Episode twenty-eight

TRANSCRIPT

NEW ZEALAND INFRASTRUCTURE COMMISSION
Te Waihanga

Asset management capability

Infrastructure for a better future

Jessie Lea
Special Advisor – Asset Management, Te Waihanga

Andy Jinks
Regional Director – Midlands, National Highways

Please note: the transcript has been edited to make reading as easy as possible.

Introduction: Welcome to Infrastructure for a better future, a series where we have honest conversations about the infrastructure challenges we are facing and how we can build a better Aotearoa. In each episode we talk to experts from here and overseas about what works when it comes to addressing these issues.

Jessie Lea: Welcome to Infrastructure for a Better Future. I'm here today with Andy Jinks. Andy is a civil engineer and chartered project professional with over 40 years' experience in both the public and private sector. He has worked in a variety of roles within the UK transport infrastructure industry. He works for the UK government-owned company, National Highways, who are responsible for managing England's strategic road network of motorways and major A-roads. His current role as Regional Director for the Midlands has the accountability for leading an 800 strong team who operate, maintain, renew, and support the enhancement of what is the largest, busiest, and most politically scrutinised region in the UK. Prior to this, he held senior roles across multiple disciplines in the UK national rail industry, including a 10-year spell in metro rail, managing the complex asset base of the London Underground network. During his time there, he led London Underground to transform their asset management practices, which led to achieving the ISO 55001 standard for asset management in 2015. He's the current president of the Institute of Asset Management and has been an active board member and volunteer for the last 10 years to support knowledge development, capability growth, and communicating the benefits of the practice of infrastructure asset management.

I'm Jessie Lea, Special Advisor for Asset Management at the Infrastructure Commission.

So, Andy, I am going to ask you a few questions. I'm interested in ISO 55001. I understand it's the global standard for asset management, and it gives organisations a clear and disciplined way to manage assets across their full life cycle, balancing cost, risk, and performance, so that infrastructure assets deliver real value to communities both now and into the future. I'm really interested to hear about your experience achieving ISO 55001 compliance at London Underground. What was your role and purpose there? How long did it take? Talk us through that journey you went on and the challenges and successes.

Andy Jinks: Thanks, Jessie. Thanks for having me today. My role in London Underground was Head of Asset Strategy and Investment. The team that I managed was a specialist function of around 60 asset managers and sponsors. We had the responsibility for interpreting the Mayor's transport strategy into long-term asset management strategies, medium-term asset management plans, and short-term delivery plans. The sponsors held a critical role as acting as internal clients for what was a 13-billion-pound programme of capital works over the 10-year asset management plan period. With this level of investment, it was vital that the outcomes of the asset management strategy and plans were translated into delivery. London Underground has a complex asset base. It's a huge geographical area spanning all aspects of London, with 10 fleets of trains, all spanning five decades of multiple types, 270 stations, most of which had individual and unique design features and heritage, just short of 600 lifts and escalators, around 12,000 structures, including 344km of tunnels and 1100km of track. There was also myriad signaling systems and multiple communications assets.

During my time at London Underground, it celebrated its 150th anniversary and that it had grown into the network it is today. The people of London rely on us to get them to work, and when you consider that approximately 25% of the UK's GDP comes from the capital, it meant that we certainly felt the weight of responsibility. I had a team of dedicated asset management capability growth experts. This was to support both corporate processes and also individual capability. Interestingly, this was where my association with Institute of Asset Management grew. In terms of the ISO 55001 journey, it all started with the formation of public private partnerships, or PPP. The PPP was introduced in 2003 and was aimed at bringing in private sector investment and expertise to modernise the ageing tube infrastructure, including much needed additional capacity, as well as upgrading the lines to improve reliability and address a massive renewal and maintenance backlog stored up over decades of underinvestment. These arrangements are designed to last 30 years and also offered a political alternative to privatisation.

