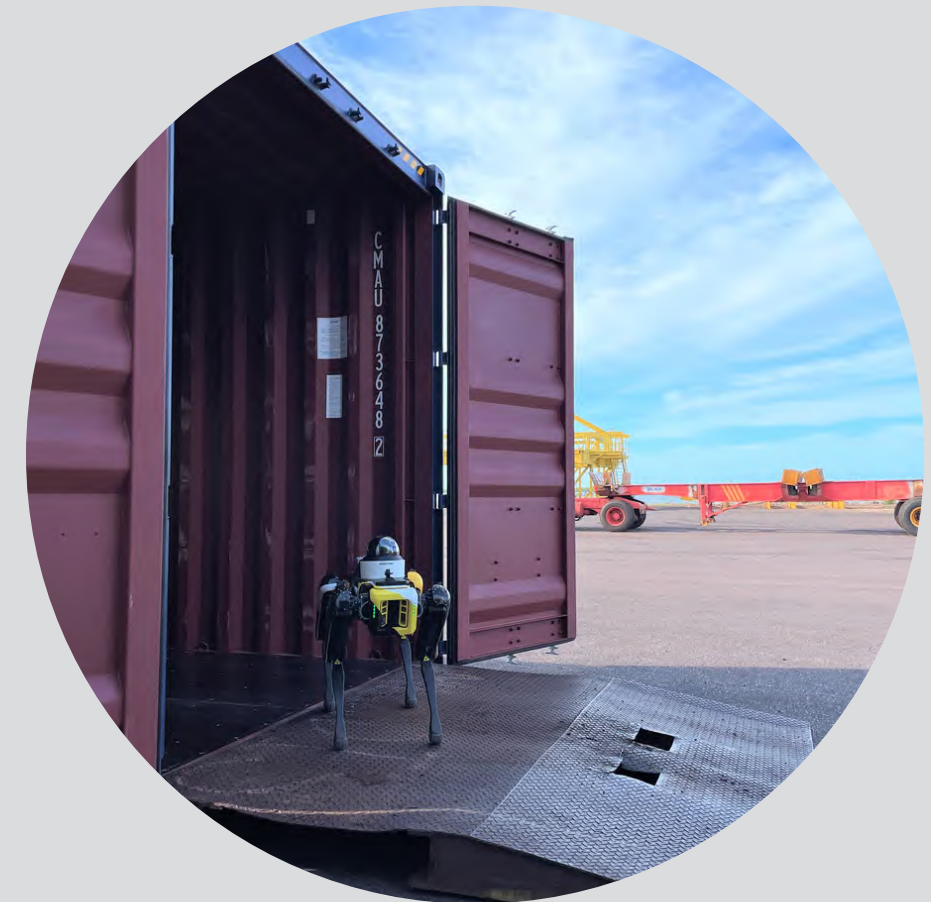
**Boston Dynamic's 'Spot' is a four-footed agile robot that can traverse rough terrain with ease and undertake routine inspections remotely.**

Spot can carry a number of payloads (up to 14kg) that can include imagery and sensor devices and an arm that can open doors and pick up items.

Spot can live-stream, take images, collect data, detect harmful gases, round up sheep and even dance!

We will be:

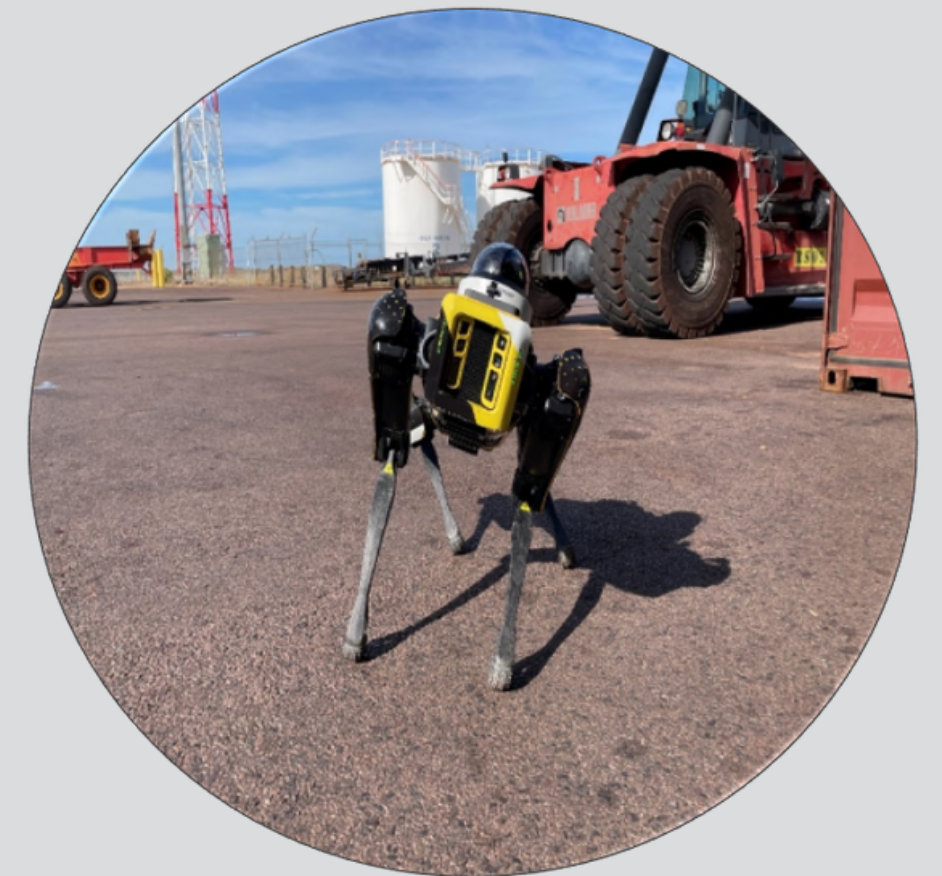
- testing Spot in container and vehicle inspections
- exploring integration with other technologies
- building on the robot's autonomous capability





# Spot specifications

- **Length** = 1100 cm
- **Width** = 500 cm
- **Default Height (Walking)** = 610 cm
- **Max speed** = 1.6 m/s
- **Net mass/weight** = 32.7 kg
- **Average runtime (no payload)** = 90 mins
- **Standby time** = 180 mins
- **Recharge time** = 120 mins
- **PAYLOADS Max weight** = 14 kg





# Contact us if you want to talk more about what we do and for further information.

**Email address**

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