

Freight Terminals of the Future

Welcome to the SME Collaborative Challenge

Freight Terminal of the Future.

Launch event - Wednesday 20th April 2022

Bob Hodgson / Rail Forum

Freight Terminal of the Future - Agenda

- 2.00 – Welcome, Introduction of the clients and supporting organisations (Bob Hodgson)
- 2.05 – Terminals of the Future – Setting the Scene (Chris Swan / Tarmac)
- 2.15 – Problem statements:
 - a) Terminal Sites (Nick Scofield / Freightliner)
 - b) Terminal Operations (Suzannah Rockett / GB Railfreight)
 - c) Rolling Stock – Locos & Wagons (Ben Garner / Tarmac)
 - d) Systems Integration and Connectivity (Steve Ball / DB Cargo)
- 2.45 – The Challenge Process and Timeframes (Bob Hodgson)
- 2.50 – Funding Opportunities, FOAK and Project Support (Ian Evley / InnovateUK)
- 3.05 – Q&A (All)
- 3.15 - Close

Freight Terminals of the Future – Clients & Supporting Organisations

Client Companies/Representatives:

Chris Swan - Tarmac

Ben Garner - Tarmac

Gary Wells - DB Cargo

Steve Ball – DB Cargo

Suzannah Rockett – GB Railfreight

Andy Cox – ERMEWA

Nick Schofield – Freightliner

Nigel Day – VTG

Supporting Organisations:

- Ian Evley – InnovateUK
- Gary Wright – University of Derby
- Rosemary Horry – University of Derby

- Rail Freight Group

Freight Terminals of the Future

Setting the Scene

Chris Swan / Tarmac

Railfreight terminal of the future

Chris Swan – Head of Rail



Building  our future

Tarmac at a glance

Leading materials capability

1,720
fleet vehicles

+30
train sets

51
Recycling/RAP plants

3
Cement plants

10
Marine wharves

2
Lime plants

93
Quarries

45
Building products sites

4
Marine dredgers

97
Readymix plants

17
Contracting depots

56
Asphalt plants



Leading
materials
capability



**7,500
people**
within our
organisation



National
Contracting and
Highways Services



Materials
Offsite manufacturing
Building products
Aggregates
Readymix
Pre-cast
Cement
Asphalt
Lime

