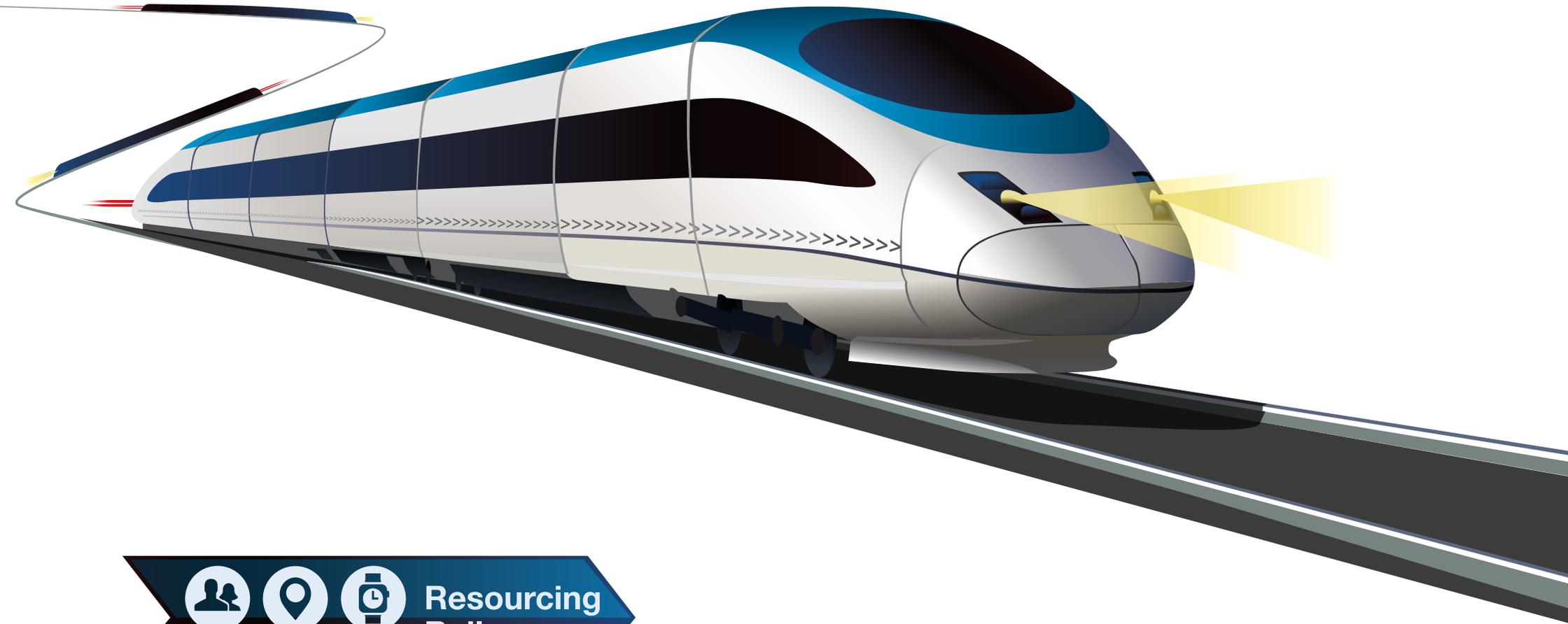


# Rail Sector Skills Delivery Plan



   **Resourcing  
Rail**

Right  
People    Right  
Place    Right  
Time



# Foreword

Britain's railway plays a vital role in getting people to work, bringing businesses and communities closer together and supporting the flow of freight across the country. The Government wants to see the railway continue to grow and to provide passengers and freight customers with a better quality of service. That is why our railway is benefitting from the largest investment programme since the Victorian era.

But to deliver our ambitious rail investment plans and to improve the railway's performance we need to attract a new generation of people to work in rail whilst also investing in our existing workforce.

Earlier this year my department published the Transport Infrastructure Skills Strategy highlighting the skills challenges facing transport and setting out plans for creating 30,000 apprenticeships, increasing diversity and raising skills levels. The strategy is being delivered by the Strategic Transport Apprenticeship Taskforce (STAT), but was also a call to action to the wider transport sector to play its part.

So I am delighted that the rail sector has responded through this skills plan. It shows how the rail industry will collaborate to deliver a highly-skilled, diverse and flexible workforce, to support the creation of apprenticeships and to promote rail as a high tech and dynamic industry.

I encourage everyone in the rail sector to get involved in delivering this important strategy and I look forward to seeing some real progress in the coming months.

**Paul Maynard MP**

Parliamentary Under Secretary of State for Transport

*Paul Maynard*



Our aim

**‘one industry’ to attract, recruit and retain the best talent; ensuring we resource rail with the right people in the right place at the right time!**

# Introduction

Sustained growth in passenger numbers to record numbers, record levels of investment, brand new high speed routes all depend on the rail industry possessing a modern, productive, skilled, talented and well led workforce.

Across the sector, this means new skills and talent will be needed to deliver the future rail system. However, with an ageing workforce, a need for those skilled in technologies and a lack of diversity compared with other sectors, rail is heading for a significant skills shortage unless the industry invests to meet future demands. This is a long term investment but if the industry does not act now, our ability to deliver a rail system that meets future growth requirements will be compromised. Research highlighted that if we do not invest in skills, cost to businesses is estimated to reach £300m per annum and the cost to Government approximately £380m per annum, by 2024. The cost to the economy could be over £1bn a year by 2034.

To respond to this challenge the rail sector has come together to set out the Rail Sector Skills Delivery Plan. This delivery plan has been developed by the industry for the industry with an input from over 60 businesses. Based on research, analysis and collaboration, the plan will help resource rail to have the right people in the right place at the right time.

National Skills Academy for Rail (NSAR), on behalf of the rail sector, will facilitate the collaborative industry effort to address this great challenge. As an industry we will work together to ensure talented people are recruited and upskilled to deliver our industry investment commitments, drive productivity and to take Britain's rail system into a new technology driven era.



