



ALIGNING ASSET MANAGEMENT & INVESTMENT STRATEGY WITH WIDER ORGANISATIONAL OBJECTIVES

2014 PRIORITIES:

- **Driving more from your assets**
- **Extracting the right data to inform investment strategy**
- **Implementing and improving asset risk management frameworks**
- **Meeting PAS 55 and ISO 55000 requirements**

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WHAT IS THE PRIME OBJECTIVE OF THE ASSET MANAGEMENT LEADER OF 2014?

Utilities, transport, DNO's/TSO's and energy organisations across the UK and Europe are at varying stages of their asset management journey, but something that they all have in common is the need to develop and better align asset management strategy and investment with the wider objectives of the organisation.

Securing senior executive buy in for new investment is a theme that crops up throughout this eBook. In our Industry Study done in the second half of 2012, when asset management leaders were asked to select the top three challenges they faced in current projects from a list of 10 options, the highest scoring answers were as follows:

- **Developing a coordinated asset management strategy - 59%**
- **Extracting value from asset data - 48.7%**
- **Educating senior leadership on the value of asset management and securing executive buy in - 43.6%**
- **Calculating and mitigating performance, people and process risk - 38.5%**

As you will see from the interviews with leading industry figures and 2013 research results analysed throughout this eBook, the need to develop and strengthen asset management strategy, plus secure senior leadership buy in are still a major focus for 2013 to 2014. Visit page 11 to discover how your peers are extracting more meaningful data, and on page 13 you can hear what approach the Highways Agency are taking to managing risk.

What are our network of asset management leaders prioritising in the next 12 months?

How to integrate stakeholder management into strategic asset management. Combining long term and short term goals

Implementation of strategic direction: translating direction of our organisation into a clear asset management strategy

How we can best represent customer views in long term plans with regards to customers

Cross assets optimisation on strategic decision making, looking to enhance risks, costs and performance management within the organisation

HEAR MORE ON STRATEGIC ASSET MANAGEMENT FROM UNITED UTILITIES AND SCOTTISH WATER

Developing a Strategic Asset Management Function at United Utilities



Ahead of the 2014 Infrastructure Asset Management Exchange in London, the Exchange team caught up with one of the speakers, **Dave Champness** who is the **Head of Strategic Asset Planning**, at **United Utilities** to discover how their asset management function has developed strategically over the past few years and which soft skills are needed for such development. Dave also shares his insights into how to get buy in from stakeholders for new investment.

How is the asset management function set up at United Utilities?

United Utilities covers the water and sewerage services for seven million customers in the north west of England. There is a strategic asset planning team for water, headed by Dave, and an equivalent for waste water, these roles are the main interfaces with the regulators who manage quality. These strategic teams write the long-term asset strategies that will deliver outcomes for customers. They also develop the in-house common framework tools that enable the organisation to prioritise investment now and in the future...