Rail capability



1450
tonnes

Average load size

9
million tonnes

of materials transported annually

1
loaded aggregate train

is equivalent to 66 loaded lorries

30
trains

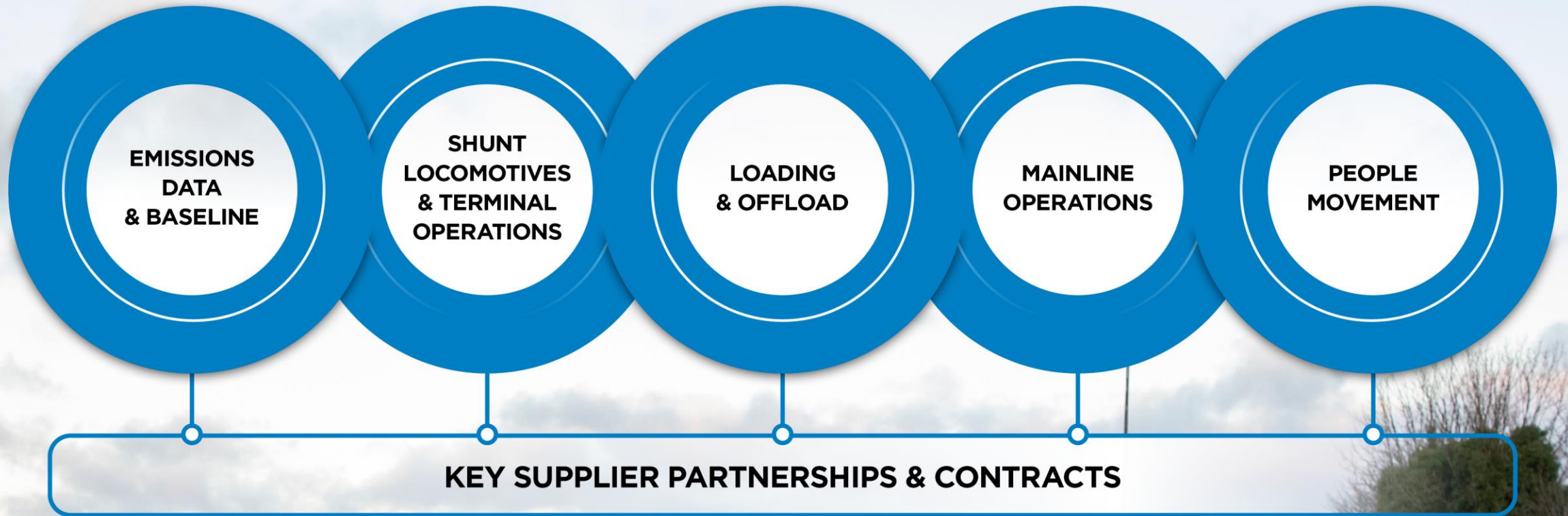
operating daily

1
loaded cement train

is equivalent to 54 loaded lorries