**Shamit Gaiger**  
Director of Strategy - NSAR

# Rail Sector Skills Delivery Plan

- ⌚ Ageing workforce
- 🔧 Technology changes
- 👥 Lack of diversity
- 📈 Increase demand for rail
- 🔄 Improve productivity



**Future Sector Skills Shortage**



**Identified Priorities of Delivery**



Right People



Right Place



Right Time

**Resourcing Rail**



2016



**Resourcing Rail**

**Training & Assurance**

- World class quality assurance
- Fit for purpose trainers and assessors capability
- Optimisation of sectoral training provision

**Standards & Qualifications**

- Develop sectoral apprenticeships strategy
- Develop common modern curriculum
- Focus on new technologies and management development

**Recruitment & Retention**

- Develop sectoral career path
- Upskilling workforce
- Setup a sectoral clearing house

**Promotion & Attraction**

- Positive industry image
- Provide Regional engagement
- Increase diversity

**Intelligence**

- Develop strategic forecasting tool
- Agree KPIs for monitoring progress

**Leadership**

- Cross industry group to deliver plan and vision
- Develop agreed sectoral pledges
- Integrate skills into commercial contracts

2020



Right People



Right Place



Right Time

2030



**Resourcing Rail**

# LEADERSHIP



## LEADERSHIP

INDUSTRY NEEDS STRONG LEADERSHIP

→ **CAPACITY +  
MOMENTUM = DRIVE  
CHANGE**



# Leadership Pledges

## Key Industry Partners

- STAT
- NR, HS2, TfL,
- Industry-wide employers
- NSAR
- RDG/RSG
- DfT
- RIA
- Rail Alliance

## Outcome

Industry leadership commits to drive delivery of the industry Sector Skills plan and the associated targets/ KPI's as defined in TISS and as set by the leadership team

## Deliverables

- Industry pledges
- Targets and KPIs where appropriate
- Delivery action plan

## Industry Champion

Neil Robertson  
NSAR

## Linkages

- Intelligence
- Promotion & attraction
- Commercial environment
- Standards & qualifications
- Recruitment & retention

## Key steps to achieve outcome

Determine key commitment areas appropriate for a pledge at a cross industry level; including those recently published in the TISS and RSG's Strategy.

Align with current initiatives already underway

Consult sector businesses on individual realistic targets, KPI and pledges

Determine action plan(s) to meet targets

Ensure buy-in for pledges and investment from key businesses

Launch the pledges and gain industry-wide commitment to support implementation

Monitor against targets

# Leadership Commercial Environment

## Key Industry Partners

- NR, TFL, HS2
- TOCs & FOCs
- NSAR
- Contractors/suppliers/SMEs
- RDG/RSG
- Government/DfT
- RIA
- Rail Alliance, RFEM

## Outcome

Buyers & government authorities to commit to medium/long term commercial activity that will provide confidence to the supply chain with a predictable pipeline of work that enables additional investment in resources and skills

## Deliverables

- Visibility of investments
- Industry-wide work bank commitment through accurate forecasting to enable foreknowledge of resource requirements
- Good practice for contracts

## Industry Champion

Peter Loosley  
Rail Industry Association

## Linkages

- Intelligence
- Clearing house
- Regional engagement
- Optimising training provision
- Promotion & attraction

## Key steps to achieve outcome

Understand industry investment plans, fleet requirements and commitments

Understand medium term skills needs to deliver investment plans

Gap analysis to identify the skills required for workload, derived from investment plans for the supply chain

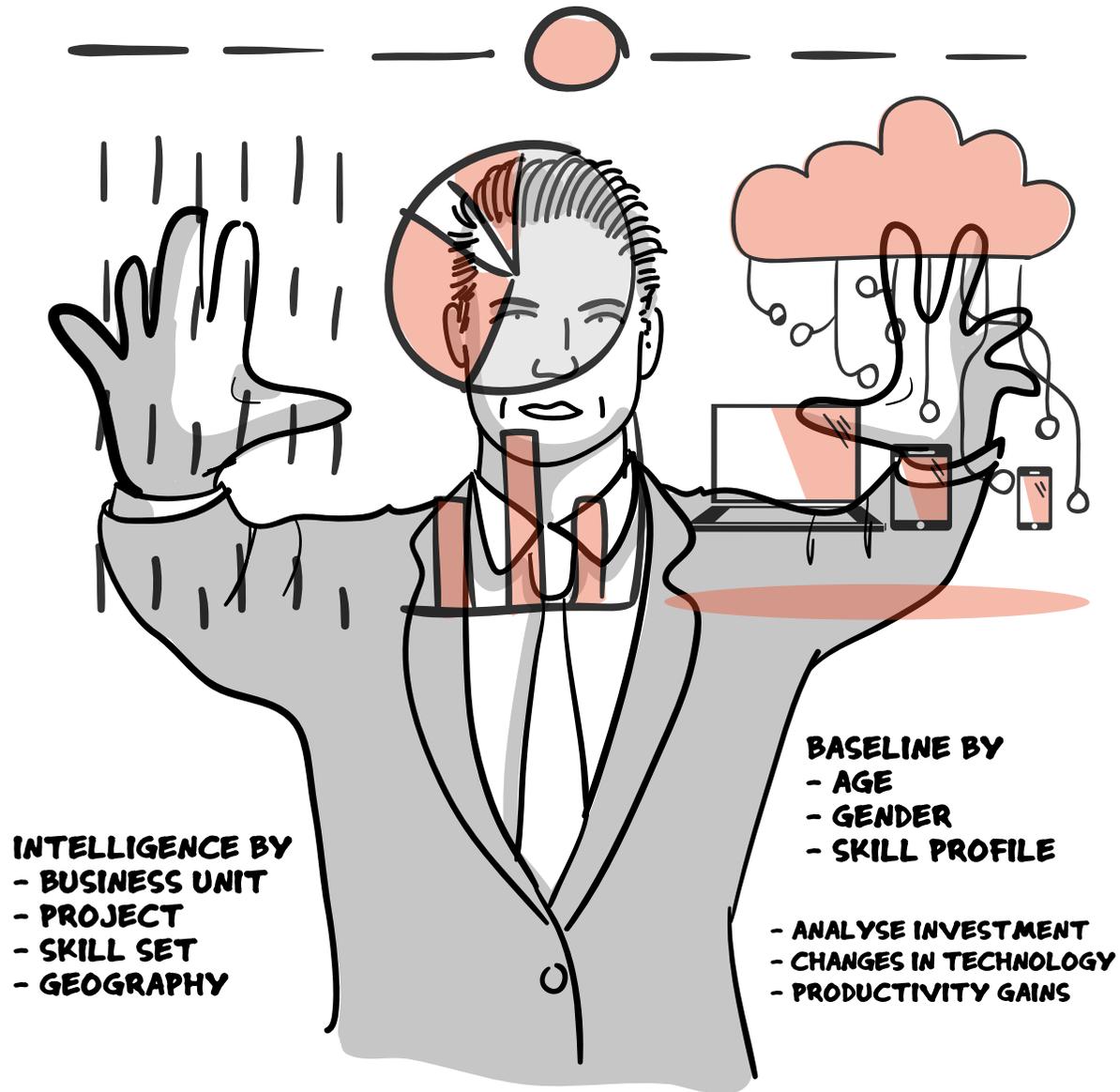
Work with buyers to publish predictable work banks available to the supply chain

