

Can you share more on your role within ERA and your current priorities?

My role in the European Union Agency for Railways or ERA is the programme manager for Human and Organisational Factors (HOF). ERA is not only an EU regulator, but by working closely with the sector, it ensures the harmonised implementation of the legislation through dissemination, training and guidance. Our current priorities are two-fold: we need to ensure that HOF are included in the EU rail regulatory framework and that it is being complied with. We do this by raising awareness at all levels. In collaboration with my communication colleagues, we are developing a HOF communication strategy, and training the sector on how to integrate HOF and national regulators in order to ensure compliance with EU legislation.

In your eyes, how has the role of safety & security in rail changed in recent years, particularly with the rise of digitization and automation?

The Boeing 737 Max accidents were a tragedy, but also a rich source of "lessons learned" for the railway industry, concerning both HOF and Safety Culture. Undoubtedly, digitisation and automation can bring many benefits to railways, such as increased performance and capacity, and these developments are happening at an ever-increasing pace. However, there needs to be a regulatory framework to ensure that with these new developments, the railways remain safe. Keeping up with the developments will be a challenge for the regulators!

What should the industry be prioritizing in order to push for the safest possible railways?

"Human Automation Teaming" is an approach that shows much potential in shaping a new role for humans. Instead of automating everything using a "because we can" approach, it would be far better to use the MABA – MABA approach, which stands for "Men are better at – Machines are better at" or to be politically correct "Women are better at – Machines are better at" WABA-MABA. This makes the best use of both humans and automation for both safety and performance.

At Rail Live, you are presenting on the myths of automation and the relationship to safety. Can you briefly walk us through what this means and how automation transforms railway safety?

The Agency is publishing a series of what we call "Automation Myth Busting Papers" written by experts in the field of automation, but in a language people can understand, pointing out some of the myths of automation – and there are many. For example, the latest about to be published is on workload. It is a common myth that automation reduces workload, which is true in some cases, but this can present its own risks, as work underload leads to a lack of concentration. Automation can also lead to overload which may seem counterintuitive, but when automation goes wrong – and we all have examples of that! – then the workload for the operator can actually increase substantially, and he or she is not prepared for that, especially if they have had a previous period with underload. Finding the right balance between automation and humans is ideal.

What does the future of railway safety and security look like? Where do you see the industry heading in the next 5 years?

Railways are the safest form of land transport, and only just behind aviation. With the transition to digitalisation and automation, as long as HOF are integrated, this will remain the case and even improve. I am very optimistic that the future is rail.



Jayne Yeo is taking to the Rail Live stage on the 29th of November to discuss:

"Debunking myths of automation: How can we ensure the safety of our constantly digitizing railways"

Click here to see who will be joining Jayne at Rail Live >>

<u>Visit our website here >> </u>

ABOUT RAILLIVE!

Rail Live! brings together the global railway industry to explore technology, innovation and investment for the entire rail supply chain.

The conference has three overarching themes - Digitisation, Liberalisation and Sustainability - and covers topics such as Digital & IOT, Mega Projects, Intelligent Infrastructure, Smart Train Control, Metro, Integrated Mobility, Smart Stations, Freight, Power & Sustainability, Light Rail and more.

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