Rail transitional roadmap



SME Decarbonisation challenge

Case studies and success

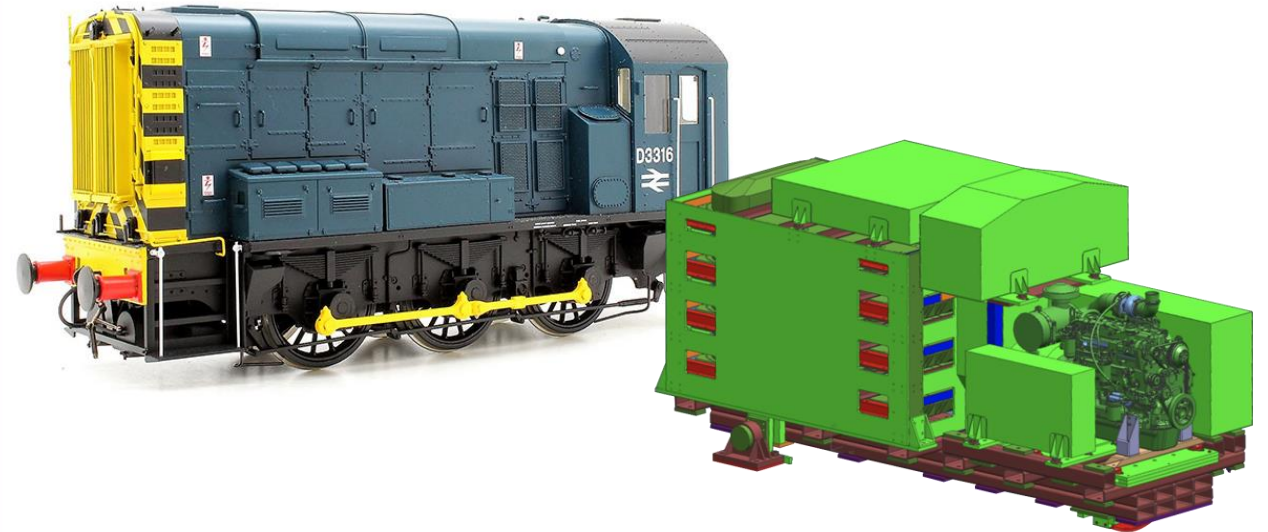
Furrer and frey

Retractable catenary



Meteor power

Conversion of 08 locos from Diesel to Battery

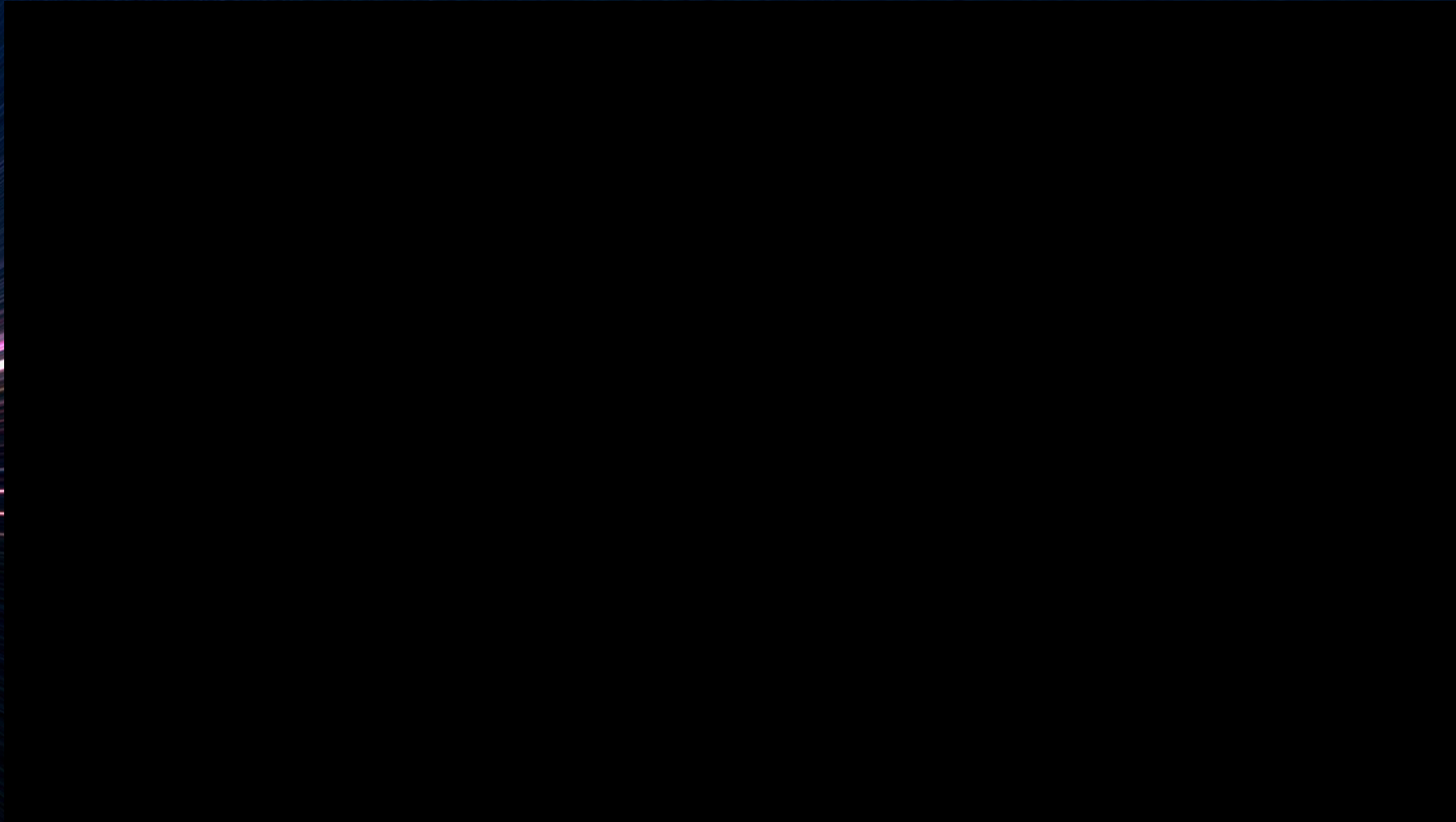


[View here](#)