Transforming Your Business and Delivering Added Value through Asset Management

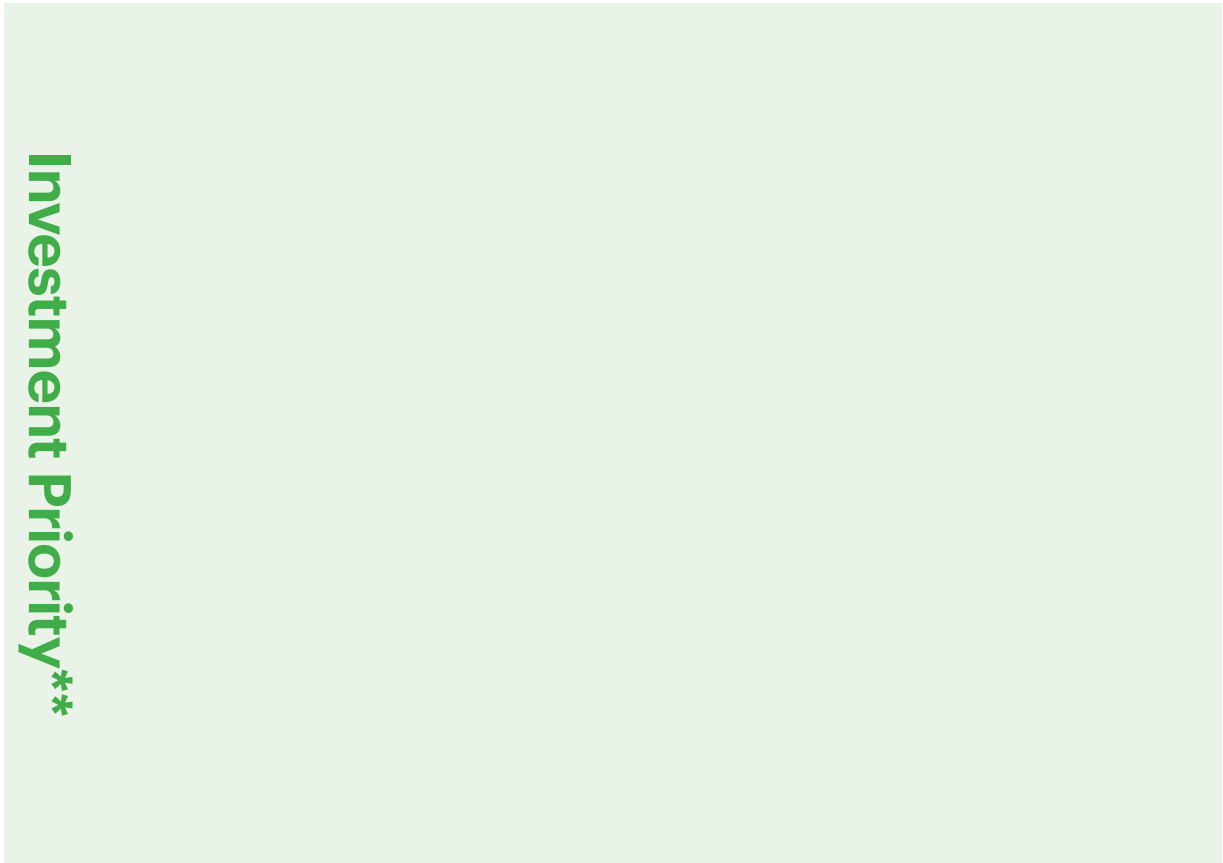
At the March 2013 Infrastructure Asset Management Exchange, **Jim Conlin**, **Waste Water Strategy Manager at Scottish Water** shared his views on what the critical success factors are in asset management and offered some illustrations of the progress at Scottish Water. It can be a real challenge to help your CEO and Executive Board understand the real business benefits that smart asset management can bring to your organisation. Watch this presentation to understand what smart asset management means for Scottish Water and what steps they have taken to track performance and illustrate this to the Board.



IN WHAT SERVICES AND SOLUTIONS DO INFRASTRUCTURE ASSET MANAGEMENT DIRECTORS PLAN TO INVEST IN 2014?

In order to understand where Directors of Asset Management, Engineering, Maintenance and Operations are focussing their resources in 2014, throughout the next section of the eBook we take a more detailed look at six of the investment priorities at the top of the agenda for asset management leaders of today.

By clicking on an investment priority below you can skip to the relevant section of this eBook. There you will find in-depth analysis of each investment priority, plus a variety of resources, including podcast interviews and presentations from **Scottish Water, CEZ Group, Southern Water, Northern Gas Networks, The Highways Agency** and many more.



(Figures taken from 2013 Infrastructure Asset Management Exchange delegate profile forms)

***Delegates could select more than one answer*

LIFECYCLE MODELING/COSTING

High Priority for 45%

What are our network of asset management leaders prioritising in the next 12 months?

*In the process of building new lines and replacing old and existing assets:
Life cycle modelling and data modelling*

Looking to continuously reduce the life cycle costs by 20%

Improved lifecycle modeling and lifecycle costing is a high priority for investment for 45% of the asset management senior professionals we surveyed. As you will hear in a number of the interviews and presentations you can download from this eBook, it is imperative that assets are maintained efficiently to allow them to be used to their full potential – it is tricky to strike the right balance to maximize the lifecycle of an organisation's assets and minimize risk.

Mismanagement of asset lifecycle can not only result in a huge increase in costs and therefore loss in profits for the organisation, there can also be serious safety consequences for the users of the assets.

There are a number of tools on the market to assist asset management professionals and with the pressure on asset management leaders to get it right when it comes to managing asset lifecycles, it is no surprise that such a high proportion are looking to invest in new solutions within the next 6 to 12 months.