Work with buyers to establish good practice re: skills in contracts (build on Crossrail and franchising)

Buyers to support by ensuring contracts are firm and committed

Continual monitoring of investment against skill demands

# INTELLIGENCE



**INTELLIGENCE BY**  
- BUSINESS UNIT  
- PROJECT  
- SKILL SET  
- GEOGRAPHY

**BASELINE BY**  
- AGE  
- GENDER  
- SKILL PROFILE

- ANALYSE INVESTMENT  
- CHANGES IN TECHNOLOGY  
- PRODUCTIVITY GAINS

# Intelligence

## Key Industry Partners

- Industry employers
- STAT/RSG/RDG/ RIA
- Education providers
- Training providers
- Regional forums
- Rail Alliance

## Outcome

Understand future and current skills shortages to enable targeted investment and monitoring of progress in order to close gap reducing industry costs.

## Deliverables

- An industry strategic skills resourcing tool
- Agreed sector KPIs for monitoring
- Breakdown to projects, routes, franchises and geographical areas

## Industry Champion

Neil Franklin  
NSAR

## Linkages

- Input and review loop into all workstreams.

## Key steps to achieve outcome

Establish skills data baseline for the sector

Development of forecasting tool

Agree forecast assumptions

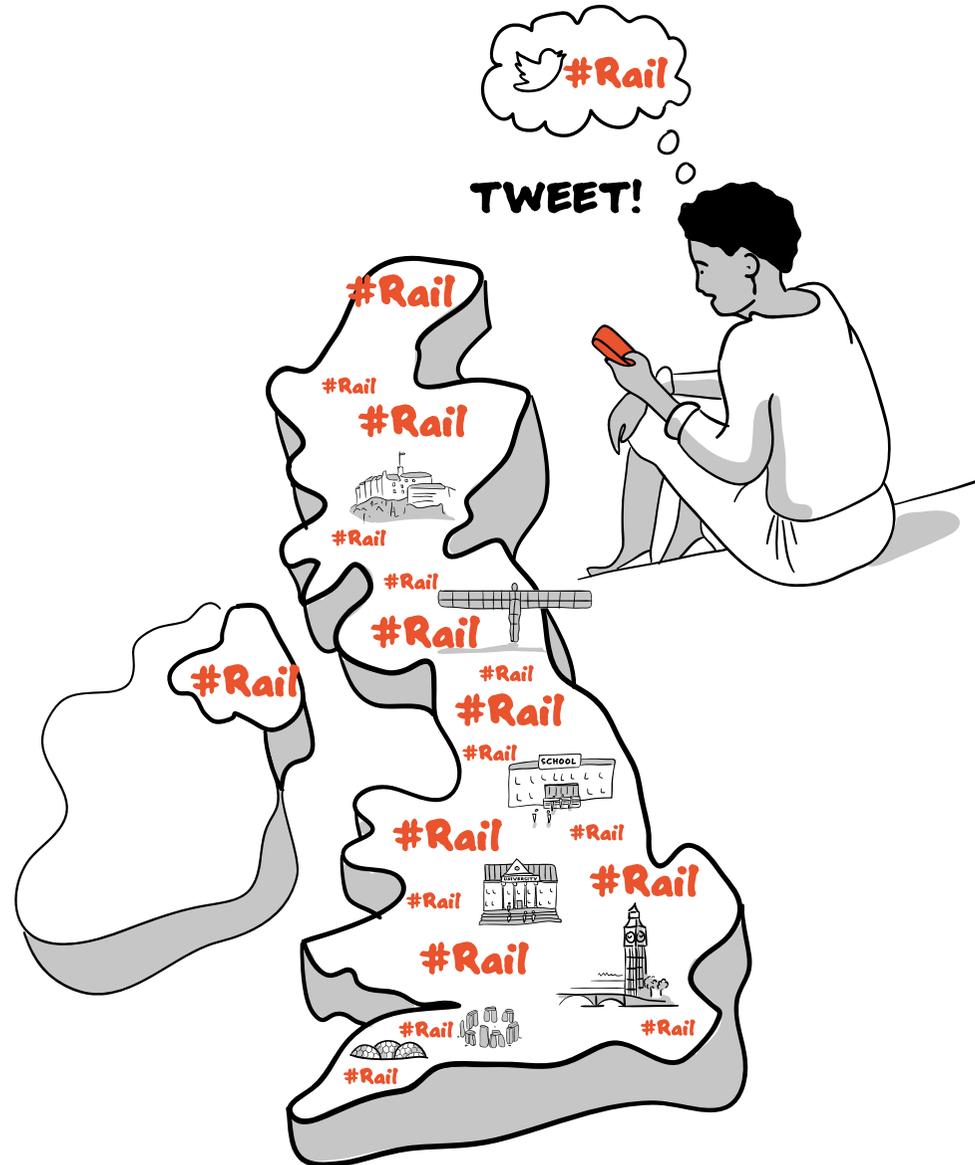
Report skills shortages

Develop a capability for varying levels of granularity, from national to project level

Agree key performance indicators

Monitor progress towards meeting forecasted needs and attainment of KPIs

# PROMOTION & ATTRACTION



# Promotion and Attraction

## Industry Image

### Key Industry Partners

- Routes into Rail
- YRP
- Women in Rail
- NSAR
- RDG / RSG
- RIA/ Rail Alliance
- Regional forums
- RFEM

### Outcome

Rail sector is seen by educators and potential recruits as a high-tech & dynamic industry; increasing number, diversity and quality of recruits & apprenticeships

