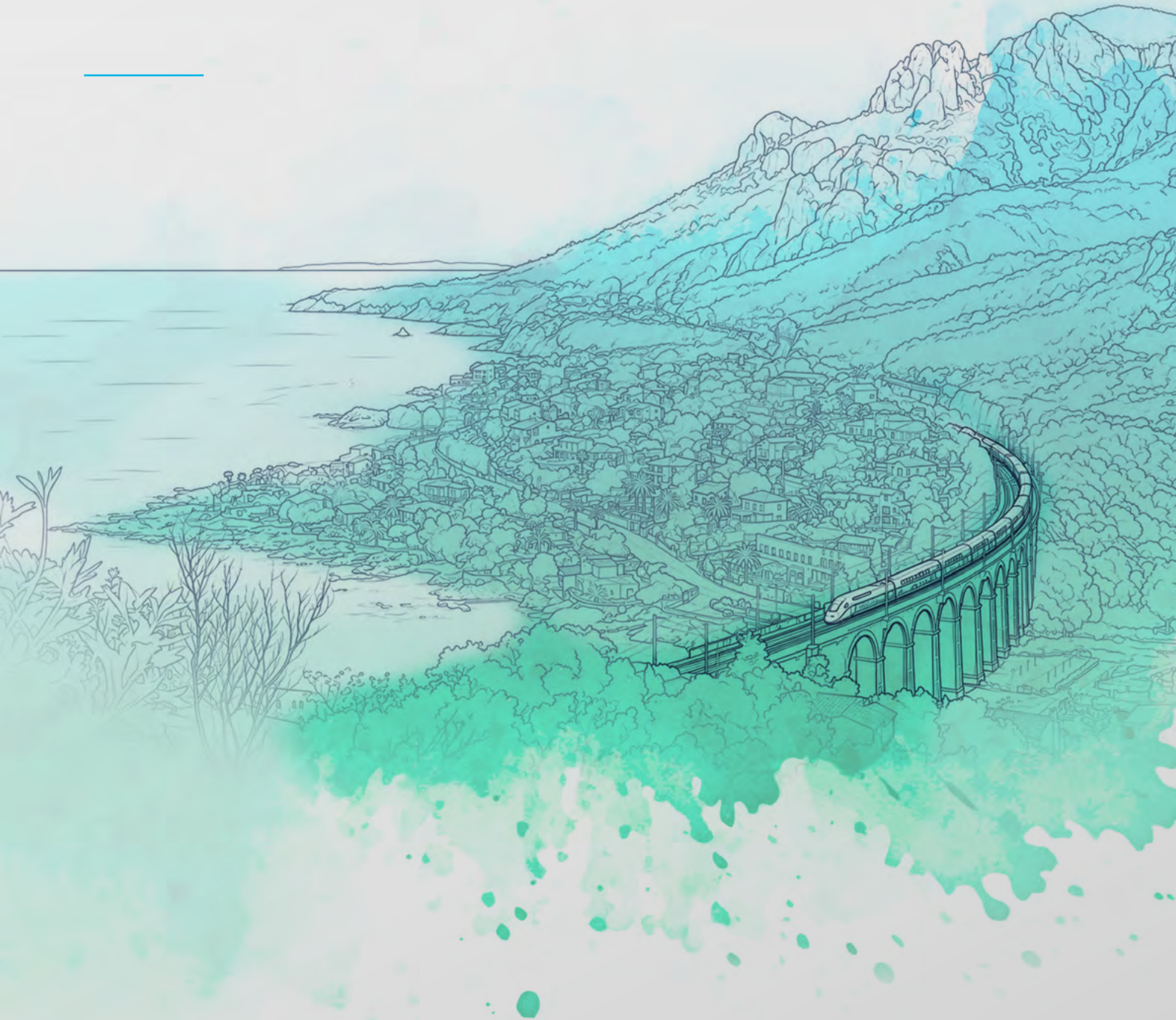


HIGH-SPEED RAIL: UNLOCKING THE POTENTIAL



HIGH-SPEED RAIL IS FACING A PIVOTAL MOMENT.

By combining market liberalisation through the Fourth Railway Package with the infrastructure ambitions of the Trans-European Network (TEN-T), Europe has created the strongest platform yet for high-speed rail to become a routine, cross-border mode of transport.