ASSET INVESTMENT PLANNING

High Priority for 40%

What are our network of asset management leaders prioritising in the next 12 months?

Finding out how our company can improve the balance of the Capex and Opex budget in relation to the maintenance plan

Making the case for investment

Identifying where the investment should be made. Ensuring that the investment is right on the right assets at the right time

Controlling costs, capital investment program to operational costs including energy reduction/energy management

Cross asset investment optimisation (particularly in the areas of asset investment planning and Data management)

As you can see when reading the quotes above from our network of asset management leaders, making the right investment decisions is a crucial part of a strong asset management strategy. It is certainly an area that a large number of professionals need advice on, with 40% indicating that they need external services and solutions to help them improve their asset investment planning in the next 6 to 12 months. The Ofwat Price Review may also have an impact on investment planning with a possible move to a totex (total expenditure) approach rather than treating operating and capital expenditure separately.

On the following page you can hear direct from two asset management leaders - **Petr Stulc, Head of Group Asset Management at CEZ** and **Jim Lightfoot, COO of E.ON Generation GmbH**. Understand why investment planning is so important to them and what external factors have impacted on their investment decisions over the past few years.

ASSET INVESTMENT PLANNING AND ALIGNING ASSET MANAGEMENT WITH THE BUSINESS GOALS AT CEZ

CASE STUDY: JIM LIGHTFOOT, COO, E.ON GENERATION GMBH



Petr Stulc, Head of Group Asset Management

at CEZ is responsible for managing all assets in the group to optimise their value. In this podcast interview, Petr shares his insights into the internal and external factors impacting on asset investment, including the asset lifecycle, commodity prices and technological development.

Petr explains how in the energy business historically asset management was how to do maintenance in the best possible way, in a predictable environment. This is no longer the case, when making decisions about how to best invest money into physical assets, there must be a fit with the overall business strategy and good cooperation between the asset management and strategy teams.

**CLICK HERE
TO LISTEN TO THE
WHOLE INTERVIEW**



E.ON's Global Unit Generation operates all of E.ON's conventional nuclear, gas, hydro and coal fired power plants across Europe. **Jim Lightfoot, COO at E.ON Generation GmbH** is the Board member responsible for the operation of E.ON's portfolio of Combined Cycle Gas Turbines (CCGT) across Europe, which comprises of 16GW of capacity spread across the UK, Spain, Belgium, Hungary, Italy, France, Sweden, Slovakia and Germany.

In the power industry over recent years E.ON and other operators have faced a number of challenges relating to the economics of gas fired power plants, largely because coal and carbon prices have been low along with the impacts from demand reduction and increasing penetration from Renewable Generation. In order to ensure the assets are able to survive the current challenging market conditions and earn a sustainable level of return E.ON's CCGT Fleet has had to make a number of changes to the way they operate their assets.

In order to proactively address these challenges and ensure the assets survive, E.ON have taken steps to reduce operational costs including working closer with OEM's and renegotiating Long Term Service Agreements. They have also changed the way they maintain assets through their Asset Management approach including focussing on how to improve the operational performance of the assets, ensuring they are fit for the market conditions and accessing new income streams.

CHANGE MANAGEMENT (SYSTEMS, PEOPLE, CULTURE) **High priority for 38.33%**

As most asset management practitioners know, it can be tough to implement change within the organisation, especially when there has traditionally been much silo working and some resistance to change. So it comes as no surprise that 38.33% of asset management leaders have change management as a high priority for investment within the next 6 to 12 months.

With huge developments in the use of data, and transformations of asset management functions in the UK and Europe, it is essential to proactively manage change in order to keep the asset management strategy on track. Below you will see a series of quotes taken from our network of senior asset management professionals which summarise the importance of change management to the asset management profession.

What are our network of asset management leaders prioritising in the next 12 months?

Changing company culture to ensure all employees incorporate asset management in their thinking

Looking at implementing one single company culture and attitude towards the management of assets

Looking at change management: currently introducing new mobile technology and interested in managing the transition of change across the company

Looking at the company culture: company needs to be aware of responsibilities to assets and decision making around them

Linear change process – changing the Maintenance department from a reactive approach to a proactive approach

Optimising IT systems – processes, behaviours etc. (change management)

Responding to regulatory change which will alter methodology and approach to the management of assets

PAS 55 / ISO 55000 CERTIFICATION

High priority for 38.33%

What are our network of asset management leaders prioritising in the next 12 months?