### Deliverables

Targeted rail promotion marketing campaign that positions rail as an attractive career choice. One industry approach that does not dilute individual brands

### Industry Champion

Rob Kirk  
Rail Delivery Group

### Linkages

- Regional engagement
- Intelligence
- Increase diversity
- Career path
- Apprenticeships

### Key steps to achieve outcome

Define what we are selling, who we are selling it to and where the message is needed

Understand market perception, needs and interest at demographic level

Collaborate with RDG to capitalise on their campaign for industry branding

Tailor marketing messages to audiences

Devise marketing and communication plan

Deliver targeted media campaigns

Develop success metrics, evaluation strategy and monitor outcomes

# Promotion and Attraction

## Regional Engagement

### Key Industry Partners

- Sector ambassadors
- RDG/ RSG
- WiR/YRP
- RIA/ Rail Alliance
- Routes into Rail
- RFEM
- Schools/unis/colleges
- Regional forums

### Outcome

To position the railway as a great place to work, using a coordinated and geographically targeted approach

### Deliverables

- Regional engagement delivery plans supported by industry-agreed promotional material
- Formation of cross-industry engagement unit

### Industry Champion

Sabrina Ihaddaden  
Bombardier & Young Rail Professionals

### Linkages

- Industry image
- Apprenticeships
- Intelligence
- Career path
- Clearing house
- Diversity

### Key steps to achieve outcome

Understand current promotional activity taking place within and outside the sector which can be capitalised on

Map regional skills needs from intelligence

Agree with industry, a comprehensive set of promotional & educational briefing material for each target demographic/group

Highlight opportunities for displaced employees within and outside sector

Produce detailed regional engagement delivery plans

Establish comprehensive network of cross-industry ambassadors and role models

Develop, coordinate and provide traineeships, work experience and engagement competitions

Build cross-industry unit to deliver and engage

Co-ordinate industry effort

# Promotion and Attraction

## Increase Diversity

### Key Industry Partners

- Women in Rail
- YRP
- Routes into Rail
- Industry Employers
- Sector ambassadors
- RDG
- RSG

### Outcome

An industry wide collaboration and commitment to increasing the diversity of the sector workforce

### Deliverables

Support 20% increase in apprenticeship uptake from women and BAME by 2020 through targeted attraction, support, retention and engagement

### Industry Champion

Adeline Ginn  
Angel Trains & Women in Rail

### Linkages

- Industry image
- Intelligence
- Clearing house
- Career path
- Commercial environment

### Key steps to achieve outcome

Develop an Industry wide Diversity and Inclusion strategy

Target attraction based on Intelligence, regional engagement, delivery plans and industry image.

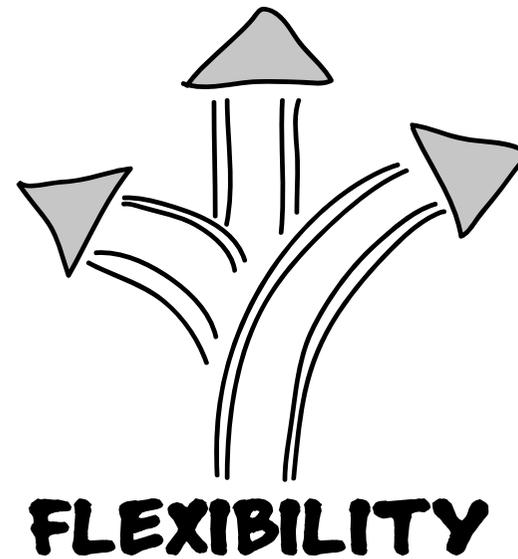
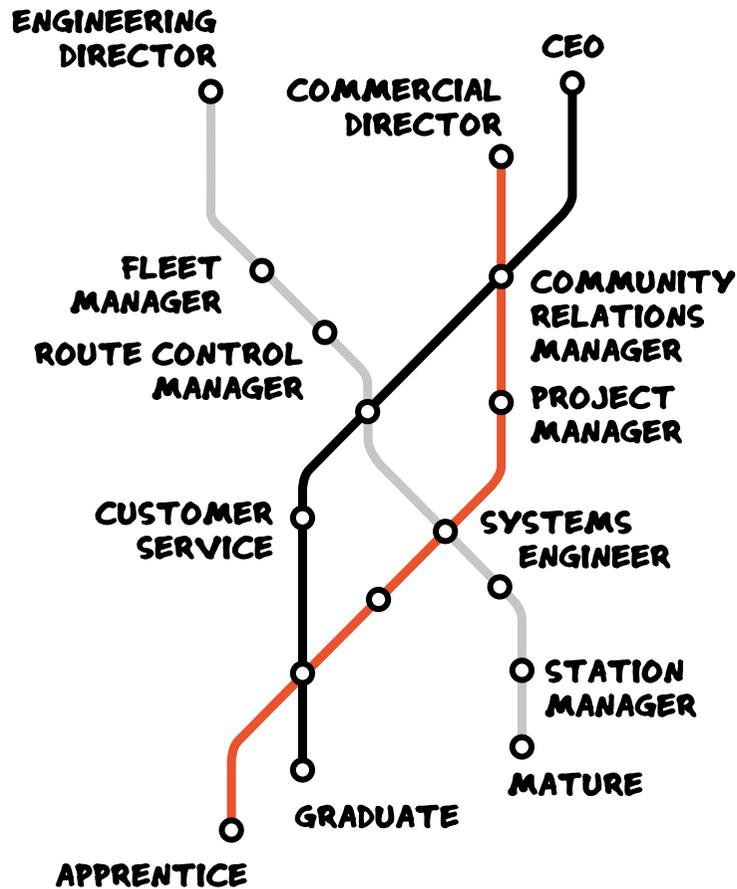
Engagement programme with senior industry leaders to encourage embedding diversity in organisations through recruitment, procurement and the creation of supporting environments

Develop mentoring programme to support women & BAME in business

Build on existing and develop best practice to retain women & BAME to support culture change where needed

Develop success metrics, evaluation strategy and monitor outcomes

# RECRUITMENT & RETENTION



# Recruitment & Retention Clearing House

## Key Industry Partners

- NR/TfL/HS2
- RSG/RDG
- RIA
- Rail Alliance
- NSAR
- YRP
- Routes into Rail
- RFEM

