

# ASAVRAIL

Engineering the future for Railway Systems

**2023**  
Railstaff Awards  
Nomination

LEARNING, DEVELOPMENT  
& INVESTING IN PEOPLE AWARD

**HIGHLY COMMENDED FOR**

Rail Engineer of the Year  
in **2016**

Digital Rail Person of the Year  
in **2019**

Technical Specialist for Rail |  
Professional Development  
Mentor and Trainer |  
Sustainable Development  
Champion |

**3,500+ Followers**

ABDUL REHMAN SAVANT, CEng, MIET

**Director | Head of Digital Railway Systems  
and Power Engineering (E&P)**



## CONTENTS

- Our Mission
- Our Values
- About Us
- Technical Capabilities
- Route to Success
- Our Leader
- Our Support
- Project Experience
- Professional Development and Coaching
- Contact



# ASAVRAIL

## OUR MISSION



### OUR PEOPLE, OUR PLANET

ASAVRAIL is ready to engineer the future for Railway Systems, using our experience in digital railway and innovation for a better and healthier planet.



### AWARD WINNING EXPERTISE

We have award winning technical expertise in Signalling Power (E&P) and the Digital Railway.



### OUR SUCCESS

We follow our company values 'eRICH' to support our clients to achieve success in delivering a reliable and resilient railway system.



### SUSTAINABILITY

We strongly believe in sustainable development, and we always aim to consider our global sustainable development goals when delivering our services.



# ASAVRAIL

## OUR 'eRICH' VALUES



### WE ARE ASAVRAIL

Engineering the future for Railway Systems.  
Supporting the UK, Ireland and Overseas.



# ASAVRAIL

## ABOUT US



### BACKGROUND

ASAVRAIL formed in 2022, is an independent contractor managed and operated by our Director, Abdul Rehman Savant, CEng, MIET, based in the UK.

ASAVRAIL is a UK registered limited company, registered in January 2023.



### OUR SERVICES

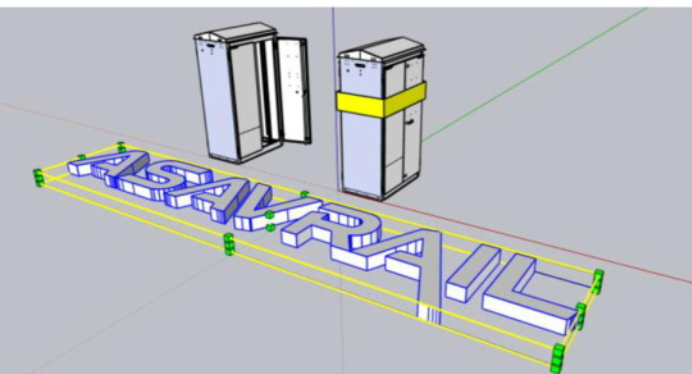
We carry out Consultancy, Design and Assurance (Independent Checking and CRE-D), Engineering Management, Project Management and Development Training for Railway Systems and Power Engineering (E&P/D&P/M&E).

As an independent contractor, working outside of IR35, we provide specialist support for the delivery of railway electrical power designs at a Chartered Principal Engineer competency level for projects in the UK, Ireland and Overseas.



### EXPERIENCE

We have over 22 years' experience working on projects from feasibility, through construction to project close out via GRIP and PACE for all UK railway regions.





## TECHNICAL CAPABILITIES

### DESIGN SOLUTIONS

● Signalling Power Systems (legacy, class II or class I)

● Insulation Monitoring and Fault location

● Design and implementation of DITAs,

● Auto (ARS) and Manual Reconfiguration design

● FSP/LOC/TEH Design for 230V/400V/650V

PSP/ASP/SSP design

● UPS and Transformer design

Substation/DNO design

● LV supplies for Signalling Equipment

● LV supplies for Telecoms Transmission equipment

HV to LV distribution

● Signalling Power Alarms Design

PLC design

● Electric Vehicle Charging Power Supplies

● Battery Charging Station Power Supplies

All other LV design for trackside open route or buildings

● As built records, records update and returns

● System Capacity Checks

● Legacy Baseline Assessments

O&M Manuals/Training for Maintainers

● Inter-disciplinary Interface reviews with design and construction

2D & 3D CAD Design, Modelling & Management (BIM)



## ROUTE TO SUCCESS

### **DELIVERING EFFICIENTLY**

We have the experience of working through the GRIP process and also PACE. We understand the value of the 10 themes of project SPEED. We can work efficiently by delivering projects to the relevant Levels of Control 1 to 4.