Further, the European Commission (EC) created a focused vision to deliver a well-functioning and faster high-speed rail network by 2040, publishing its High-Speed Rail Plan in late 2025. This compelling vision is based on its four pillars: accelerating investment, creating the right framework, harmonising the rail sector, and strengthening governance.

The UK is also focused on delivering high-speed rail both within the UK and to the Continent. HS2 has been reset and may ultimately get closer to its original vision. The UK Government is very supportive of the initiatives of the HS1 and Channel Tunnel infrastructure managers to grow international services on their infrastructure and recently entered into separate bilateral agreements with Switzerland and Germany to facilitate the delivery of rail services between the countries.

Liberalisation is taking hold and growing where already established, with new entrants increasingly challenging state-owned incumbents to deliver additional routes, introduce much-needed competition, and meet untapped demand.

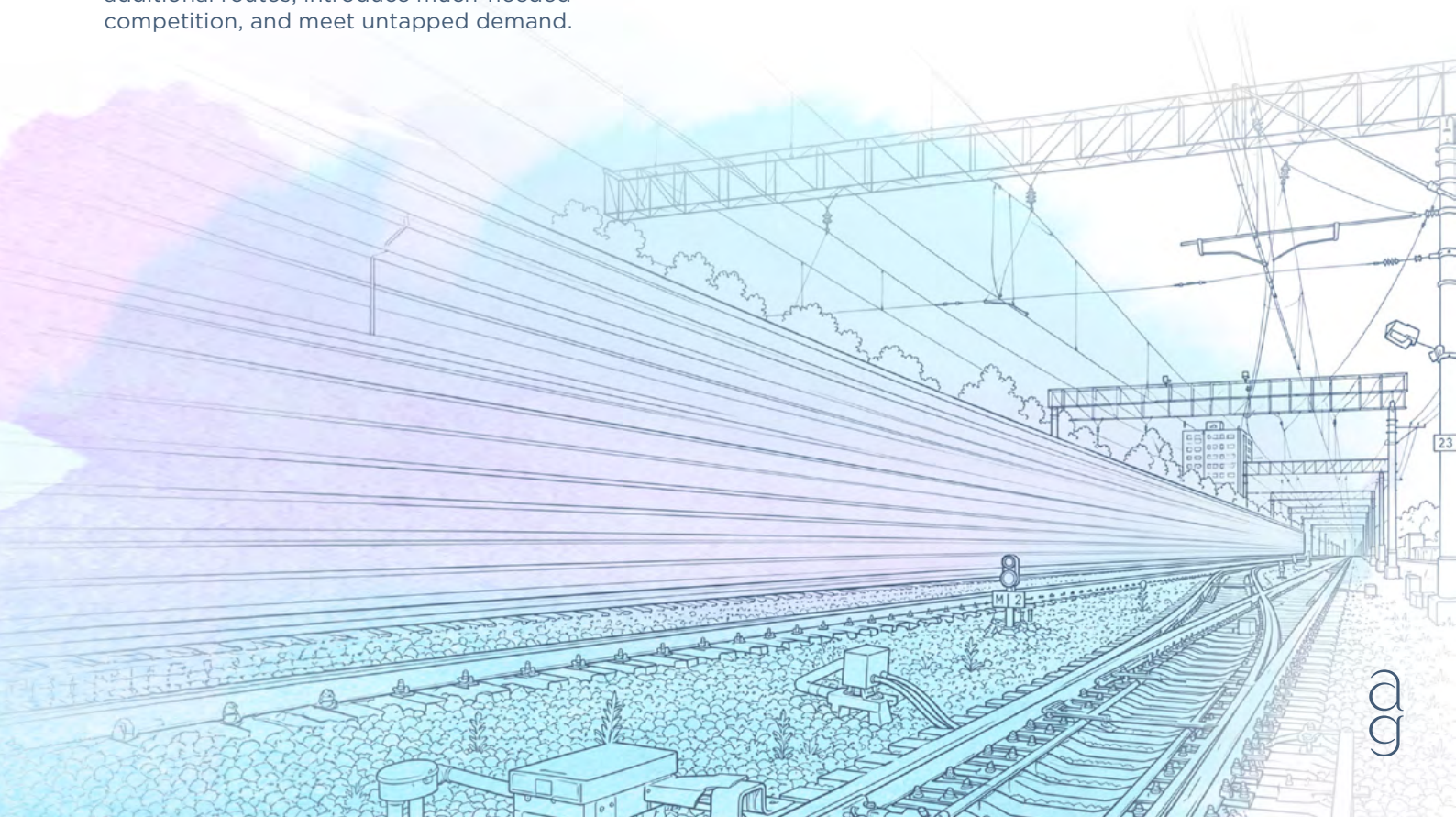
However, whilst passengers are beginning to see real choice, we do not yet have what might be called a high-speed rail network.