## Outcome

Optimising supply and demand around recruitment of apprenticeships, graduates, career changers and movement of existing industry personnel

## Deliverables

Establish an online capability linking supply of provision to market demand that can support the rail industry in its search of talent, both in terms of future recruitment and the upskilling of existing industry workforces

## Industry Champion

Neil Franklin  
NSAR

## Linkages

- Industry image
- Intelligence
- Apprenticeships
- Career path

## Key steps to achieve outcome

Develop an online requirements specification for a web portal to optimise supply and demand for apprentices, graduate and displaced workforce

Develop web portal for the sector

Develop a process and service strategy to support sector

Pilot tool

Industry engagement

Monitor progress

# Recruitment & Retention Career Path

## Key industry partners

- Employers
- NSAR
- YRP
- Routes into Rail
- RIA,
- RDG/RSG

## Outcome

Increase visibility of potential career progression and mobility within the industry broadening industry knowledge

## Deliverables

Establish clear industry career opportunity pathways by role

## Industry Champion

Clair Mowbray  
National College for High Speed Rail

## Linkages

- Regional engagement
- Intelligence
- Clearing house
- Apprenticeships
- Modern curriculum

## Key steps to achieve outcome

Agree key roles in operations, engineering, management and leadership with sector

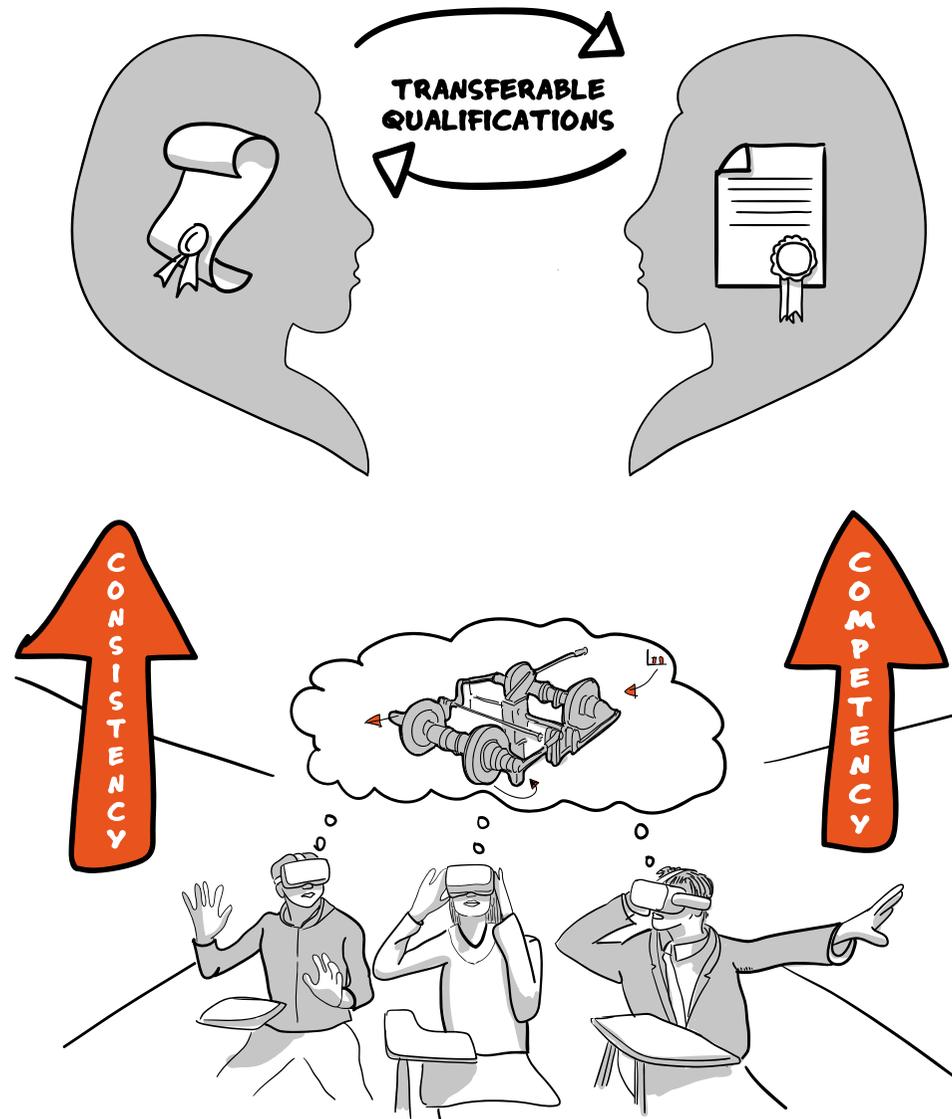
Understand future talent needs from career path product

Establish industry career clusters and common capabilities matrix

Develop pathways for key roles

Market and encourage employers and education providers to use pathways

# STANDARDS & QUALIFICATIONS



# Standards & Qualifications

## Common Modern Curriculum

### Key Industry Partners\*

- Industry employers
- RRUKA
- NSAR
- HS2

### Awarding bodies

- DfE
- Universities
- Professional
- Institutions

### Outcome

Adoption of consistent industry-wide competence standards to support transferability of skills, thus reducing the cost of retraining

### Deliverables

Agreed set of industry standards (including apprenticeship levels 2-7) for engineering, operational, management and leadership roles taking into account new technologies

### Industry Champion

Clare Hannah  
DB Cargo

### Linkages

- Apprenticeships
- Intelligence
- Career path

### Key steps to achieve outcome

Agreed key roles for common competence standards (engineering and operational)

Facilitate employer-led apprenticeship standards including upskilling for agreed key roles

Collaborate with universities to develop rail specific higher education courses (apprenticeships 5-7) to address current and future skills needs