### **PROGRESSIVE DESIGN REVIEWS**

We believe that excellent communication is a critical factor to successful design delivery. We work closely and collaboratively with our clients and other engineering functions to provide a design which is aligned and constructable. We are transparent in our engineering to ensure solutions are delivered to the agreed milestones.

### **COST REDUCTION**

We always look for opportunities to provide our clients with minimal viable products. We have the knowledge and experience of engineering solutions that can be delivered to offer an optimum solution of the equivalent functionality with minimal interventions and are cost effective, opposed to the 'gold plated' option. We also analyse the client requirements and advise if 'do nothing' is also an option. Our approach allows us to offer solutions that can reduce CAPEX and OPEX, bringing them together.

### **ENVIRONMENT AND SUSTAINABILITY**

We have a great relationship with our suppliers and manufacturers, who are at the forefront of offering sustainable and environmentally friendly products. We work collaboratively with our suppliers and our clients to close the gap and introduce technology that offer these benefits.

### **INNOVATION AND MODULAR SOLUTIONS**

We are advocates of continuous professional development, which keeps us up to date in the latest engineering and technology. We have proven experience of working with our suppliers and industry experts to utilise innovation and modular solutions to ensure our railway is reliable and resilient.



## OUR LEADER

### DIRECTOR & HEAD OF DIGITAL RAILWAY SYSTEMS AND POWER ENGINEERING (E&P)

#### Abdul Rehman Savant, CEng, MIET

A professionally registered Chartered Engineer and active member of the IET who has over 22 years of experience in the Railway Industry. Currently Director of ASAVRAIL and Head of Digital Railway Systems and Power Engineering (E&P).

An experienced specialist in E&P design and construction across all of the UK Railway regions, with expert specialism in Railway Signalling Power Systems. Also has multi-disciplinary experience delivering designs in Signalling, Telecoms, Civils/Structures with previous experience as a global leader/manager for the implementation and deployment of BIM up to 5D.





## OUR LEADER



Has held the responsibilities to manage competence and compliance for the UKIRL region, Engineering Management, Quality Assurance, Innovation, Bids and Tendering, Team Management, Professional Development and Coaching.

An award winner for Digital Railway Person of the Year in 2019 and Rail Engineer of the Year 2016.

Reached the UK Top 15 Rail Managers of the year category as a finalist in 2021/2022.

Actively writing articles for exhibitions and industry journals on innovation, CPD and decarbonisation, such as the IET, Rail Engineer, Railstaff, Railtex and supplier material.

Offers a global reach for training and development to engineers all over the world in Engineering including the UK, Europe, UAE, KSA, Asia, South America, Africa and the Indian Ocean.

Visit [Abdul Rehman, CEng, MIET](#) | [LinkedIn](#) to connect, follow or for further details on project experience.

## OUR SUPPORT

### CURRENT SPECIALISM

Railway Signalling Power Systems experts, Railway E&P Design & Management, Competence & Compliance Management, Quality Assurance, Innovation, Product Research & Development, Digital Railway, Interface Management, Team/Line Management, Bid & Resource Management, Mentoring, Training, Development and Institutional Professional Registration Support for UK and Overseas.

### ADDITIONAL SERVICES

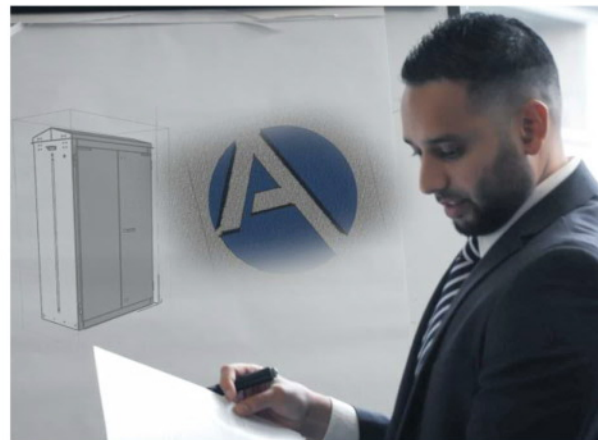
ASAVRAIL additionally offers Technical Assurance, Competency Assessments and Management, Technical Collaborative and Innovative CPD Technical Workshops with global experts and suppliers, Professional Registration Support, CV reviews, application of Railway Standards/Guidance and Mentorship including STEM.

