



**indigo**  
drive™

**ABD** SOLUTIONS



# Your fleet, but driverless



With a focus on creating safer, more efficient work environments, tackling driver shortages and supporting ESG goals, we created **Indigo Drive**; a full-stack self-driving system to deliver autonomy faster, and more cost effectively, using your existing vehicles.



## Boost Productivity

Fully synchronised vehicle operations to ensure total site optimisation.



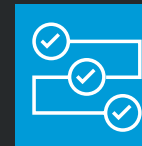
## Enhance Safety

Remove people from harm's way and reduce chances of human error.



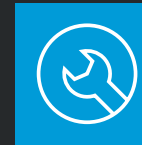
## Increase Efficiency

Remove driver downtime allowing assets to work at 100% potential capacity.



## Simplify Operations

Our software allows vehicle supervisors instant visibility of all assets (AVs and non-AVs).



## Retrofit Quickly and Easily

Add to any vehicle type quickly and easily with minimal vehicle modification.



## Make Operational Savings

Reduce fuel costs, emissions and tyre wear and see OPEX savings from reduction in personnel costs.



# Features



Driverless or remote vehicle control



Detect, stop and go and pedestrian detection



Accurate path following



Integrates with existing fleet management systems



Plan and allocate tasks



Secure communications and GPS / GNSS localisation



CAN or robotic actuation



Built for harsh weather and environments



High-availability redundant architecture



Functionally safe architecture meets IEC612508: 2010 and ISO17757: 2019





# Plan and go

Indigo Drive's **user-friendly** task planning software ensures vehicles take the most **efficient** routes, reducing fuel consumption and time to complete operations.



As vehicles detect obstacles, they alert the vehicle management system preventing others from facing the same issue. Once an obstacle is flagged, the vehicle management system generates a new route, or an operator can remotely access and assess the situation.

Indigo Drive also digitises key vehicle data, providing powerful insights to fleet operators. The vehicle's speed, location, fuel level, diagnostic status and distance-to-target can all be relayed to inform operational decisions, maintenance scheduling, and logistics planning.



# Your site, your way

A **scalable**, full stack, **high-availability** ecosystem. **Cyber-secure** and built for **functional safety**.



## Radio Network Base Station

Connecting the vehicle supervisory system to the network - whether in an office, site cabin or vehicle.



## Radio Network Repeater Station

Boost coverage and redundancy across even the largest site.



## Server Room

High-availability servers manage vehicle fleets and site operations. Provided on or offsite as preferred.



## Site Traffic Management System

Keep personnel and the public out of harm's way with automated traffic lights, barriers and other site safety systems.



## Control Room

Manage multiple vehicles at once via a user-friendly software interface.