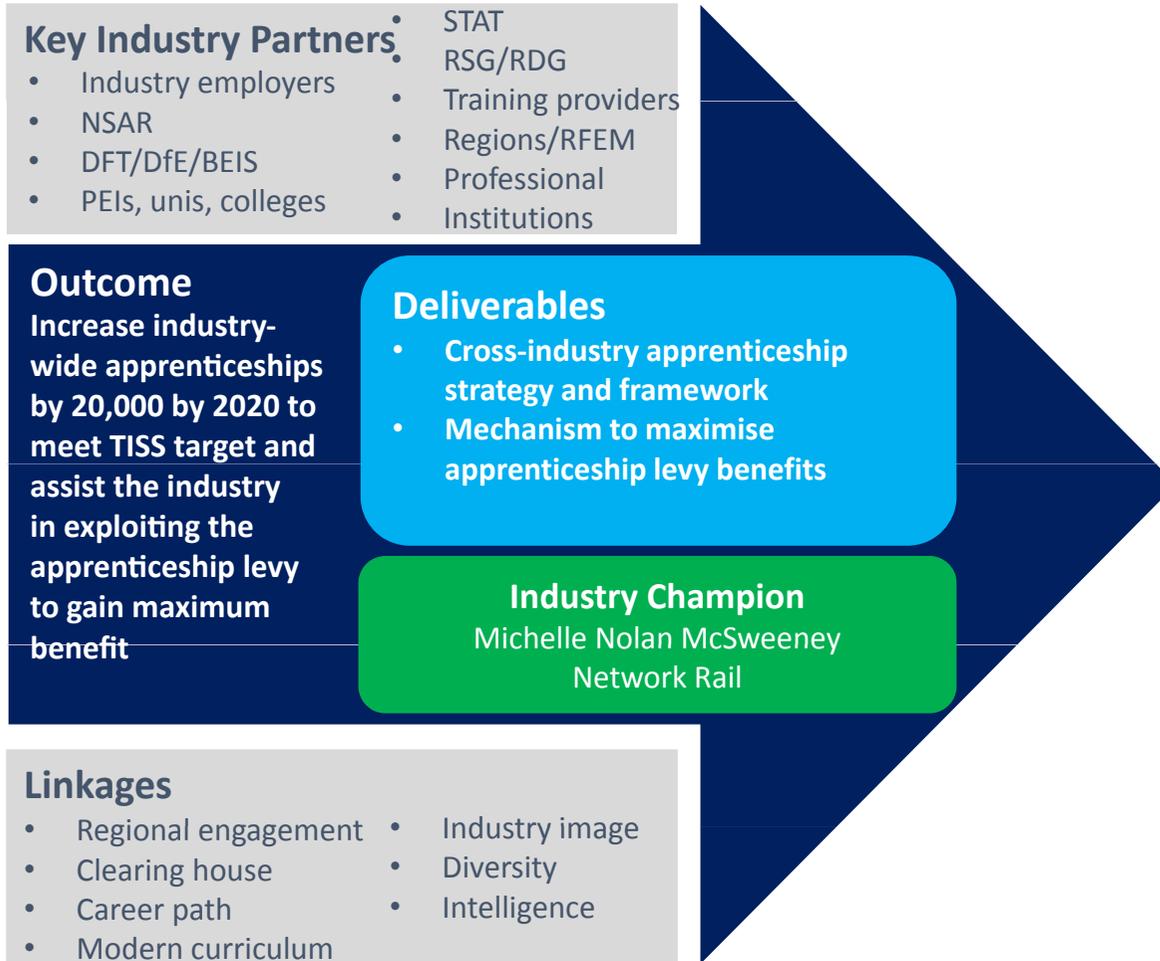
Develop rail curriculum for excellence in management and leadership skills

Identify future skills needs taking into account new technologies and develop appropriate standards with employers

Understand the role of qualifications in rail and develop a suite of agreed transferable qualifications