### RESOLVING ISSUES FOR

Existing Design Submissions, difficulties with Client Requirements or Client Reviews, Resource Management, Budget Management, Programme Management, Change Control for Design or Technical Queries.

### GUIDANCE AND SUPPORT

Design Coordination, Designer Mentorship, Design Logs, Design Close Calls, Outline/Detailed Design, Needs Analysis, Independent Checking, CRE Design Assurance, DRN Reviews, Progressive Design Reviews, Scope/CRT writing or Bids and tenders.





# ASAVRAIL

## PROJECT EXPERIENCE

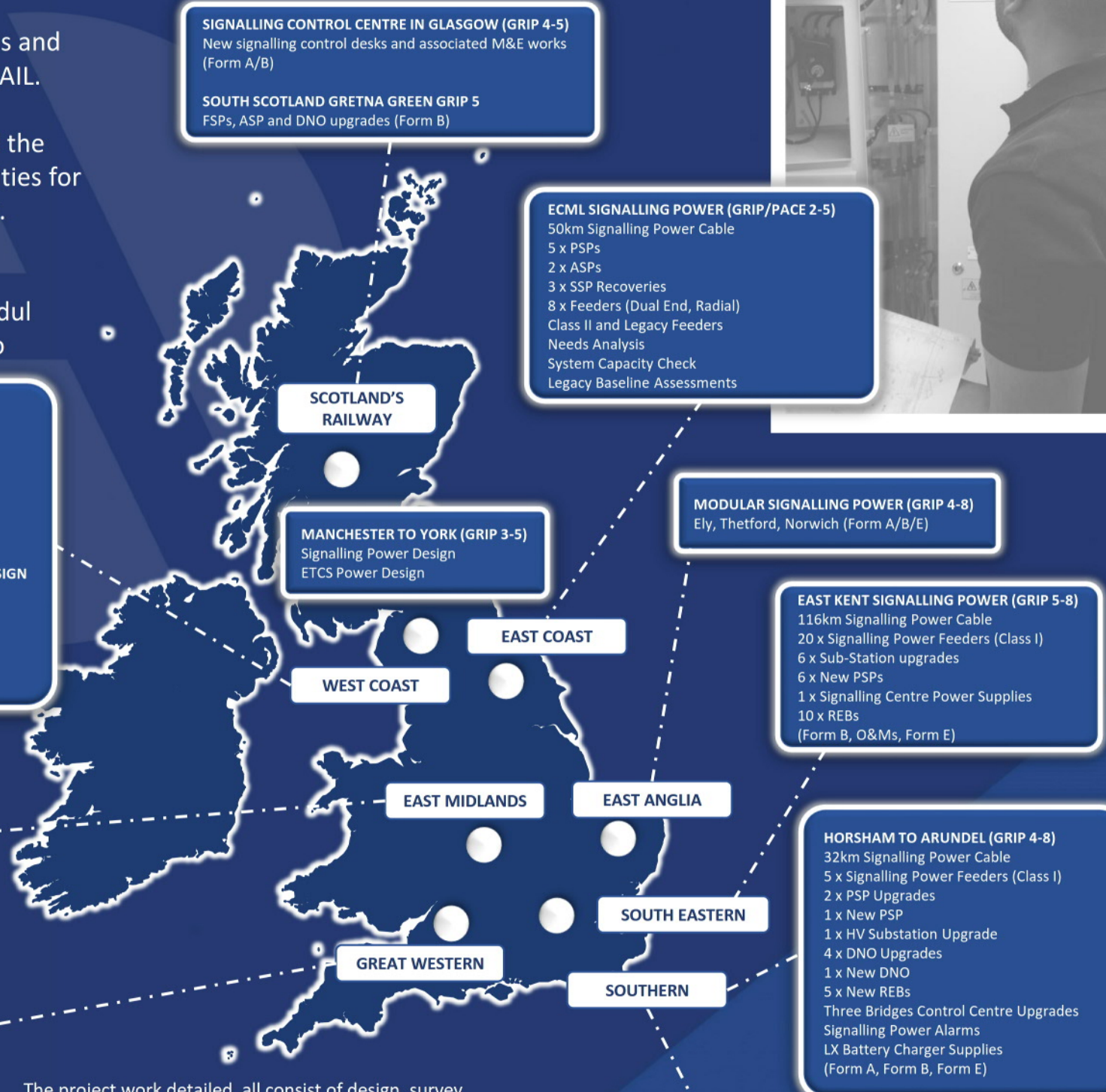
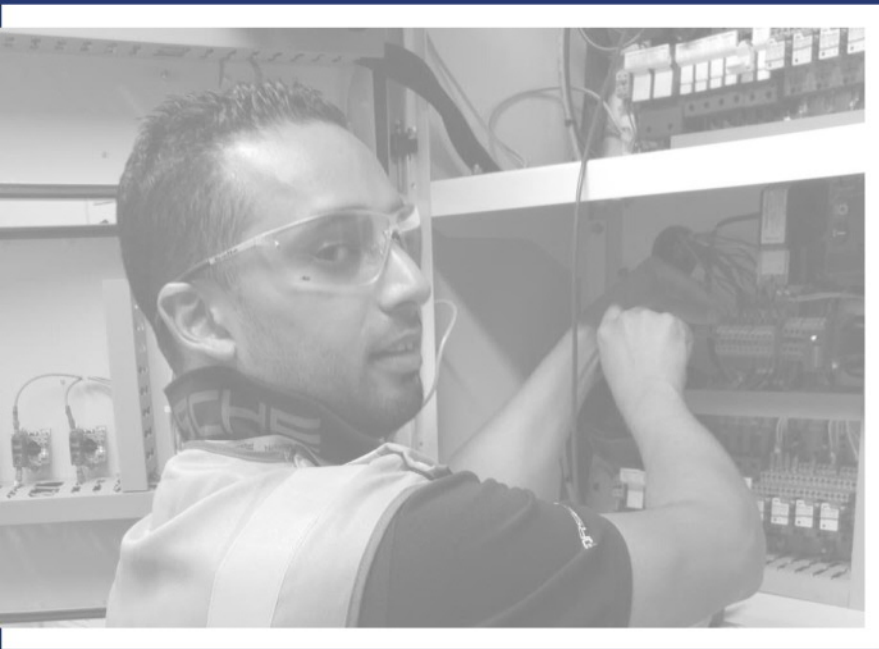
### BACKGROUND