Planning to build an asset management system in order to meet PAS 55 and ISO 55000 criteria

PASS 55 Gap analysis to see where we are as an organisation: will be establishing whether we need accreditation over the course of 2013

Want to understand more about the benefits of PAS 55 and ISO 55000

These quotes from our network of asset management leaders show they need to find out what they can gain from PASS 55 and ISO 5000 accreditation and have been conducting gap analyses this year to find out what steps they need to take towards accreditation in 2013 and 2014.

Reminder, what is PASS 55? How did we get to ISO 55000?

PAS 55 is the British Standards Institution's (BSI) Publicly Available Specification for the optimized management of physical assets. Included in the standard are definitions and a 28-point requirements specification for establishing and verifying a joined-up, optimized and whole-life management system for all types of physical assets.

Following widespread adoption in utilities, transport and a number of other industries, the International Standards Organisation (ISO) accepted PAS 55 as the basis for development of the new ISO 55000 series of international standards. So what is ISO 55000?

- ISO 55000 will provide an overview of the subject of asset management, the principles and the standard definitions to use
- ISO 55001 is the requirements for an integrated system for assets
- ISO 55002 provides guidelines for the application of ISO 55001

The documents are now in Final Draft International Standard status with an expected publication date of February 2014, but what does this all mean for your organisation? There has been much discussion about certification and the impact on organisations. It is expected that **change management** will play an important role in implementing this standard to ensure the technical and people side are both accounted for, and that there is the required buy in from the senior management.

The aim of these standards is to further assist organisations in managing their infrastructure assets across the lifecycle to make sure asset management can help the organisation meeting it's strategic goals in the short and long term. 2014 will be another busy year for asset management professionals but these developments are certainly viewed as a positive step to driving a more strategic asset management function.

DATA ACQUISITION & DATA QUALITY

High priority for 32.50%

What are our network of asset management leaders prioritising in the next 12 months?

Attempting to improve the way data is managed within the organisation, Interested in finding a data management solutions

How should data be collected to ensure that only the right data is extracted to make business decisions about asset investment and maintenance?

Need to look at Asset Information/Data to have sufficient information about its condition and inventory to be able to make informed decisions about investments which need to be made

Currently there is a need to improve the quality of the asset information. If this can be achieved then decision making in terms of asset investment will be improved

Complimentary Data Resources

INTERVIEW: Achieving World Class Asset Performance Management and Improving Asset Integrity by Turning Data into Actionable Knowledge

The Infrastructure Asset Management Exchange spoke with **Mark Biagi, Solutions Executive at Bentley Systems** about how asset management professionals can achieve world class asset performance management.

For Mark, it takes more than just technology. It is about combining strategy with a robust technology platform to better optimise and prioritise work. Mark goes on to share his views on the most pressing issue for the IAM community, which he sees as the sheer volumes of information that is paralysing many organisations who are struggling to turn this information into actionable knowledge. Finally, Mark describes what he believes will be the hottest trend in asset performance management in 2014; turning all the data into actionable knowledge to improve asset integrity and reliability amongst many other things.



DATA ACQUISITION & DATA QUALITY (CONTINUED) **High priority for 32.50%**

INTERVIEW: Streamlining Data Analysis to Improve Decision-Making and Asset Performance

Martin Alderson, Director, Asset Risk Management at Northern Gas Networks spoke with the Infrastructure Asset Management Exchange about how streamlining asset data analysis has improved decision making and asset performance. Martin also shared his views on what processes and technologies asset management professionals can adopt to cut costs, including remote monitoring of data. Finally Martin moves on to explain what he thinks is the one area in 2014 where there needs to be a big change and where solution providers could make a big difference through technology development.



CASE STUDY PRESENTATION: Empowering Your Workforce with Location Information in Network Asset Management

Join **Terry C. Bills, AICP Transportation Industry Manager, ESRI** to discover how you can save time collecting data in the field with mobile GIS in this 2013 presentation session at the Infrastructure Asset Management Exchange. Also discover methods to optimise how you use this data to help transform your business through improved asset management.



