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ILS ASIA 2017

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Post-event Report

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INTRODUCTION

Welcome to the Artemis ILS Asia 2017 report, which offers an insight into some of the discussions that took place between speakers and attendees during Artemis' second event in the region.

The event took place in Singapore's Marina Bay Sands Convention Centre, with over 170 delegates gathering to hear leading ILS and reinsurance market participants from across the globe explore the potential for ILS in Asia, with the goal of further educating the region on ILS as risk transfer and an asset class.

The day was a resounding success, and attendees were treated to educational talks as well as an insightful examination of ILS structures and what might be needed to expand the asset class across the Asia-Pacific region, and in particular emerging Asia.

In many parts of Asia there is a real lack of awareness and understanding of ILS as a form of risk transfer, and with the region being home to a broad range of perils the potential for ILS expansion, whether via catastrophe bonds or collateralised reinsurance, became apparent.

The ABCs of the distribution process were explored, and attendees also heard about the workings of the secondary catastrophe bond market and the liquidity this provides, a side of the marketplace many don't see, especially in emerging markets like Asia.

Speakers noted how the investor base in Asia is as diverse by region as its peril exposure, and how the need for robust modelling and use of innovative structures, alongside further educating the investor and sponsor community, can help to broaden the remit of ILS in Asia.

Event attendees enjoyed both individual speaker and panel sessions throughout the day, which included risk modellers, brokers, investors, sponsors, and other industry service providers.

Artemis ILS Asia will be back in Singapore in July 2018.
We hope to see you there!

Steve Evans
Founder & Editor, Artemis.bm


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Credit Suisse is one of the world's leading banks, with more than 45,000 employees, offices in over 50 countries and expertise in nearly every facet of banking, investing and finance. In 2006, Credit Suisse acquired the ILS team of Clariden Leu (a former Credit Suisse Group subsidiary) and since then, has developed a growing ILS platform. Today, Credit Suisse is the second largest ILS manager globally.

RMS

RMS models and software are used by the world's top 10 ILS funds, and are at the cutting edge of risk management solutions. Our continued investment in the development of ILS-specific solutions supports the growth and success of this global sector, including the enhanced ability to evaluate and manage worldwide catastrophe risks. From investment selection and portfolio optimization, to real-time catastrophe response and developing investor insight, RMS models and software solutions can integrate across an organization's entire ILS workflow to successfully support strategic business decisions and objectives.

Mt. Logan Re Ltd.

Mt. Logan Re, Ltd. is the securitization vehicle for Everest Re Group, Ltd. (NYSE: RE), one of the largest global (re)insurance groups in the world. Mt. Logan Re, domiciled in Bermuda, is registered as a Class 3 insurer and a Bermuda segregated accounts company and has been in operation for four years in the insurance-linked security space. The Mt. Logan Re platform leverages Everest Re Group's four decades of involvement in the (re)insurance industry, its long-standing customer relationships, global scope, analytical platforms, and underwriting talent to build portfolios of securitized risk for investors. This risk is accessed by investors through the purchase of non-voting, redeemable preference shares that are linked to distinct and separate segregated accounts managed by Mt. Logan Re.

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Elementum

Elementum Advisors, LLC is an independent alternative investment manager specializing in collateralized natural event reinsurance investments. The Latin word *Elementum*, meaning element or first principle, was chosen to emphasize our focus on natural catastrophe event exposed investment strategies and dedication to our clients. The Elementum team possesses a lengthy track record of portfolio management experience across a range of RLI investment mandates – from more liquid catastrophe bond to higher alpha collateralized reinsurance investments. Elementum currently manages a multitude of mandates that span a wide spectrum of risk-linked investments and offer varying risk/return and liquidity objectives.

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RFIB

RFIB Group is an established Lloyd's broker handling all classes of insurance and reinsurance together with risk management advisory and related services. Headquartered in London and with an international network of offices, we work with clients of all sizes across all geographies to deliver integrated and tailored risk solutions that meet their business objectives. We seek to develop long-term relationships anchored in knowhow and a high quality service.

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The Bermuda Business Development Agency (BDA) encourages direct investment and helps international companies start up, re-locate or expand their business in Bermuda—a vibrant funds and financial services centre. An independent, public-private partnership, the agency is the primary point of contact for prospective business, providing connections to industry professionals, regulatory officials, and key contacts in the Bermuda government to facilitate jurisdictional decision-making. Bermuda's proximity to both North America and Europe make it an ideal location for companies serving global markets, along with its highly respected and business-friendly regulatory reputation, sophisticated infrastructure, world-class workforce and access to capital, legal, audit, banking and IT service-providers.

To start the day, John DeCaro, Founding Principal at specialist insurance-linked securities (ILS) investment manager, Elementum Advisors, LLC, discussed ILS activity currently occurring in Asia and the broader Asia-Pacific region, for both cedents and investors, underlining divergent trends across the region.

"There's certainly room for growth and we're seeing more interest in the asset class from places such as South Korea, but other countries, such as China, Hong Kong, Malaysia, and Singapore, all tend to be more focused on private banking channels," explained DeCaro.