Our Director, Abdul Rehman Savant, CEng, MIET is our Head Of Digital Railway Systems and Power Engineering (for E&P/D&P/M&E), who carries out all works on behalf of ASAVRAIL.

Abdul began his rail industry design career in 2001, working in Signalling. He later had the opportunity to transfer his skills to Civils and Structural Engineering for Buildings, Utilities for the DNO and then to Rail E&P as an Electrical Engineer up to Chartered Principal level.

### EXAMPLES OF PROJECT WORK

Some examples of projects have been provided to illustrate the design experience Abdul brings to his role at ASAVRAIL. Abdul has design experience from feasibility through to project close out across all regions of the UK railway.



**BLETCHLEY AREA (GRIP 5) DESIGN**  
17.6km Signalling Power Cable  
3 x New PSPs with OLE Supplies  
3 x New DNOs  
2 x Fringe PSPs  
7 x Auto-recon Distribution feeders (Class I)  
38 x FSPs  
5 x Signalling REB supplies (Form B)  
**LNW SIGNALLING POWER SUPPLIES (GRIP 5) DESIGN**  
142km Class II Signalling Power Cable  
11 x SSP Upgrades  
12 x New ASPs  
22 x Manual Recon Feeders with Ring Feeders  
500+ FSPs, DITAs, Relay Rooms (Form B)

**MIDLAND MAIN LINE (GRIP 3-8)**  
23km Signalling Power Cable  
11 x PSP Air Con Upgrades  
5 x Signalling Power Feeder Class II Upgrades  
Distance to Fault Upgrades  
1 x New PSP with OLE Supply  
SSP Recovery  
2 x PSP Upgrades  
120 x FSPs  
(Form A/B, Form E)

**BRISTOL AREA (GRIP 4-8)**  
145km Signalling Power Cable (Class II, I & Legacy)  
9 x PSPs/ASPs  
18 x Signalling Power Feeders (Dual End and Radial incl. ASR)  
12 x REBs  
700+ FSPs, New and Modified DNOs  
Substation Modifications  
Fibre Cable Design  
DITA Units  
(Form A, Form B, Form E)  
**Other Projects**  
**SWINDON AREA GRIP 4-8**

The project work detailed, all consist of design, survey and some with project engineering/installation, test and commissioning experience, at varied levels of involvement from design support, design lead, works package/design management, independent checker to Contractors Responsible Engineer (CRE) for design. Further details can be provided on request.