In part, that is because significant challenges remain. Different cross-border regulation, lengthy procurement processes, land and planning obstacles, barriers to new entrants and costly and complex track access arrangements, among others, all hamper investment and slow progress.

So, we spoke to industry and legal experts working at the sharp end of high-speed rail to explore the scale of the opportunity – and the levers stakeholders can pull to accelerate delivery.

It's just the start of the conversation, but bringing together the people who are building, investing and regulating this industry is an essential step on the journey towards connected, safe and sustainable travel across Europe.

This report, produced by Addleshaw Goddard in partnership with IPEX Consulting, captures these expert views, setting out the latest market position, analysis of where the real opportunities lie and a blueprint for how to unlock and accelerate delivery.



A MARKET ON THE MOVE

Progress looks different across Europe, but our experts are optimistic about the general direction of travel.

Countries have been inching towards high-speed rail for decades, but for the experts we spoke to, this moment feels different. Political will is high, and the High-Speed Rail Plan, underpinned by the legislative framework, is driving both investment in new high-speed railways and trains and liberalisation in formerly closed markets. “Breaking up the existing monopoly structures” will be a determining factor in a successful European high-speed network, one contributor emphasised.

The High-Speed Rail Plan looks at some of the challenges and focuses on trying to solve them. Its key aims are to remove cross-border bottlenecks, continue the standards harmonisation that the legislative framework calls for, facilitating new entrants and mobilising investment around priority routes.

In addition, the EC announced it will exempt rail services operating in liberalised markets from the provisions of its proposal for a Regulation on public contracts and concessions, published on September 9. This is intended to encourage and simplify investment and competition.



Success depends on a shared political, economic and environmental vision, and the investment of political capital beyond the electoral cycle.”

THE VIEW FROM EUROPE

France, for example, is showing that liberalisation “can be done – slowly, but surely,” as one interviewee put it. Privately owned Velvet has secured train paths, depot access and rolling stock to compete with SNCF – wisely choosing not to challenge the incumbent head on, instead running several new routes from Paris into western France to tap previously unmet demand. That follows TIF getting a foothold in inter-city operations from 2021 including cross border operation into Italy.

Spain remains the reference point for sustained procurement of high-speed rail networks in Europe, with early technical standardisation creating a well-utilised core network between major cities and the largest High-Speed network in Europe, the second largest in the world, behind China. Not every route has delivered on its economic promises though – a reminder to prioritise routes that will deliver the greatest socio-economic utility. But it has opened up that network also, with private operator Iryo operating between Barcelona and Valencia and Seville among other destinations.

Italy is arguably one of the most commercially mature and competitive rail markets in Europe. Its combination of dedicated infrastructure, successful open-access competition (Trenitalia vs Italo), strong passenger growth, and significant private-sector investment makes it one of the most important reference markets for future high-speed developments across Europe.

Germany may have been slower to open up its high-speed rail market, but change is now being seen. Italo has entered the market, Munich-based Flixbus has reaffirmed its expansion plans and market participants like Netinera are challenging Deutsche Bahn regionally – even against a wider regulatory landscape that still favours the former state monopolist. The Federal Network Agency’s (BNA) decision to limit DB’s access to 65-70% of capacity on key long-distance corridors from the 2028 timetable represents a significant step towards opening the German market to greater competition.

Poland, seeing just 11 rail trips per passenger, per year – against a European average of 19.5 – is working hard to close the gap with the 2032 launch of its first high-speed rail line via CPK. Connecting three major cities and a brand-new airport, it’s the country’s biggest-ever infrastructure project and a key part of the Government’s Integrated Railway Network Plan that spans new construction and modernisation of existing lines.