This doesn't mean that those markets aren't allocating capital to the space, continued DeCaro, it's just "not so much from the pure pension fund perspective."

DeCaro told the audience how New Zealand's and Australia's sovereign wealth funds' are examples of large, flagship investors in ILS that are domiciled in the Asia-Pacific, which can act as "stewards of strong investment practice and reference investors throughout the Asian region."

For parts of Asia-Pacific that are no stranger to ILS, the respective investors often have differing requirements and aims for their allocation, which can be driven by numerous factors.

As an example, DeCaro explained that as Australian allocators require a higher minimum rate of return they tend to invest in riskier assets that might include more reinsurance exposure, or "a broader mix of cat bonds and something that's got more risk to it."

In contrast, Japan typically has lower return thresholds and investors are more attracted to catastrophe bonds for this reason, and "are comfortable with the lower returns and greater liquidity that the cat bond market actually offers."

John DeCaro –
"ILS should be considered for their diversification performance reasons, in any institutional portfolio"

Asia-Pacific is home to a broad and diverse range of natural catastrophe risks, and the regions' insurance culture is as diverse. A lack of awareness and education in some parts of Asia is hindering increases in insurance penetration, and DeCaro suggested that higher insurance penetration supports greater ILS deployment.

Across Asia, "ILS should be considered for their diversification performance reasons, in any institutional portfolio," said DeCaro.

He concluded with a mention of the Mexican government's 2012, Multicat Mexico catastrophe bond, an example of how ILS capacity can be provided post-event for disaster relief and recovery, which is something "the capital markets can provide for Asian sponsors."

For any form of risk transfer capacity to meaningfully participate in Asia-Pacific markets, catastrophe risk modelling is vital, and the second keynote speaker of the day, Jinal Shah, Director of Capital Markets at global catastrophe risk modeler, RMS, educated the audience on the importance of models, how they operate, and what role they play in the ILS transaction process.

Shah underlined the necessity of robust risk modelling and analytics for ILS business generally, and in the Asia-Pacific.

Where insurance plays, reinsurance and ILS typically follows, or at least, for the latter, has a greater opportunity to do so, and so the need for greater penetration across Asia would benefit

both the re/insurance and ILS markets, and importantly, those in need of protection.

Furthermore, greater modelling capabilities in Asia supports higher insurance penetration, ultimately assisting with the expansion of ILS into more perils and countries throughout Asia.

Nick Griffiths –
"The collateralized market and the ILS world stepped into that arena and solved that problem"

Shah's insightful and educational discussion preceded the day's first panel session, which focused on the identification of ILS as a risk transfer opportunity and was moderated by Nick Griffiths, Director, Reinsurance Division, RFIB Group Limited.

Griffiths explained that he's often questioned on the lack of Asian cedents purchasing collateralized reinsurance, and was eager to underline the importance of the history of what took place in 2005 with hurricane Katrina, and the accelerated market growth that followed.

He explained that for U.S. risk the development of the market took fifteen to twenty years, and in an area with "very technical modelled data, there was dislocation in the market and a capacity requirement, and the collateralized market and the ILS world stepped into that arena and solved that problem."

Griffiths questioned panelist Chris Kershaw, Managing Director, Global Markets at reinsurer Peak Re, on the origination of an ILS transaction, and what might drive the initial look to the capital markets over traditional forms of risk transfer.

Essentially, explained Kershaw, origination concerns looking at where you can purchase the most efficient cover for an exposure. However, for most of Asia, traditional reinsurance remains the most efficient form of protection, which limits the need to look at ILS.

"If you're looking in Asia, then 99 times out of 100, that's going to be conventional reinsurance provided on a UNL (ultimate net loss) basis, from the conventional reinsurer. However, there are things which certain buyers are prepared to consider, prepared to look at, where it is possible that an ILS solution may be an option," explained Kershaw.

The need for improved education around ILS in Asia featured heavily in the opening panel of the day, and while panelists underlined the valuable role the broker community plays in the region, ultimately, greater awareness and education is both required and achievable.

"I think the brokers have a key role to play in this. Brokers also need to educate funds and access to funds about what's different around Asian risk. There are a number of things that need to happen to make this more attractive to Asian buyers, and I think one of those is the product itself, the approach itself in many ways, needs to internationalise to become more applicable on a smaller scale.

"It's fine when looking at Japan or Australia, where you have very large programmes bought, but if you're looking for a wider application then some of the characteristics around the transaction may just need to evolve and mobilize to find a wider application, and I think brokers can have a significant influence in carrying that message back to the gatekeepers," said Kershaw.

Brokers, agreed the panel, need to educate on both sides of the equation, and the region requires both ILS education and increased investor comfort to support the demystification of the asset class. The region offers diverse levels of technical knowledge and diverse levels of risk, and there's "definitely nascent for what the ILS markets have to offer," said Kershaw.

A need for diversification fueled by the natural evolution of ILS, explained panelists Richard Lowther, Partner & Chief Operating Officer (COO) at Hiscox Re Insurance Linked Strategies Ltd., could drive a natural increase in the focus on Asian risks.