Freight terminal of the future



Freight terminal of the future



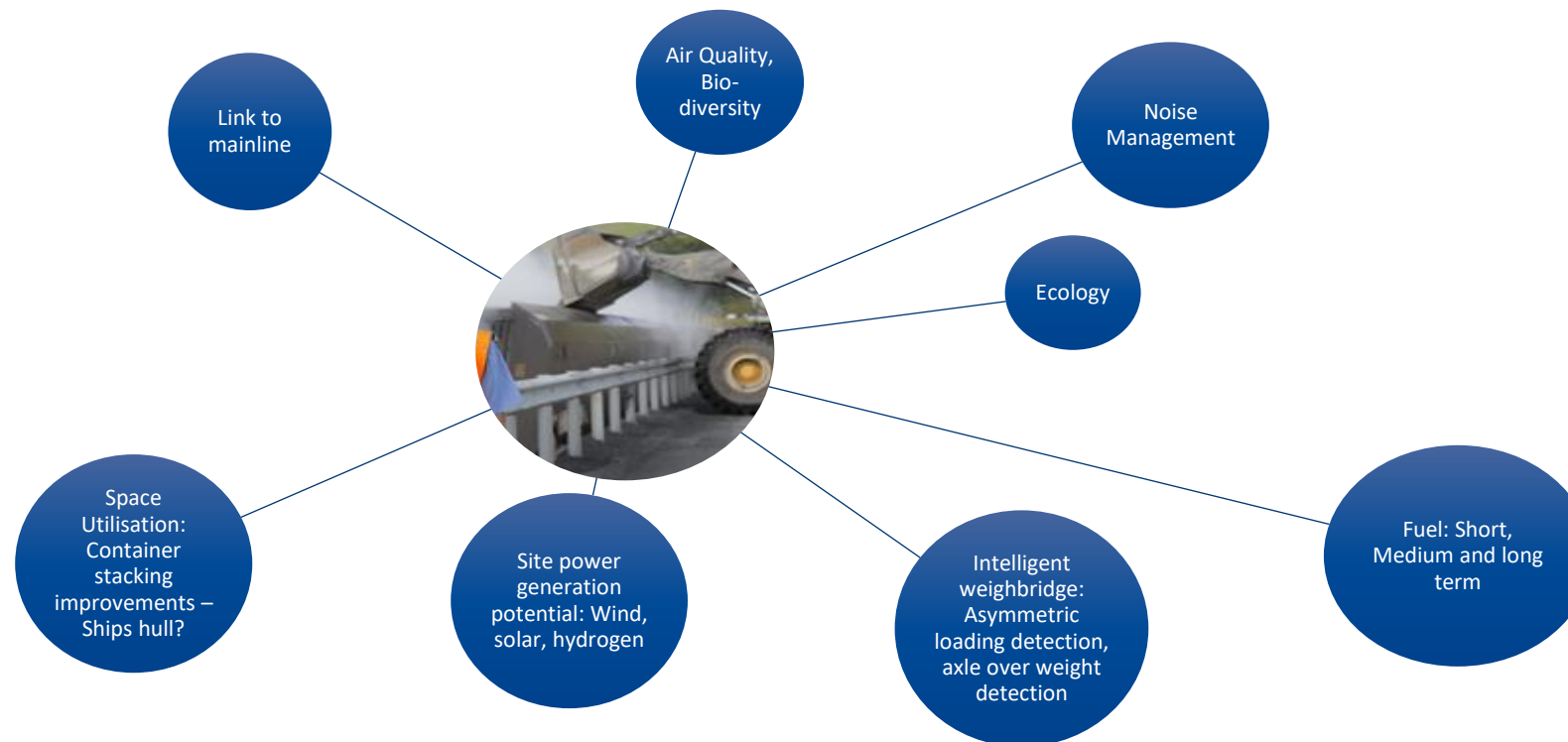


Next steps

Event will be 1400 on the 20 April 2022

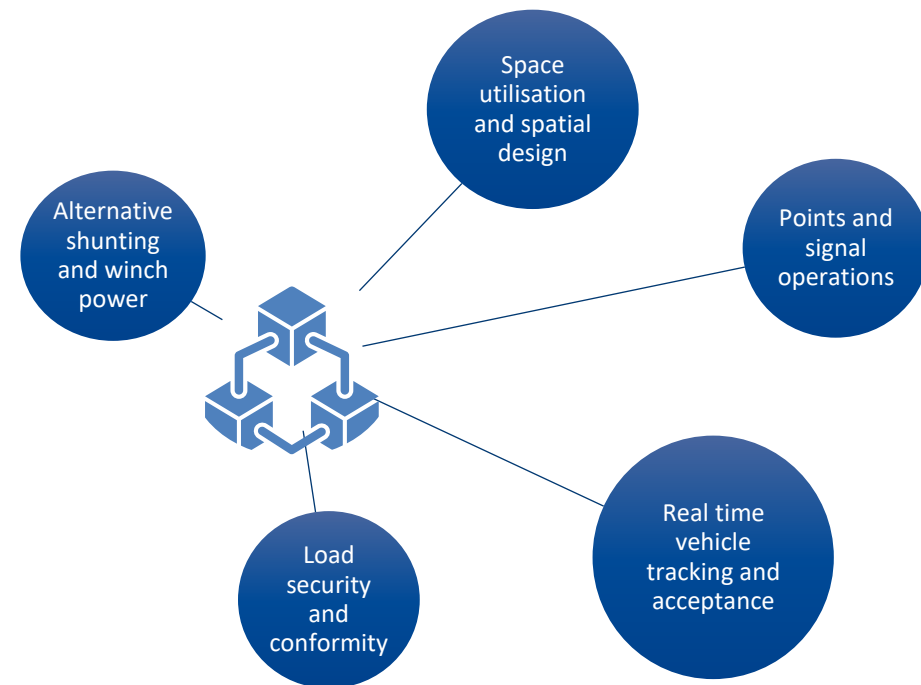
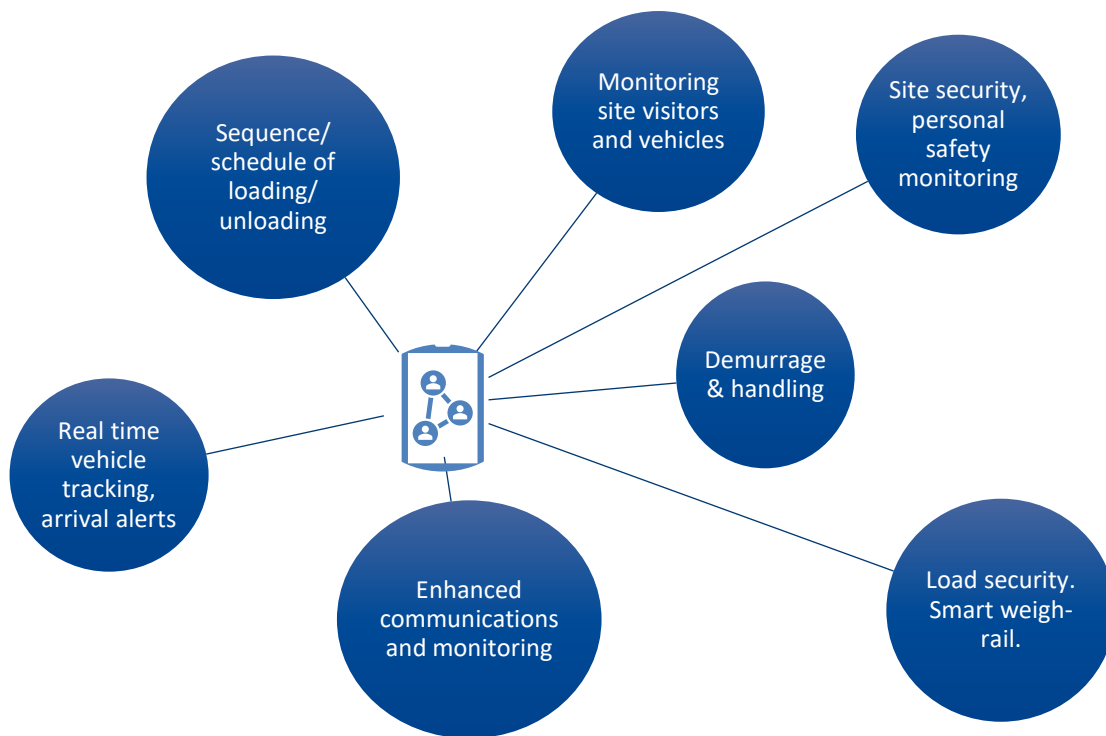
Show us your product or solution
and we'd love to work with you!!