The Czech Republic, arguably engaged in Europe’s most sustained transport PPP procurement programme, is about to commence the competition for the High-Speed Rail Moravian Gate project.

While the **UK** has recently gone in the opposite direction after 30 years of liberalisation, it still believes that international high-speed services should be delivered by the market. It will be interesting to see what the Government’s plans are for operating high-speed services on HS2.



We're seeing real progress here. What Velvet is doing in France, for example, is admirable. It spotted a gap that SNCF wasn't serving and will soon add 10 million seats to the network per year. It's exactly the kind of confidence-building precedent that will drive greater investment and move the market forward."

2030s: AN INFLECTION POINT?

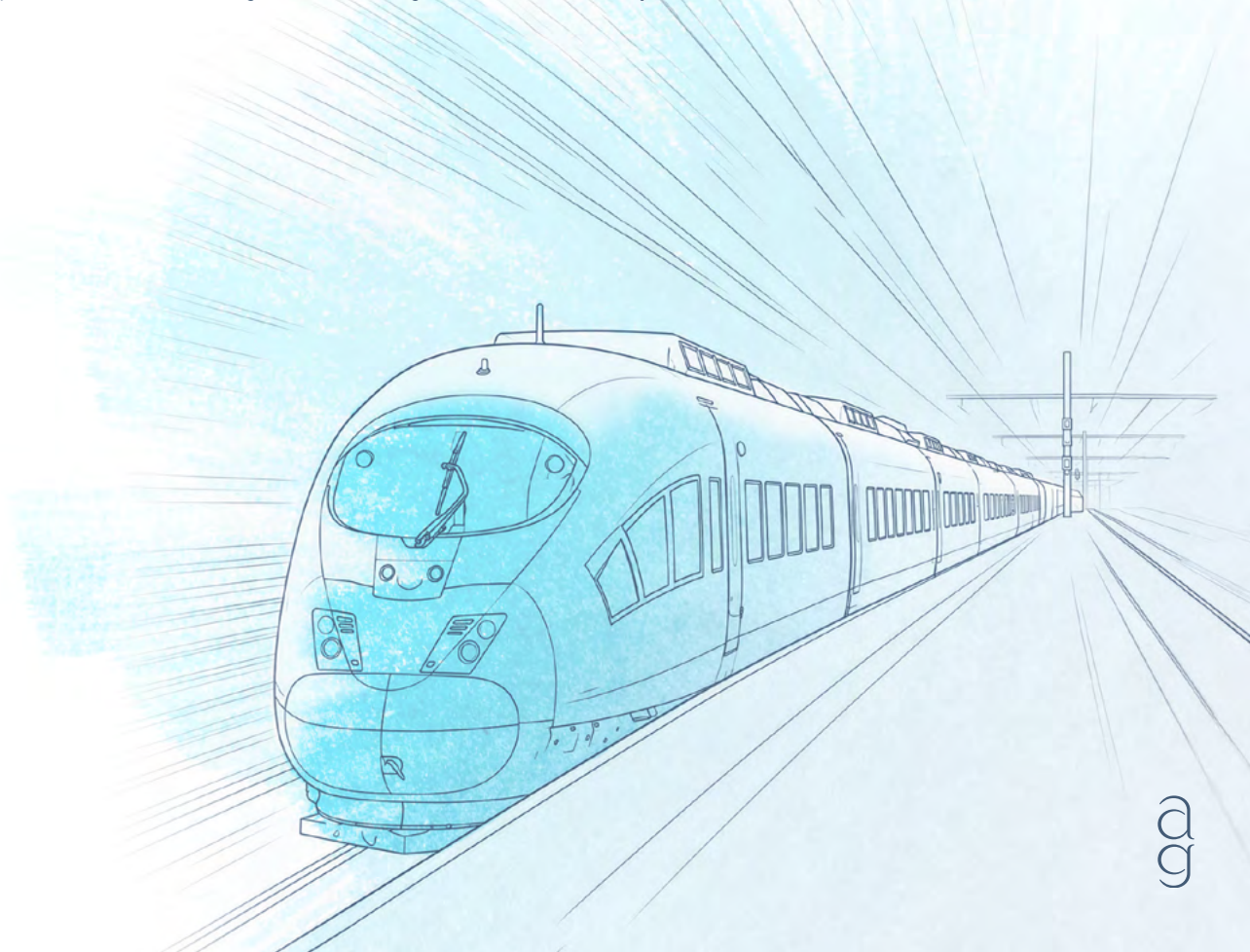
Keeping rail firmly on the political agenda are growing environmental pressures and looming net-zero targets. With all of these tailwinds pushing in one direction, one of our interviewees believes we're finally approaching a tipping point.