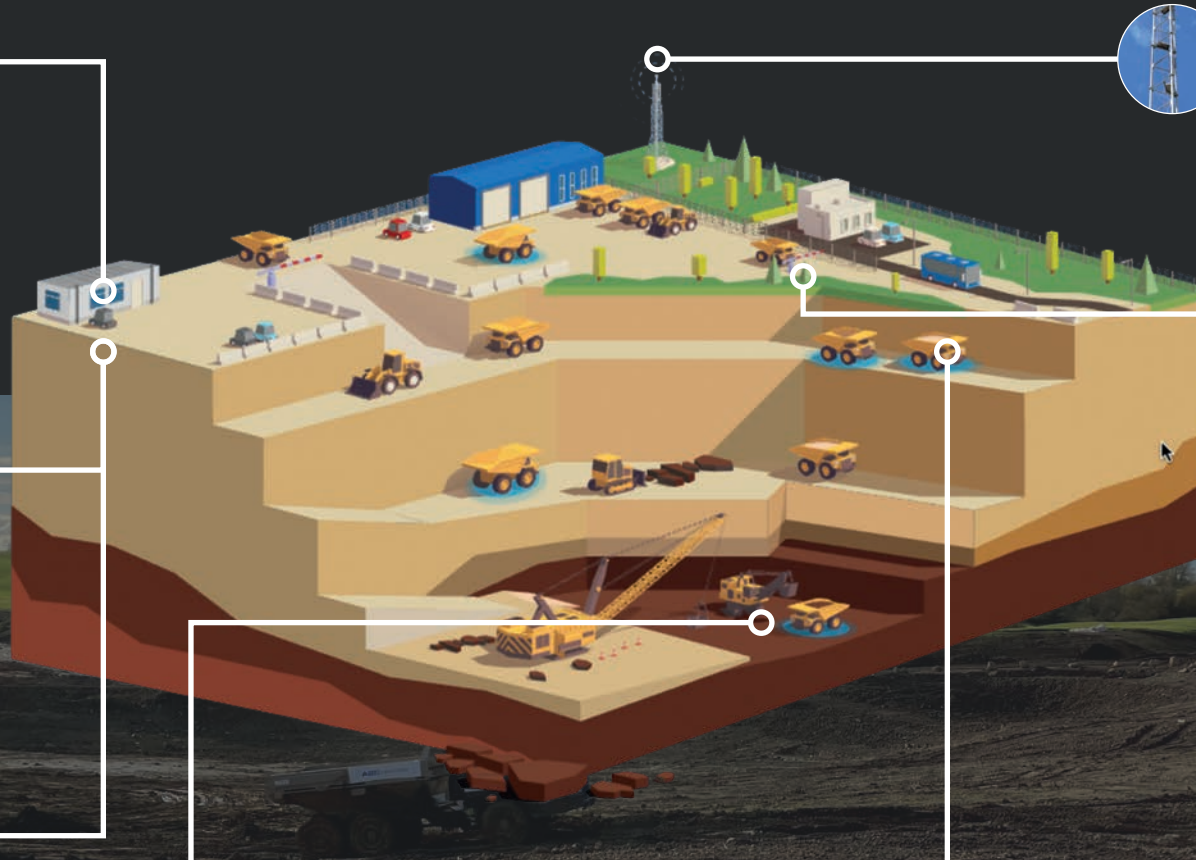
## Vehicle Automation System

Create safer driving operations using our smart perception system (LiDAR, camera, and radar) and reliable vehicle control using robotic or Controller Area Network (CAN) technology.



## Driver Connectivity System

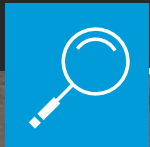
In-cab driver system allows manual and autonomous vehicle operation.





# With you, every step of the way

Wherever you are in your autonomy journey, we'll collaborate with you as partners, ensuring you reach your goals.



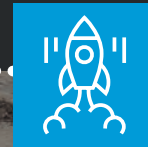
## Assess

- ✓ Understand challenges
- ✓ Agree goals
- ✓ Outline timescales



## Tailor

- ✓ Define solution
- ✓ Agree strategies for:
  - Business
  - Site
  - Vehicles



## Roll out

- ✓ Adapt site
- ✓ Convert vehicles
- ✓ Business process implementation
- ✓ Training



## Support

- ✓ Ongoing bespoke support:
  - Regional
  - Onsite
  - Remote diagnostics



# We provide...



## Fleet Conversion

Conversion of existing fleets and sites, to benefit from autonomy, across a range of industries, whatever the vehicle type.



## Vehicle Actuation

For those already using autonomy with an existing tech stack needing additional vehicle actuation.



## Site Simulation

Exploration of a site's potential for autonomy using our digital twin environment that accurately simulates and tests any scenario.



## OEM Collaboration

Partnership with OEM's who need a helping hand adding autonomy to a product.

## Ideal for...

✓ Mining ✓ Heavy Industry ✓ Materials Handling ✓ Construction ✓ Logistics ✓ Agriculture ✓ Defence

# About us

As part of the global AB Dynamics plc group, we have a heritage of driving vehicle safety and are market-leaders in vehicle actuation, control and automation. With offices around the world, our innovations solve global challenges.

Have a question?

Contact: [info@abdsolutions.com](mailto:info@abdsolutions.com)



## ABD SOLUTIONS

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