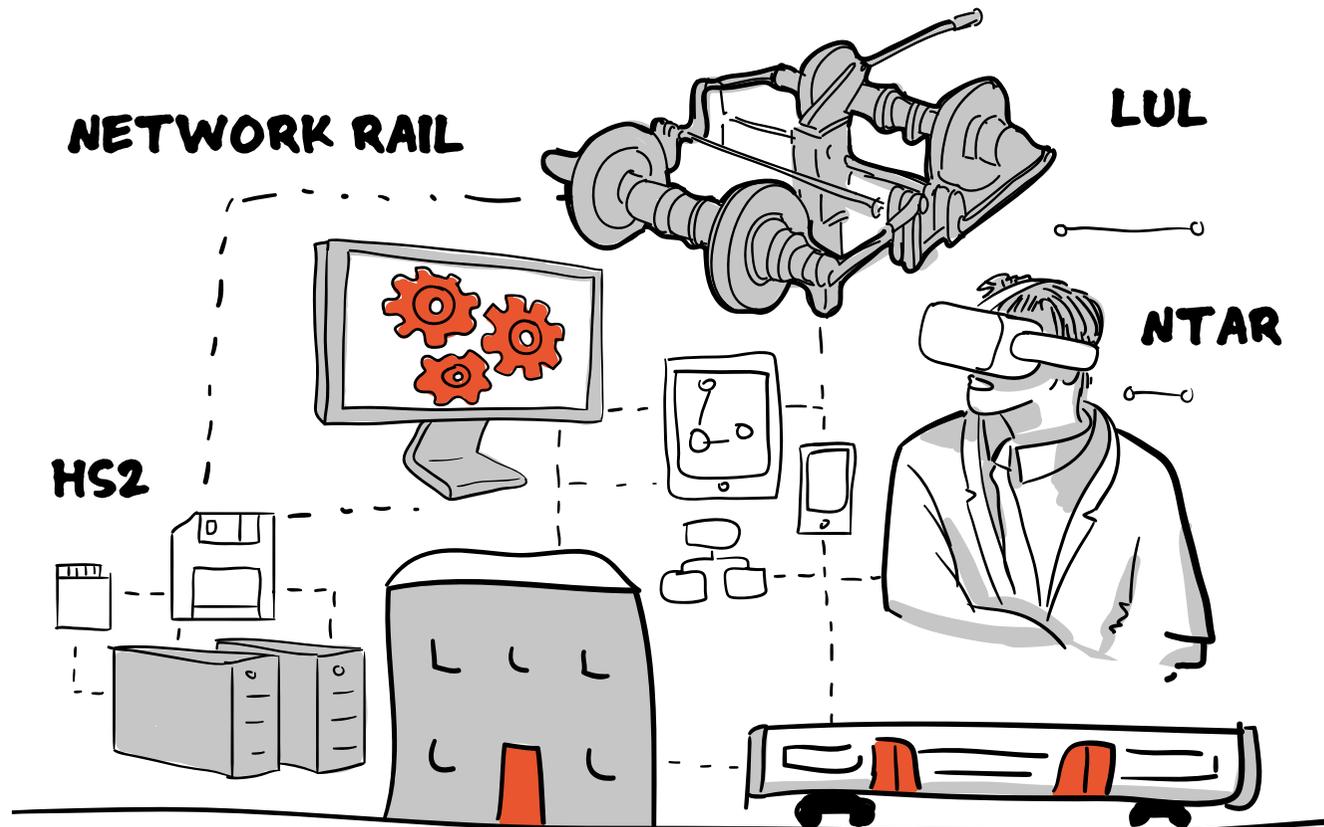
# Standards & Qualifications

## Apprenticeships strategy and levy



- Key steps to achieve outcome**
- Use intelligence to determine apprentice numbers in each geographical area, sub-sectors and industry discipline and define scope of supply chain
  - Agree key priority areas for apprenticeship and develop standards based on 'modern curriculum' workstream
  - Influence industry commercial contracts to deliver apprenticeship numbers throughout the supply chain
  - 'Pump prime' the skills pipeline and facilitate cross-ownership of apprenticeships to support SMEs
  - Ensure sufficient training facilities, kits, trainers and assessors are available
  - Develop mechanisms to draw on apprenticeship levy
  - Monitor progress against TISS target

# TRAINING & ASSURANCE



# Training and Assurance

## Quality Assurance

### Key industry partners

- NSAR
- Training providers
- NR/TfL/HS2
- RSG

### Outcome

Increased competency across industry-wide workforce

### Deliverables

- Quality assurance framework within and on behalf of industry
- A pan-industry quality assurance assessment and assurance panel

### Industry Champion

Kim Millen  
NSAR

### Linkages

- Intelligence
- Career path
- Optimising training provision
- Common modern curriculum

### Key steps to achieve outcome

Maintain and build on current QA scheme delivered by NSAR

Establish an industry assessment and assurance panel

Identify and form partnerships with training and education providers to expand courses covered by the scheme

Create a mechanism to enable transparency of the quality of training providers to be widely accessible to industry

Monitor continuous improvement of overall quality of training

# Training and Assurance

## Trainers and Assessors Capability

### Key Industry Partners

- Training providers, colleges and assessors
- Employer assessors
- Apprentice assessment organisations
- Awarding bodies/SFA

### Outcome

Current, valid, sufficient and reliable assessment of capabilities

### Deliverables

- Develop robust accurate assessment tools and resources
- Increase assessor training capacity
- Quality assurance of training assessments

### Industry Champion

Kim Millen  
NSAR

### Linkages

- Quality assurance
- Common modern curriculum
- Apprenticeship strategy & levy

### Key steps to achieve outcome

Link with provider readiness groups (PRGs)

Use Future Apprenticeships Toolkit/Excellence Gateway

Identify demand for assessors in rail

Identify capacity for training assessors

Understand assessment requirements for new apprenticeship standards

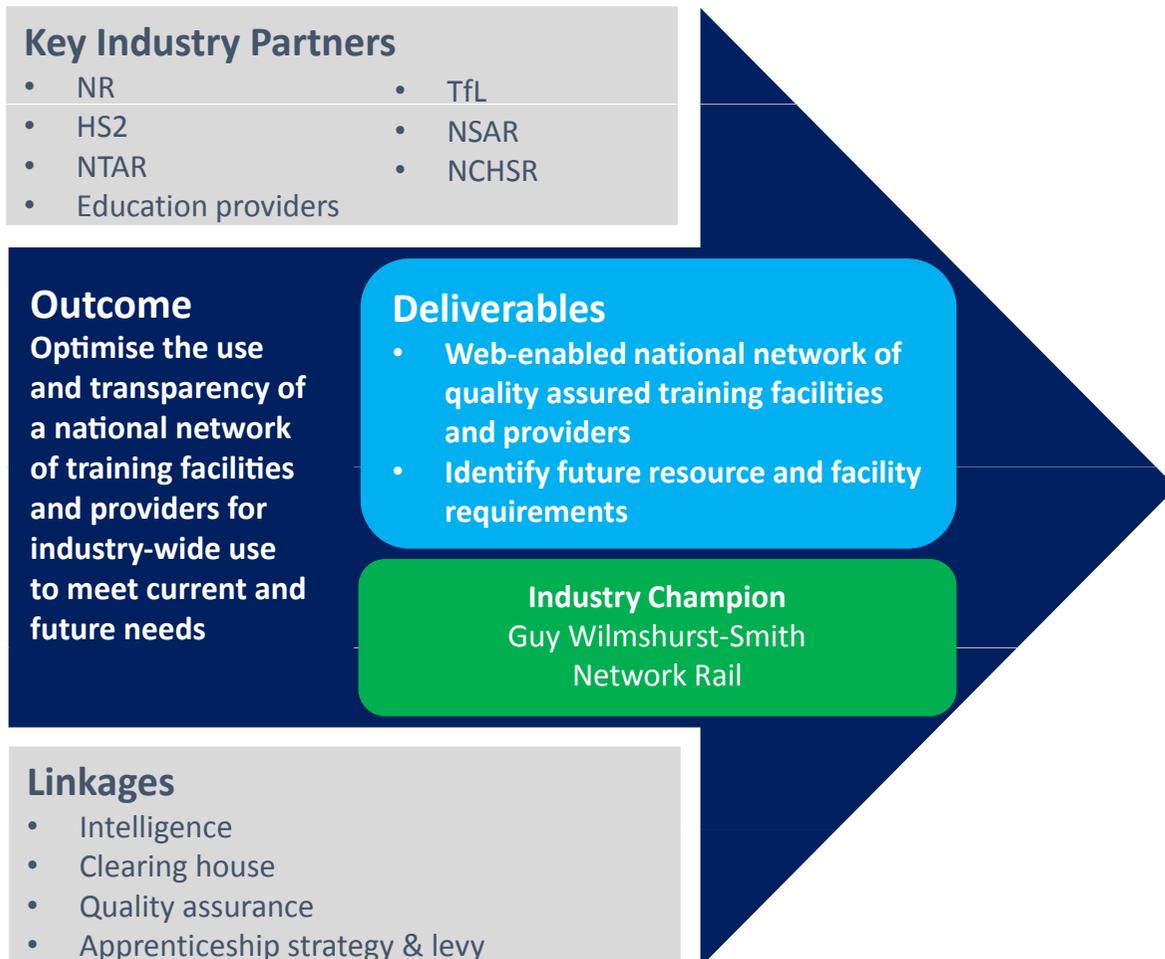
Develop online formative and summative assessment tools