Terminal of the Future – Terminal Site



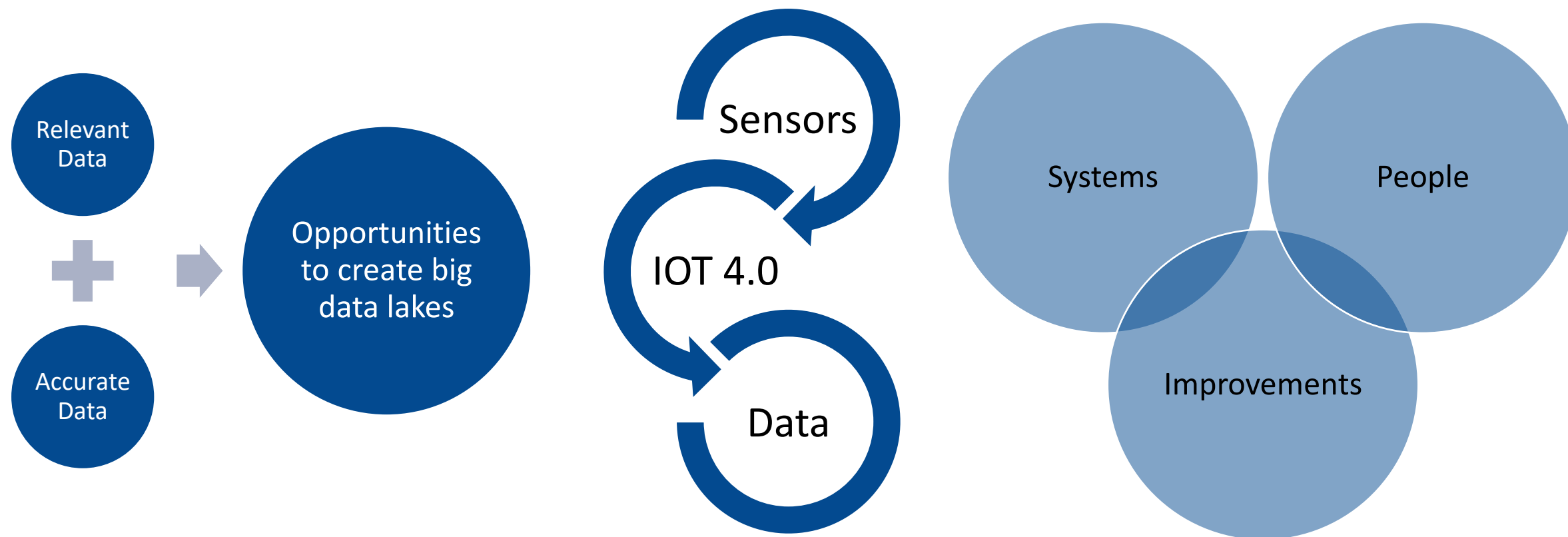
Problem Statement: The terminal facilities that are in operation today are based around a design that's on average 60 years old. If we were to design a terminal today what would we want it to look like in 60 years time ? We need to design for the future not the past