One of the pivotal points for the later development of good asset management practice came through one of the obligations that was in the PPP contracts. In the first seven-half years of arrangement, a comprehensive asset register had to be created. Alongside this was the development of a mechanism to develop service criticality and asset vulnerability by developing a matrix of asset risk measures. These included legislative compliance, safety risk understanding, performance impact of failure, as well as maintenance risk. This sat alongside a measure of residual life measures as well to understand what the time to net economic intervention would be. Asset management systems were also introduced to inform the development of a 10-year asset management plan to demonstrate the balance of cost, risk, performance, and work required to meet the aims of what was then not just the contracted outcomes for our client, but also Transport for London's overarching strategy. As you can imagine, in the early days, the lack of asset information, lack of understanding, and early business leveling out, meant that these were not initially our finest plans But incrementally they improved and we started to develop simply at first, but then more complex degradation models, which linked to improved cost estimating techniques, led to some asset areas having some quite comprehensive whole life cost models. Unfortunately, the PPP experiment didn't last. Metronet went into administration in 2007 and came under Transport for London ownership. Tube lines were later bought out and came into Transport for London in 2010.

The practice of asset management, both corporately and individually, continued to mature. We undertook asset management maturity assessments against various excellence models that are out there. We steered our improvement program against this maturity assessment, and we also established in-house training for all levels of asset management professionals – from absolute beginners, such as train drivers, station staff, who received various levels of familiarisation, to practitioners and maintenance operatives, right the way up to domain experts in my team. We link these courses to the Institute of Asset Management (IAM) qualifications and took several hundred people through these courses to achieve various levels of certification. This created positive contagion within the business. Our executives started to see the value of better investment decision making, whilst our team felt like they were being invested in. Once ISO was published, we undertook a gap analysis and embarked on a programme of activities to close out any areas that needed attention. Despite former Metronet and tube lines having separately attained PAS 55, one of the complications was that they were still actually operating on different systems, two different asset management work management systems, one having Ellipse, one having Maximo, so that meant we had a significant amount of integration to do to make sure we met the required standard for ISO, but we got through that. In spring 2015 we obtained ISO accreditation and thus became the first railway authority in Europe and the second in the world to achieve the new standard.

What was interesting was that a decade earlier we were often visiting other countries and other metro and railway organisations to understand their levels of practice. Fast forward 10 years, we had organisations from New York, Singapore, United Emirates, Qatar, and also our UK mainline sisters in Network Rail to come and see how we did asset management. That was a really good moment for us, and we took pride in that. It didn't end there, as we still had more to do. So, whilst we'd achieved ISO, it's a bit like passing your driving test, in a way, it just says that you're competent, and we set up a continuing development framework to effectively go beyond ISO, and that's something that anyone who goes through ISO, considered that there is always a position beyond ISO.

Jessie Lea: That sounds awesome, and that you managed to achieve something as a first and then had all of that international interest in achieving that ISO 55001. Can you tell us what the ISO standard for asset management is?

Andy Jinks: It's a suite of standards. If you look at the definition of the ISO itself, it's an international standard that provides an overview of the principles and terminology for effective asset management. It was launched in 2014 and it's aimed at helping organisations optimise asset value, reduce risks, and improve financial performance. It covers the entire life cycle of an asset, not just its initial development and bringing it into service, but also all the way to disposal, which is quite useful, especially in certain industries where you have to consider decommissioning.

Jessie Lea: What do you think are the biggest benefits that public sector asset owners gain from meeting those ISO 55001 requirements? Clearly other people were interested, because they came and asked you about it.

Andy Jinks: I've mentioned a few examples. In simply undertaking the exercise, it brought the organisation together. It concentrated many different departments on a common purpose. It gave interest and understanding to the value of asset management, and how the development could grow into creating better business outcomes. It also gives an organisation that is ISO accredited the opportunity to talk to their funders, promoters, or their sponsors that the product that they've developed is something that's endorsed underneath these international standards. It has that level of credibility. It also creates a formula by which you can understand how to calculate and retain value. It encourages practice to consider outcomes rather than just inputs and outputs, serviceability, and also ultimately customer and user satisfaction. Put another way – it creates an environment that allows an organisation to align asset management with its strategic objectives and make it part of the everyday.

From what I've witnessed at both London Underground and at National Highways, it also fosters a commitment within our leadership and gives them confidence in some of the plans that we've developed to be deliverable.

An example of that was when the then Managing Director of London Underground was arm wrestling at a funding setting meeting at City Hall. He had the ability with the 10-year asset management plans, that had the demonstrable mix of risk, cost, performance, work, and the various other aspects, to demonstrate to the financers at City Hall what was actually going to be achieved and what wasn't by backing certain flavours of a particular plan. He was quite pleased when he came back, having got the suitable size of the pie that he was after. As I mentioned earlier, the benefits go beyond ISO with the right leadership and commitment – it should foster a culture and continuous improvement to go even further with your plans.

