



AN INTRODUCTION TO
AEGIS R&D and INNOVATION

R&D and INNOVATION

At AEGIS we put **Innovation at the heart** of all we do.

We recognise that Innovation is **the key to progress** for the benefit of humanity, and that it is the only way to overcome the incessant challenges we will face.

Railway and transportation are in need of **new ideas** and **transformative solutions**, these can only be achieved through **constant research, fireless development** and **bold investment**.

OUR SERVICES

R&D and Innovation Consultancy

AEGIS; your RD&I partner

❖ We support our clients with their R&D and Innovation projects.

At AEGIS we have a long history of supporting the railway industry with its most innovative enterprises. We can offer our full suite of engineering and certification services for the benefit of R&D projects (early-mid TRLs) and Innovative projects (mid-late TRLs). Moreover, with the creation of the RD&I section, we will build specific skills through training, synergies and the experience and resources of the IKOS lab, to add even more value to our services.

These are some examples of RD&I projects we have been involved with:

- LPG conversion of diesel-loco (C73) with G-volution.
- Development of cloud-based software-in-the-loop test benches.
- Developing the battery powered C230 vehicles with Vivarail.
- Developing the HydroFLEX and the ElectroFLEX projects with Porterbrook.

Research & Development

We develop the future of railways

❖ We do our own Research & Development projects.

Together with industry and/or academic partners, or on our own, we will explore the possibilities of R&D (low-mid TRLs) and build upon our expertise and the IKOS lab experience to lead or co-lead these type of projects.

Innovations

AEGIS; your Innovation provider

❖ We provide our clients with innovative products and services.

We will offer innovative services and products (mid-late TRLs) to our clients. We will build upon the ideas developed by the IKOS lab and/or ourselves through R&D projects to bring these ideas to the UK market.

We have innovative developments in the fields of condition-based maintenance, model-based systems engineering or additive manufacturing. In addition, we can offer services such as the application of systematic innovation methodologies.

Training

We prepare you for the future

❖ We train our clients in the skills and technologies of the future.

Our training offerings are and will be of the highest quality in the most important topics for the industry. At AEGIS, we have experience in delivering successful training courses and we want to take this service to the next level. We will combine our expertise and experience with the IKOS lab to create training courses that can adapt to the needs of each client.

To our current offer covering topics such as Safety or Cybersecurity, we may add topics such as ERTMS/ETCS, MBSE or Systematic Innovation amongst others.

InnovAEGIS

We make AEGIS the best it can be

❖ We improve AEGIS by applying R&D and Innovation to our systems/processes.

Every company needs to strive at being the best, all the time. At AEGIS we understand that in order to keep offering the best service to our clients we need to keep improving and never settle.

Through academic collaboration, with the IKOS lab or on our own, InnovAEGIS is applying our R&D and Innovation expertise for the improvement of our systems and processes.

R&D and INNOVATION

OUR PEOPLE



Mario Ramos Garcia CEng, R&D and Innovation Lead, AEGIS

"With this R&D and Innovation section, we want to place AEGIS at the centre of Innovation. We want to be the partner of choice for everything RD&I related."



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As part of the **IKOS group**, we benefit from the R&D and Innovation expertise and experience of the IKOS lab. We work as one team to deliver on the needs of the R&D and Innovation services AEGIS is offering to our clients.



<https://www.ikosconsulting.com/en/ikoslab>



Giacomo Bersano, Technical and Innovation Director, IKOS

"If you worry about the future, create it!"

OUR PARTNERS



OUR CLIENTS





THE POSITIVE CHOICE



AEGIS Rail

www.aegisengineering.co.uk