"Three major projects due to deliver in the early 2030s accelerate us towards the Plan's 2040 deadline: Rail Baltica will move the Baltic states off the historic Russian-gauge network, linking them into Europe's network for the first time. A new 18km long rail and road tunnel will halve travel times between Denmark and Germany and the Brenner Base Tunnel will run through the Alps, linking Germany, Austria and Italy. It feels like this could be a critical-mass moment for the high-speed sector, creating a huge influx of interest that feeds the next phase of investment."

2030 is also the focal point for reducing Lisbon-Madrid journey times to below five hours, the first phase in the flagship plan to connect Paris-Madrid-Lisbon by 2035, underpinned by Portugal's Porto-Lisbon high-speed rail corridor, already underway.

The early 2030s is also the target for a number of new international passenger operators – Evolyn, FS Trenitalia, Gemini, Heuro and Virgin, as well as the incumbent, Eurostar – to introduce new high-speed services from the UK to the Continent and cross-border on the Continent, offering choice like never before. There's a clear move towards more competition, capacity and private-sector investment – no doubt driven by the size of opportunity on the table.

For our experts, the next five to ten years are likely to decide the shape of the market.



OPPORTUNITIES AHEAD: WHERE RAIL WINS

Rail remains underrepresented within the European transport market, accounting for approximately 7% of passenger transport journeys despite offering substantial environmental advantages over competing modes. This creates a significant growth opportunity. The growing competition and investment we're seeing reflect real changes in behaviour and market dynamics on the ground. Most notably, environmental concerns are impacting travel choices and rail clearly stands to benefit. Producing a fraction of the emissions compared to flying, it's a compelling

model for Governments to promote, as they capitalise on rising demand while meeting environmental obligations at the same time.

Accelerating this shift is wider turbulence across the aviation industry. Passenger numbers have surpassed pre-pandemic levels, but clear demographic splits and supply chain pressures have emerged. Post-COVID recovery remains a complex picture, which our experts suggest could help high-speed rail really take off.

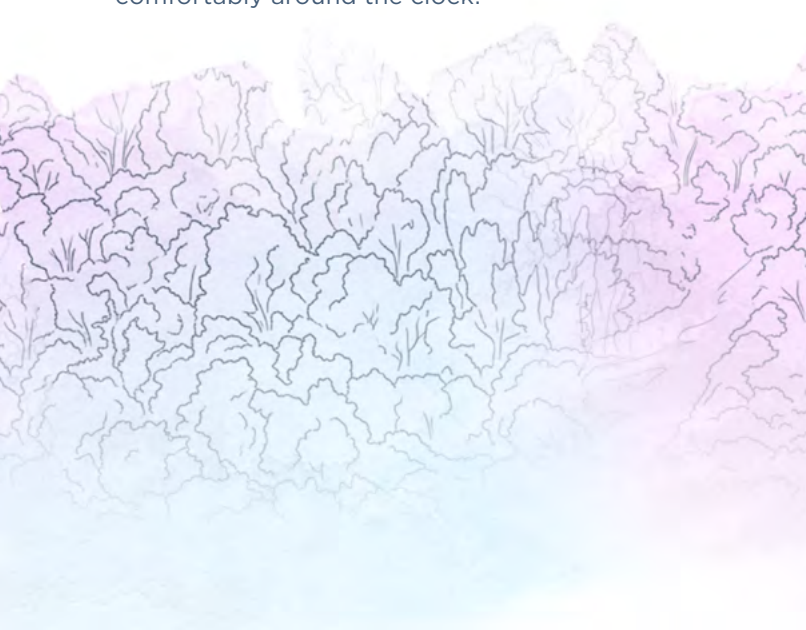
THE CONVENIENCE INDEX

For this to happen though, rail travel has to be easy, comfortable and cost-effective – it's what one of our experts coined the "convenience index", where a number of sometimes competing factors drive our travel choices. High-speed rail offers you city-centre departures and arrivals. When you can board a train in central London and step off in the heart of Paris a little more than two hours later, "it's simply a no-brainer". But if rail is too expensive, people will engage their brain and often trade convenience for price. High-speed rail needs to find the right place on the index.