Terminal of the Future – Terminal Operations



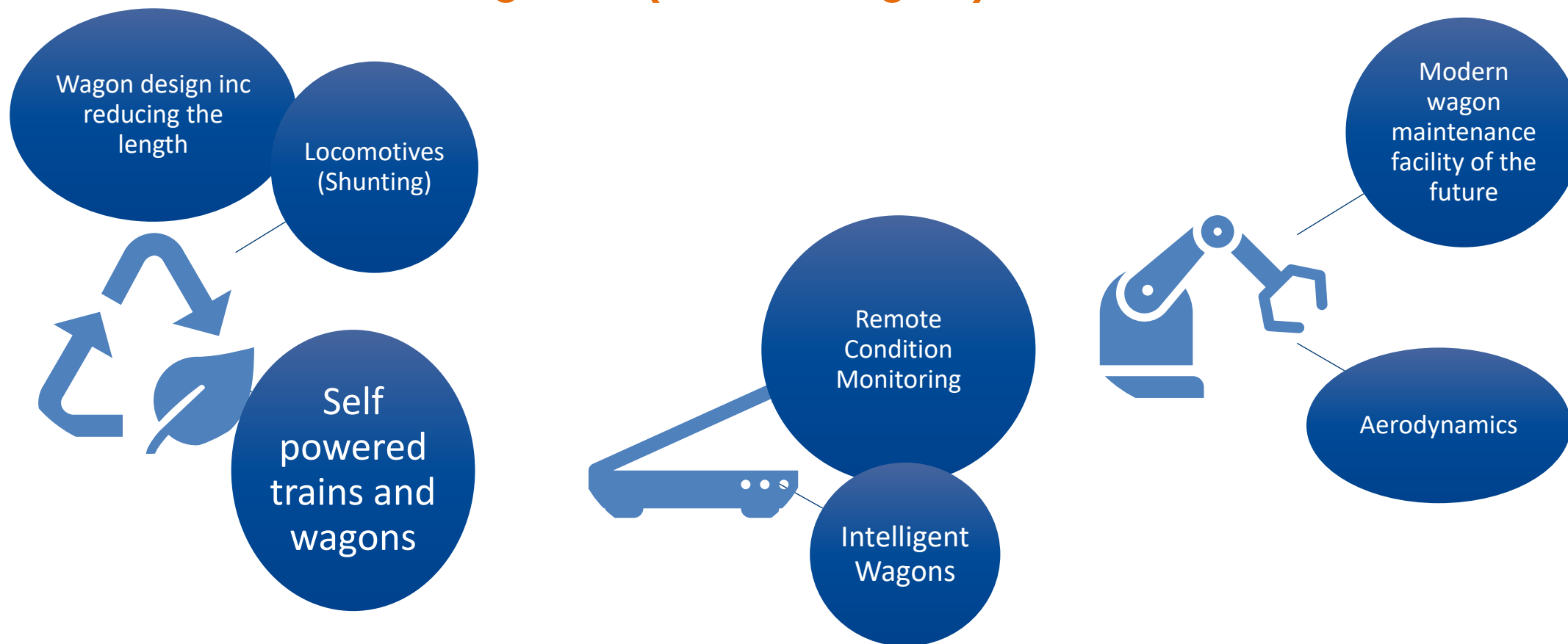
The rail freight sector operates multiple types of terminal which come with many operational challenges. To ensure they are fit for the future, we need to consider streamlining solutions through automation and digitalisation to create long lasting economic value in the decarbonised environment of the future.