## PROFESSIONAL DEVELOPMENT AND COACHING

### FUNCTIONAL SKILLS AND MATHEMATICS FOR ENGINEERS

Do you have Apprentices or Technicians who are looking to apply or enter a college or degree course and are nervous about their level of understanding in Mathematics or do you have engineers in your team who are struggling with calculations due to weak mathematics skills like transposition for example. ASAVRAIL can support your engineers to overcome their weaknesses or fears of mathematics.



We can also support your engineers to upskill or refresh their understanding of Engineering Mathematics. We provide dedicated 1-2-1 tutoring of Engineering Mathematics for Functional Skills, Level 2 and Level 3 qualifications. We have over 30 years of expertise in tutoring of mathematics. We can tailor our tutoring to suit the needs of the candidate and offer marked assessments to measure improvements.

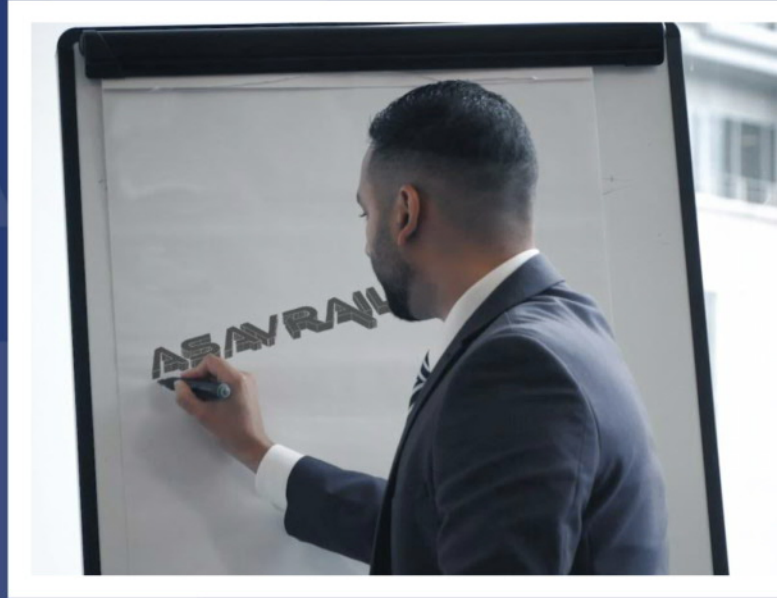




## PROFESSIONAL DEVELOPMENT AND COACHING

### RAIL ENGINEERING TRAINING & TUTORING

If you have an Apprentice, Graduate, Technician, or Newcomer to Rail in your team who is in need of guidance support and dedicated mentoring, which you are unable to fulfil due to busy schedules and project commitments, then let ASAVRAIL take care of them. We provide tailored training to familiarise your engineers with the Railway, the Processes, the Engineering and Technical Subjects specialising in Design for E&P and Signalling Power.



Training will be supported by an assessment to measure the knowledge retention and a feedback report. We can also offer hands on dedicated on the job training, to help your designers complete designs under competent mentorship. Our training, mentoring and support expertise has a track record of success over the last 20 years, following positive feedback and award nominations.

We have worked with engineers transferring from Non-rail to Rail, Rolling stock to Systems, Civils, Signalling or Telecoms to E&P, overseas engineers from Europe, India and Africa to the UK, maintenance, construction and asset engineers in to design.



## PROFESSIONAL DEVELOPMENT AND COACHING

### PROFESSIONAL DEVELOPMENT COACHING AND WORKSHOPS



ASAVRAIL globally offer professional development coaching and workshops to support your teams or groups to understand continuous professional development and guiding them to achieve a professionally recognised qualification of an Engineering Technician, Incorporated Engineer or a Chartered Engineer in accordance with the latest competency requirements. This can also be aligned with your local industry or company competencies, these may be specific to your country or a particular qualification being applied for in parallel, to avoid duplicating the process.

We can offer sessions to a group or individuals which can be tailored to suit your needs or qualification objectives.

We also provide technical seminars with industry experts to support your continuous professional development and innovation in Engineering and Technology.







**[www.asavrail.com](http://www.asavrail.com)**

Follow us on LinkedIn



Based in Birmingham, UK  
Serving the UK, Ireland and Overseas

For further details contact:  
[info@asavrail.com](mailto:info@asavrail.com)