Jessie Lea: It sounds like it was a really positive experience for you there. Would you recommend that meeting ISO 55001 is something that we should do in the public sector in New Zealand?

Andy Jinks: I believe so. Don't do it just for the sake of getting a certificate and getting the ISO accreditation. It is part of a framework that you need to encourage before actually going ahead and doing it, but as I said, our experience at London Underground and National Highways, is that it gives you the framework corporately, individually, and creates that contagion that asset management really does offer value. Plus, it gives you a credible sort of certification to underwrite your investment plans.

Jessie Lea: Where would you suggest we would start if we're going to embark on that journey? What's the most important thing to get right first?

Andy Jinks: Start simply. Start with the basics. Understand your asset base. You need to understand what your maintainable items are and build from there. Just to repeat some of the stuff about the underground. We had a very poor understanding of our assets. We got understanding of our assets in our databases, what we were doing with them, how much it was costing, and we started to build a credible and capable way of understanding risk, cost, and what we were doing out there. Over time, you can use the ISO guidance to support where you are in that maturity framework. There's models out there to support your maturity understanding, where you compare against ISO.

Jessie Lea: I would agree that the ability to do maturity assessments is a really helpful way to identify your areas for improvement in the asset management space. We've talked a bit about the ISO standards. I'm also interested to talk to you about your role as President of the Institute of Asset Management, which is UK based, but obviously has an international reach. So, for those of you who might not know, the Institute of Asset Management (IAM) is the global professional body advancing the discipline of asset management as an independent and not-for-profit organisation. It brings together a worldwide community of professionals who are developing best practice, building their knowledge and championing the value of asset management for organisations, infrastructure systems, and the communities they serve. I would be really interested to hear about your role as the President of the IAM, and a bit about the IAM itself. What's your favorite part of that role as the president?

Andy Jinks: I've been in and around IAM for well over 10 years now, and been part of the board for around that similar time, and was fortunate enough to be president in September 2024. I've got another six months of my tenure before I hand over to the next president. The president just heads up a board of like-minded professionals. All of us are volunteers and I suppose for me it's been about being a small part of an incredibly committed and passionate community. An example of that passion and commitment is the level of volunteering that supports the aims of the Institute. In 2025 we saw a record-breaking 750 volunteers from over 40 different countries, all contributing to various things like advancement of knowledge, advancements of capability, just growing the actual practice, and also just some of the day-to-day activities.

My passion is about professionalising the discipline and getting it international, national and corporate recognition through the provision of various levels of membership that we offer. That's the maturity assessments I mentioned, other knowledge products, and subject-specific guidance. There's a wide variety of stuff that we provide, and I'm really keen to make that part of people's every day as part of their professional journey. One of my goals in my tenure has been to get the Institute formal recognition through developing our petition for royal charter. That means we'd get that professional recognition alongside other bodies.

Jessie Lea: That sounds great – a tick from the king would be nice! I know we've got to finish up, what would be a final message you would give to New Zealand asset managers who want to improve infrastructure outcomes for our public sector? What would you tell them?

Andy Jinks: Be patient. Asset management doesn't happen overnight. I'll be honest, when I first joined London Underground, I wasn't quite sure what an asset manager was. It was really only when I look back on my career at the various things I've done, I realised it was all of that plus a huge dose of common sense. So be patient, start with the outcome in mind, get your crystal ball polished to make sure you understand what the future looks like, understand the corporate environment that you're in, and how that will help you play your own individual capability and competencies. If you like to develop a plan, developing capabilities of things like decision-making, whole life cost models, start with that information equally. A little bit of advice is good enough. Often, I see a lot of 'pseudoscience' and complex models being peddled around the industry that I feel are sometimes unnecessary. Start with the basics in my mind. Some of the most complex asset management models that I developed started life in Excel. What was useful about that was that if it threw up a slightly odd answer, we could go back into the logic, and I could spot where maybe the algorithms are out, and that sort of thing. So, start with the basics and build on that. Don't go straight into black box and complex models and take it from there and enjoy the ride.

Jessie Lea: Well, thank you, Andy. It's been a real pleasure to talk to you today about how we might learn from your experience with the ISO standards, and also your learnings from being president of the Institute of Asset Management. Thank you very much for your time today.

Andy Jinks: Thank you, Jessie.

Narrator: Thanks for listening. Find out more about the work Te Waihanga is doing to transform Aotearoa at **tewaihanga.govt.nz**