Terminal of the Future – System Integration and Connectivity



Digitising the way we work across all terminals is an enabler - delivering great benefits while retaining knowledgeable teams, allowing them to work smarter not harder.

Terminal of the Future – Rolling Stock (Locos & Wagons)



For the future of the railfreight sector it is vital that we have the intelligent & innovative vehicles that move us to Net Zero, embrace the digital opportunities & improve the efficiency of the operation

SME Challenge Process & Timescales

- Open to all UK based SMEs
- Collaboration between SMEs is good
- Non-SME companies and organisations can be involved but the lead company has to be a UK based SME
- Any number of companies and organisations can work together
- Ideas and solutions to the problem statements must be submitted on the relevant form which is can be downloaded from the events page on our website
- The FOCs will select those ideas/solutions to the problem statements they wish to present at a dragons den style event (online)

Freight Terminal of the Future - Timescales (FOAK)

- Wednesday 20th April - launch event (today)
- Wednesday 4th May (+2 weeks) - Submissions closing date for Dragons Den
- Wednesday 11th May (+1 weeks) – Advise successful SME's of selection for Dragons Den presentation
- Thursday 26th May (+2 weeks) – Dragons Den presentations (online)
- Monday 30th May – advise SME's which projects the FOCs wish to take forward
- Wednesday 8th June (+2 weeks) - Closing date for FOAK competition

Freight Terminals of the Future - Timescales

SME Collaborative Challenge – Rail Freight Terminal of the Future

Submission Document

Before completing please read the guidelines document which accompanies this form.

If you have any questions in respect to completing the following please contact Robert Hodgson on 07913 709744 or email robert@midlandsrail.co.uk

Are you seeking support from the Freight Operating Companies for the FOAK competition?

Yes/No

(note: FOAK funding is only available for innovative ideas to assist with providing proof of concept)

Name of Project (max 10 words):

Freight Terminal of the Future - Timescales (non - FOAK)

- Wednesday 20th April - launch event (today)
- Wednesday 18th May (+4 weeks) - Submissions closing date for Dragons Den
- Wednesday 25th May (+1 weeks) – Advise successful SME's of selection for Dragons Den presentation
- Wednesday 15th June (+3 weeks) – Dragons Den presentations
- Wednesday 22nd June (+1 week) – advise successful SME's which the FOCs wish to take forward

Freight Terminals of the Future

Funding opportunities, FOAK and Project Support

Ian Evley / InnovateUK

Terminal of the Future – Free Business Support for Applicants

Business Support

Innovate UK EDGE

Bespoke, tailored growth support
National programme – locally
delivered

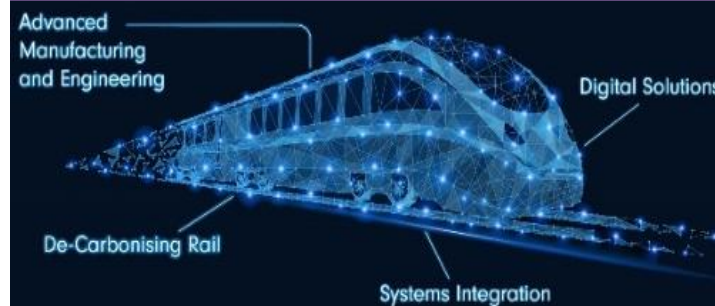
- ✓ Vision & Strategy
- ✓ Market Readiness & Alignment
- ✓ Innovation Process
- ✓ Internal Capability
- ✓ Collaboration
- ✓ Intellectual Property
- ✓ Results, Evidence & Impact
- ✓ Sourcing Support for Growth
- ✓ Finance for Growth

Research & Development

University of Derby

Derby Rail Research & Innovation
Centre (RRIC)

- ✓ Innovate 4 Rail
- ✓ Advanced Rail Composites
- ✓ Rail Data Analytics
- ✓ Artificial Intelligence
- ✓ Intelligent Power Solutions