RISK MANAGEMENT / ASSESSMENT

High priority for 31.67%

What are our network of asset management leaders prioritising in the next 12 months?

Looking to improve risk management strategy for existing projects

Understanding asset risk – trying to predict asset failure

Risk reporting – how to convey risks to the board

Risk quantification and communication

Complimentary Risk Management Resources

CASE STUDY PRESENTATION: Achieving National Consistency through A Risk Based Approach to Asset Management

In this great case study presentation, **Derek Turner, Director Network Delivery and Development and Deputy Chief Executive** at the **Highways Agency** outlines their latest initiatives to achieve a national consistency in asset management, plus how they are implementing robust planning mechanisms to effectively mitigate people, asset performance and asset risk. Derek is an industry veteran who leads teams responsible for planning, managing and maintaining over £85bn worth of public assets. Watch this case study to learn from Derek's biggest successes – and thorniest challenges – in asset management.



RISK MANAGEMENT / ASSESSMENT

High priority for 31.67%

INTERVIEW: Overcoming your Most Pressing Challenges in Infrastructure Asset Management through Risk Management Strategies

In 2012, **Bob Okhuijsen, Head of Risk, Tennet** joined the Infrastructure Asset Management Exchange to share exclusive insight into his most pressing challenges in infrastructure asset management, including developing appropriate risk management strategies to improve asset management and asset performance. Hear Bob discuss the changing role of an asset manager and share his experiences in securing board level buy in for new projects – a huge challenge for many asset managers.



IN WHAT SERVICES AND SOLUTIONS DO INFRASTRUCTURE ASSET MANAGEMENT DIRECTORS PLAN TO INVEST IN 2014?

Full Results

Below are the full results chart of the top 14 areas of planned investment for Directors of Asset Management, Maintenance, Operations and Engineering in 2013 to 2014.

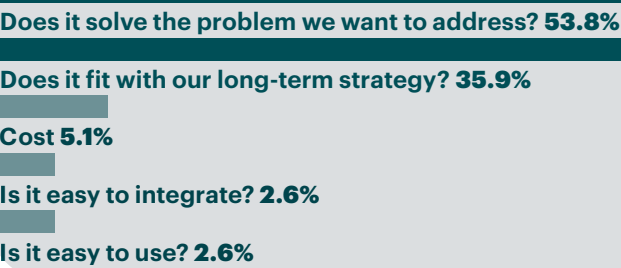


**Delegates could select more than one answer

HOW DO INFRASTRUCTURE ASSET MANAGEMENT DIRECTORS MAKE THEIR INVESTMENT DECISIONS?

On this page you will see results from a 2012 to 2013 survey conducted with 148 senior Asset Management, Operations, Engineering and Maintenance Professionals. Throughout this eBook we have analysed the top investment priorities of asset management leaders, so now we are taking a look at the decision-making process.

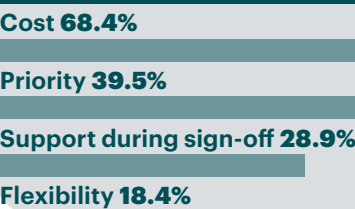
What factors are most important when making the decision?



How do you find out about new service/solution providers?



What obstacles do you face in getting sign off?



How often do you review your suppliers?



***Delegates could select more than one answer*

WANT TO FIND OUT MORE?



17 - 19 March 2014, London, UK

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Are you interested in exploring the themes of this eBook in greater depth with 80 Directors and Heads of Asset Management, Operations, Maintenance and Engineering from the utilities, transport, DNO, TSO and energy organisations across the UK and Europe?

- **Invitation-only, Director level meeting**
- **Network, learn and find solutions to your biggest challenges**
- **Update your strategy, manage risk and get the latest on the ISO standards**
- **Turn the page to discover which Directors you will network with**
- **Free resources available [online now](#)**

How Can You Get Involved?