In contrast, and not so much high-speed, but still long distance rail, for increasing numbers of people, the journey, not journey times, has become important. The high-end travel sector is outpacing other areas of tourism and many people are opting for sleeper trains – luxury 'hotels on wheels' – allowing them to travel comfortably around the clock.

“

People often think high-speed rail is about reducing journey times. But it's also about capacity. Building new high-speed passenger lines frees up space for freight and additional local services. This is the win-win for high-speed investment.”



BUILDING THE EDGE

When asked how rail can sustain this advantage as routes and passenger numbers grow, our experts cited three key considerations. First, prioritising the right routes: once journeys begin to get to six or seven hours, it becomes harder to compete.

Then there's connectivity. A high-speed line means little if passengers can't easily get to their departure point or the 'last mile' is so inconvenient it negates the convenience the train offered in the first place. Similarly, dovetailing into existing networks may mean working within or adapting existing stations. Do these stations have the capacity for increased footfall, and the security controls required for international travel? If not, boarding and alighting are going to be miserable experiences however nice the train is.

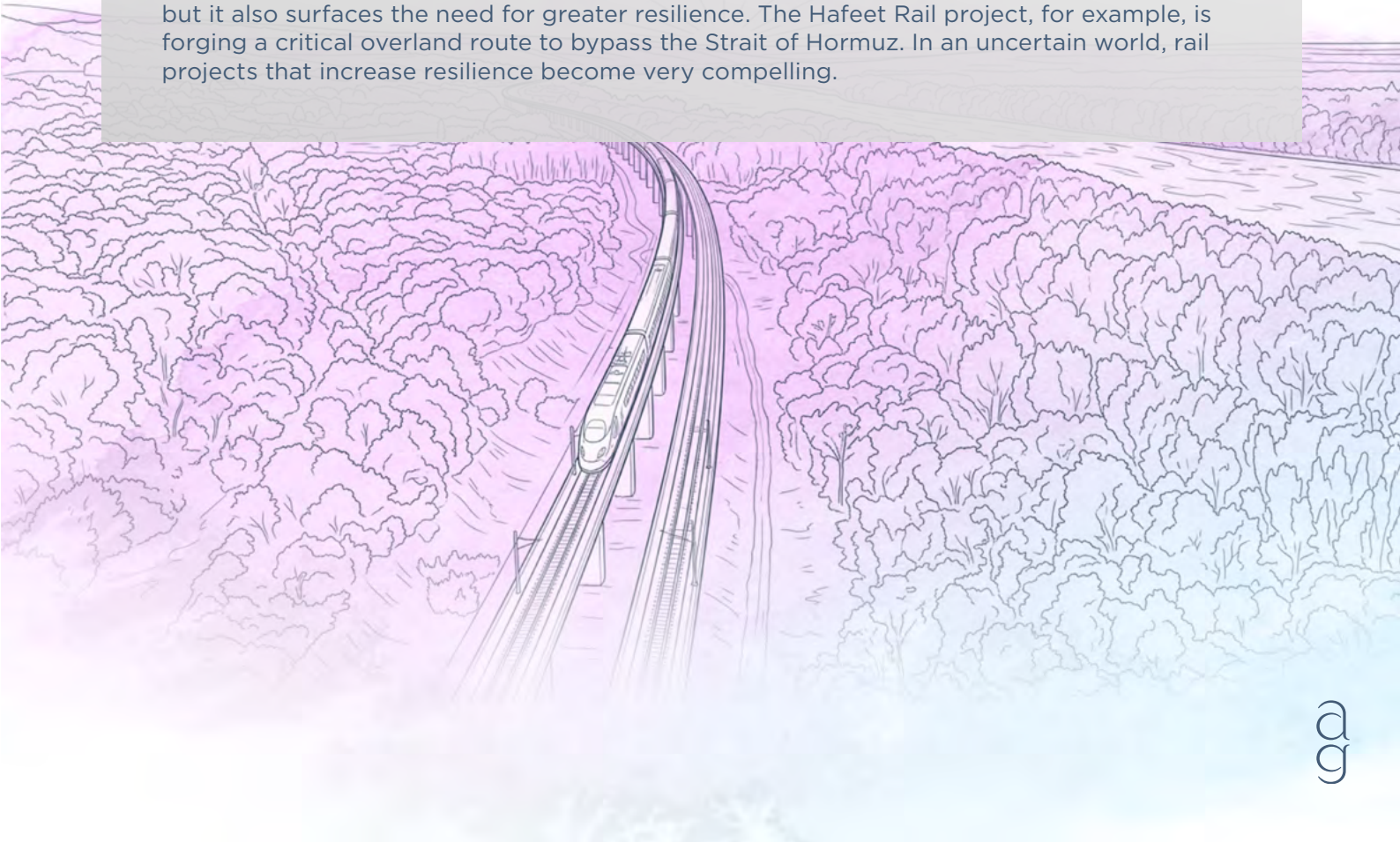
Finally, cost. "The rail industry doesn't always pay for itself," explained one of our interviewees. Government investment is essential, but there are other financing models that could be deployed to ensure high-speed rail remains attractive for passengers and investors.