Grants and Funding

An added value service for
Terminal of the Future applicants

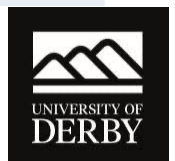
Helping you to access free
specialist business support for
your rail sector business

Identify R&D partners

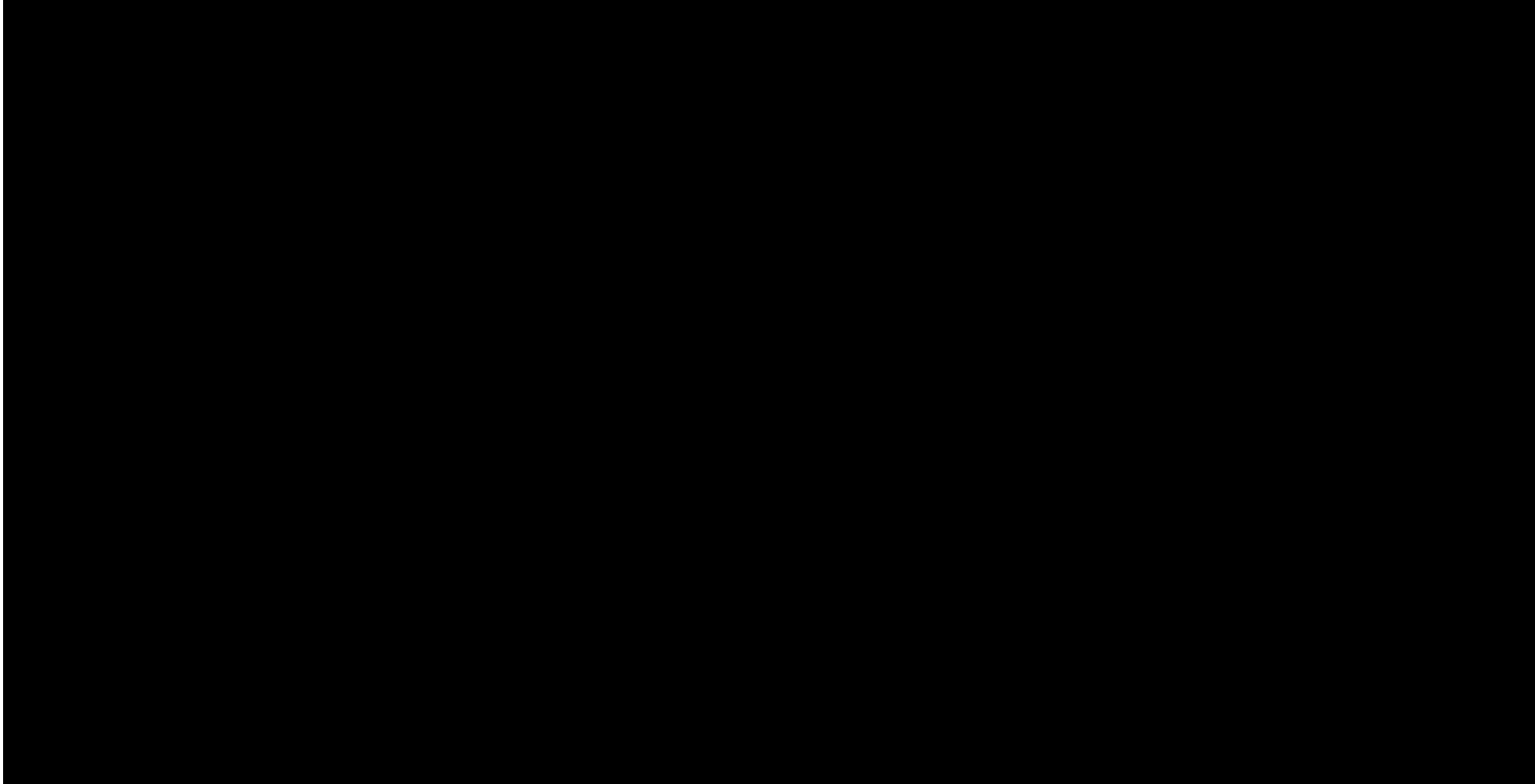
Identify Grants and Funding for
your business

Support you with your application
and project delivery

Publicly funded business support for the Rail Sector
Specialist support for the Rail Freight Industry
Independent, Knowledgeable, Relevant, Free



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Any Questions?