For more details about the Infrastructure Asset Management Exchange or to request your invitation as a delegate, speaker or solution provider:

- [Request your invitation to attend online](#)
- Call us on +44 (0) 207 368 9484
- Email exchangeinfo@iqpc.com

2014 SPEAKERS

Geoff Aitkenhead Asset Management Director Scottish Water



- 4th largest water and waste water services provider in the UK
- Around 5 million customers in 2.4 million households, sole provider of water and waste water services to 30,000 square mile area
- On Executive Leadership Board
- Former Chairman of WaterAid (Scotland)

Dave Champness Head of Strategic Asset Planning United Utilities



- 9,000 employees, listed on London Stock Exchange & FTSE 100 Index
- Largest listed UK water company, providing water and wastewater services to over million people
- Heads up Water Strategic Asset Planning team

Jim Lightfoot COO E.ON Generation GmbH



- One of world's largest investor-owned electric utility service providers, €112.954 billion revenue
- Jim is member of the E.ON Generation Board, reporting to the CEO of the Global Unit Generation
- Responsible for assets in Spain, UK, Italy, Hungary, Belgium, Sweden, Slovakia and Germany
- Currently focused on proactively driving more value from assets

George Butler Director Asset Management Northern Ireland Water (subject to final confirmation)



- Provides 625 million litres clean water a day to almost 1.7 million
- Approximately 1,400 staff
- On Executive committee
- Responsibility for strategic asset management & scientific services

Mel Karam Director of Asset Management Southern Water



- Supply 529 million litres of drinking water along 13,735 km of water mains to customers' taps daily
- Previously Director of Asset Management, Thames Water
- 15+ years professional asset management experience
- Current projects include ensuring results of customer consultations are integrated into planning

Richard Wakelen Head of Asset Strategy & Performance UK Power Networks



- 20 years+ experience in the utility industry; 15 years in UK Power Networks & predecessor companies EDF Energy and SEEBOARD
- Responsible for asset strategy and performance of the electricity distribution network
- Heavily involved in deciding how to use data and information, how to determine what is critical and what's not

Claus Hincke Director Technical Service & Operation Copenhagen Airports



- Busiest international airport in Nordic countries (21.5 million passengers per year in 2012)
- 2,000 employees, 300 in asset organisation; annual maintenance costs of around €70 million
- Claus has experience with change management & how to motivate individuals & teams to move from a reactive unit to becoming proactive

Rian Kloosterman Head of Program Management for Strategic Asset Management Vitens



- Largest water company in The Netherlands, supplies drinking water to 5.4 million people and businesses
- € 454.0 million turnover
- Speaking on how to build a robust asset management risk framework

2014 SPEAKERS

Eva Sundin

Head of Asset Management
Vattenfall Distribution



- Responsible for strategic investment and maintenance planning, long term resource allocation and portfolio and project management
- Board member of a transport company, and two energy companies

Ian Costigan

Asset Management Director
Manchester Airports Group



- Responsible for building and implementing asset management capability to drive value & growth
- Management of rolling 5 year capital programme to maximise return on investment
- Largest UK-owned airport operator

Jean Lemaire

Director Asset Management
Akuo Energy



- Privately help IPP, electricity is created purely from green methods
- HQ in France, global in 8 countries (US, Asia, Africa and growing)
- Almost €1 billion in revenues
- On the Board, Jean helped create the asset management function 9 months ago to be more strategic
- Previously COO Akuo Energy in US

Lars Bergman

Infrastructure Planning
SwedishTransport Administration (Trafikverket)



- 35 years+ experience in Swedish Transport Administration & Swedish Road Administration
- Sharing insights on why data is the foundation of good decisions
- Long experience of working in Middle East, Asia and Africa, Lars introduced the need for relevant data

Petr Stulc

Head of Group AssetManagement
CEZ Czech Republic



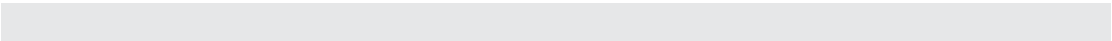
- In top 10 utilities in Europe: electricity generation, trade, distribution, heat, and coal mining
- Conglomerate of 96 companies, 72 in Czech Republic
- Current project is deciding how to allocate budget to different units, accounting for market conditions

Per Kristiansen

Acting CEO
Oslo Municipality

- Supplies water and collect/treat sewage for the city's 600,000 inhabitants
- Major investments plans (€500M in 5 years) to compensate for major forces of change (including climate change, ageing infrastructure, population growth)
- Leading a discussion on increasing asset performance through rehabilitation

2014 SPONSORS



**WANT TO DISCOVER WHAT HAPPENDED
AT THE 2013 INFRASTRUCTURE ASSET
MANAGEMENT EXCHANGE?**