These are just some of the questions any sustained high-speed rail initiative will need to answer. So, what will it take to get this bold new reality over the line?

LEARNINGS FROM FURTHER AFIELD

Unlike in Europe, the Middle East is building its rail network from a clean slate. Our Abu Dhabi-based expert shared his thoughts on what Europe can take from the GCC:

- Plan for the long term: Short European election cycles often hamper long-term vision and investment. Gulf states plan on 20–30-year political horizons, designing infrastructure to anticipate demand, rather than playing catch up.
- De-stigmatise private finance: This opens up more room to experiment with different financing models. The Gulf is building with significant overseas investment and involvement; Europe needs to consider how it can better balance value for money with protecting domestic manufacturing.
- Build for resilience: Geopolitical tension raises costs and dampens investment appetite, but it also surfaces the need for greater resilience. The Hafeet Rail project, for example, is forging a critical overland route to bypass the Strait of Hormuz. In an uncertain world, rail projects that increase resilience become very compelling.



UNLOCKING DELIVERY: WHAT NEEDS TO HAPPEN NOW?

We know momentum is building. But there's clearly more to do if countries are to turn ambitious delivery concepts into reality, at pace. We asked our experts for the key tactical levers that stakeholders can pull to unlock faster, smarter progress.



If a train could run a different route, for a different operator, 15 or 20 years into its life, rolling stock would change from a high-risk, single-use cost into an investable asset. Plus, it would create a functioning secondary market – something that's currently lacking.”

ACCELERATE HARMONISATION

Standardising the technical aspects of high-speed rail is essential. Because, as one of our interviewees pointed out, this isn't just a case of interoperability. “Full technical harmonisation across the network would allow trains to run anywhere, which in turn would greatly simplify specification and procurement processes. But critically, from an investment perspective, it would allow trains to be redeployed.”

EXPAND FUNDING MODELS

The Plan is looking at developing a dedicated EU financing strategy, culminating in the High-Speed Rail Deal, “a multilateral commitment to mobilise the necessary investment”. No doubt Public Private Partnerships, where private capital pays for and delivers and is then repaid for availability, and concessions, where Government delivers infrastructure but the private sector takes on operation and maintenance, will feature. Both can offer meaningful risk transfer and flexibility over long-term projects, helping to ensure greater value for money. If the UK Government wants meaningful private sector investment in rail and other industries, it will either need to offer the market a new financing and procurement model, or it will need to come to terms with a seeming reluctance to develop PPPs.

A number of our interviewees would look further. Wider acceptance of alternative funding arrangements, such as land value capture or realisation, could ease the balance sheet pressures Governments face, and ultimately reduce the cost of delivery, but only at scale. Since LVC at scale goes to the heart of how we tax land/property, it would require real political will.