Share assessment resources and support through a national network

Set up quality assurance of assessments framework

# Training and Assurance

## Optimising Training Provision



### Key steps to achieve outcome

Identify current facilities and resources available

Understand current and future needs using output of intelligence, quality assurance and apprenticeship strategy

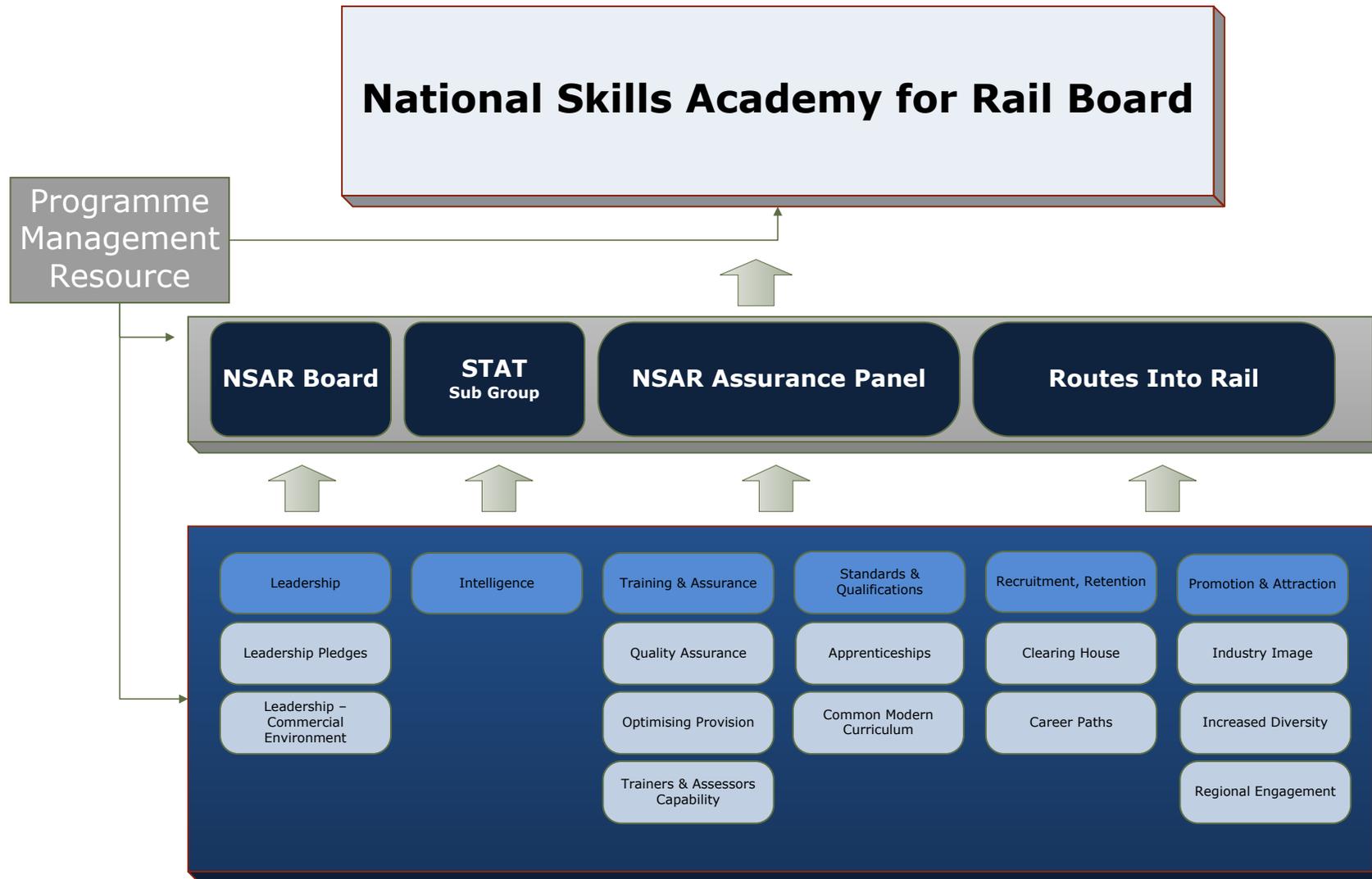
Undertake GAP analysis

Gain industry commitment to scheme and establish partnerships to ensure assets are optimised

Develop web portal to provide access to facilities and resources, providing transparency through 'trip advisor' approach

Continual monitoring of quality assurance and 'trip advisor' type feedback

# Governance Structure for Delivery



# Rail Sector Skills Delivery Plan

- ⌚ Ageing workforce
- 🔧 Technology changes
- 👥 Lack of diversity
- 📈 Increase demand for rail
- 🔄 Improve productivity



**Future Sector Skills Shortage**



**Identified Priorities of Delivery**



Right People



Right Place



Right Time

**Resourcing Rail**



2016

Training & Assurance

Standards & Qualifications

Recruitment & Retention

Promotion & Attraction

Intelligence

Leadership

**Resourcing Rail**

2020

Right People

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2030

## Training & Assurance

- World class quality assurance
- Fit for purpose trainers and assessors capability
- Optimisation of sectoral training provision

## Standards & Qualifications

- Develop sectoral apprenticeships strategy
- Develop common modern curriculum
- Focus on new technologies and management development

## Recruitment & Retention

- Develop sectoral career path
- Upskilling workforce
- Setup a sectoral clearing house

## Promotion & Attraction

- Positive industry image
- Provide Regional engagement
- Increase diversity

## Intelligence

- Develop strategic forecasting tool
- Agree KPIs for monitoring progress

## Leadership

- Cross Industry group to deliver plan and vision
- Develop agreed sectoral pledges
- Integrate skills into commercial contracts

# Rail Sector Skills Delivery Plan

## for the sector by the sector

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