REDUCE BARRIERS TO ENTRY

There needs to be better alignment between regulatory and certification requirements across borders. Unlike aviation – an international industry from its inception – rail is playing catch up.

There are huge efficiencies and cost savings to be had in simplifying licence, safety and technical requirements, and in end-to-end, cross-border, access applications and awards.

“

If you're an operator running from the UK into mainland Europe, you'll be facing three or four separate sets of standards and certifying bodies. For cross-border travel to really take off, this status quo is unsustainable.”

One of the particular challenges high-speed rail faces end-to-end is land and associated planning delays. Rail is tied to the land and high-speed rail is tied to a lot of it, and the laws of the land change from country to country. One of our experts added that planning reform is part of this simplification exercise too: “Certainly in the UK, a faster, less easily challenged

planning process would greatly accelerate delivery. If there was a mechanism to designate schemes of ‘national importance’, that wouldn’t then need to consult 15 different councils and grapple with judicial reviews, that would significantly boost investor confidence, speed up delivery and reduce costs.”

BREAK THE ACCESS DEADLOCK

New entrants face a real “chicken-and-egg” problem. They need confirmed track access to secure investment for their rolling stock, but they often can’t get access until they’ve secured the fleet. A more pragmatic approach would be to grant access based on the credibility of an operator’s rolling stock plan. We’ve seen this approach gaining traction, but wider adoption is clearly needed.

SHARE THE LEARNING

Our interviewees agreed that there isn’t a single quick fix. However, creating a forum for operators, investors and wider stakeholders to speak with a more coordinated voice is a fast, low-cost intervention that would help regulators and Governments better understand the reality on the ground.

ENCOURAGE MODAL SHIFT

In Europe, rail accounts for only about 0.4% of transport-sector greenhouse gas emissions. This is a major reason policymakers across Europe are encouraging modal shift from air and road to rail. A passenger moving from a short-haul flight to high-speed rail can reduce travel emissions dramatically. This impacted rail growth in France where since 2023, it banned certain domestic flights a suitable rail alternative exists with journey of 2.5 hours or less.

Open collaboration, at a national and EU level, would help anticipate friction points and turn high-level ambition into practical delivery. Hopefully this will be demonstrated through the recent UK-Switzerland and UK-Germany MOUs. If so, more bilateral agreements and MOUs could follow, accelerating us towards the 2040 objective.

“

Policymakers have done a good job on high-level strategy, but there’s a gap in translating that into practical delivery and in channelling those experiences back into shaping priorities.”

CONTINUING THE CONVERSATION

Through all of our conversations, there was one consistent thread: despite the challenges, of which there are many, this is a market that's gaining real traction. The political will is growing, liberalisation is happening and new entrants are emerging – and winning. Through the Fourth Railway Package, there is a clear appetite to address the technical and administrative hurdles, and ensure fair track access for everyone. The TEN-T network paints a bold picture of seamless connectivity across the continent.

At Addleshaw Goddard, we've had a front-row seat to this growing momentum. Rail is our largest transport sector, so whether we're advising on cross-border access rights, negotiating rolling-stock refinancing or leading competitive procurement procedures, we're fully committed to working with our clients to accelerate the delivery of high-speed rail across Europe, and beyond. For us, driving change will mean:

- Facilitating conversations between key stakeholders to surface challenges and address friction points.
- Guiding our clients through the regulatory and funding barriers that hold back delivery.
- Building out this report with your insights and presenting it to the European Commission.



To conclude this report, Addleshaw Goddard and IPEX Consulting are hosting a breakfast roundtable at InnoTrans, bringing together industry leaders to explore many of the themes highlighted throughout this research, including the future of high-speed rail, investment priorities, infrastructure delivery, cross-border collaboration and the role of innovation in unlocking network capacity and economic growth.

The discussion will provide an opportunity to test and challenge the findings of this report against current market perspectives and emerging industry developments. Following InnoTrans, we intend to revisit the report, incorporate key insights and observations from the event, and issue an updated edition reflecting the discussions held and the latest market thinking. This will ensure the report continues to provide a relevant and informed view of the opportunities and challenges shaping the future of European high-speed rail.

ACKNOWLEDGEMENTS



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