"I think the next leg of ILS that's unfolding is some level of capital efficiency in sourcing this risk and I think that is good news for Asia, because to do that requires greater diversification outside of just U.S. hurricane," Lowther suggested.

Stephen Moss, Director of Capital Markets Solutions at RMS, moderated the second panel of the day, which explored the structuring of ILS transactions, triggers, coverage design, and risk modelling.

The panel discussed the need for ILS solutions to work alongside traditional reinsurance in emerging parts of the world, which in turn makes education and the work to help sponsors increase their understanding of how to best incorporate an ILS product into their programmes, vital.

“It’s looking at reinsurance and the ILS market in a symbiotic fashion, where they are working together and which is the most efficient element of the features, which is most efficient for which piece of the program,” said Moss.

Stephen Moss – **“It’s looking at reinsurance and the ILS market in a symbiotic fashion”**

To increase risk transfer, Moss stressed the importance of a deeper, more symbiotic relationship between ILS and traditional reinsurance, explaining that collaboration is more important than competition when expanding risk transfer in an underserved market.

Panelist Daniel Brookman, Head of Strategic Investor Solutions, New Ocean Capital Management, added; “Fundamental to where this market is going and has evolved over the last few years, has been the importance of access to opportunities.

“The cat bond market, over its formation period, has certainly reached a level of standardization. But on the collateralized reinsurance side, the involvement of reinsurance companies can also make it more seamless to transfer some of those opportunities that don’t ever make it to the cat bond market, through to investors.”

Panelist Anne-Claire Serres, Head of Natural Catastrophe Underwriting for Asia Capital Re, noted that risk knowledge across the region does exist, suggesting that perhaps convergence is needed in the region if ILS is to expand across the Asia-Pacific, underlining the importance of “really embedding all the underwriting knowledge that is in Asia.”

Essentially then, explained Moss, “if the capital that comes in can look as reinsurance like as can be, that smooths the transition process.”

Brookman reminded the audience of the vast quantities of insurers that purchase protection against property catastrophe risks. Adding that hardly any of the SMEs have sponsored a cat bond, which is in part down to a lack of awareness and education, but also has to do with the comfort they have buying traditional protection.

Providing more technical and educational insight for the audience, Andreas Zell, Managing Director of AKR Zell Consulting, explored the benefits and limitations of parametric trigger structures. Ultimately, Zell concluded that a parametric structure might be a more pragmatic fit for governments than private insurers or reinsurers.

“With parametric, it really speaks to the opportunity to create new opportunities in zones that don’t have these insured values,” added Brookman.

Moderated by Chris Caponigro, Head of Business Development at Mt. Logan Re Ltd., the next panel focused on legal considerations surrounding ILS business and insurance management issues. Panelists discussed ILS domiciles around the world, and again, there was an overall acknowledgement of the need for education around the asset class across much of Asia.

Caponigro stressed the importance of being in the convergence space now, explaining that over the last three to five years the reinsurance industry finally started to move at a pace similar to ILS.

“But I will say, if you’re not on this ride as a reinsurer today, then I hope you have a way to manage this quicksand under your feet. If you’re a reinsurer and you haven’t found a way to manage this quicksand, you better find a way quickly to embrace it, because forces around you are moving, right now,” said Caponigro.

The ILS market continues to expand in terms of both size and remit, with more parts of the world looking to develop regulation that facilitates ILS business.

Such regulation includes the establishment of special purpose vehicle/special purpose insurer (SPV/SPI) frameworks, and Ariane West, a Partner in the Bermuda office of law firm Walkers, explained exactly what an SPV is, and how they fit into the ILS process.

SPV regulations do exist in Singapore, informed panelist Steve Britton, Managing Director, Global ILS Management at Aon Insurance Managers, but is yet to be used. Adding that all is likely required is for it to be dusted off the shelf and put to work as the appetite is there.

“Yes we need to educate the market, clearly, but once you do the first deal the rest will follow,” said Britton.

West, added; “I think it’s a matter of educating the market, making a product that’s attractive to your sponsors and investors. In terms of rationale that will make sense and will drive business, it could be as simple as regional risks wanting to find a regional hub and home for it. It’s a

Chris Caponigro – **“If you’re not on this ride as a reinsurer today, then I hope you have a way to manage this quicksand under your feet”**

process of getting the ball rolling and proving the effectiveness of the statutory regime that you've got in place."

Britton, continued on the theme of education with a view of expanding ILS via increased insurance penetration, something that was mentioned by a number of speakers throughout the day.

"I think ultimately where ILS can really help the world and get that next $100 billion, is by increasing demand for insurance product. Talking about economic losses in the Asia-Pacific region versus insured losses, I think it's an education process, and where ILS can really help, in large numbers, is when corporations or governments buy protection for very low frequency events, but high severity events," said Britton.

In the past, certain ILS deals and structures have shown potential to access new regions and lines outside of the most competitive areas, although rarely have they achieved any true scale.

Caponigro underlined this point, and questioned if in the future there could be a "structure or simplification" that will enable a greater volume of capital to deployed in the space.

The structure of an SPI has developed over a number of decades across many asset classes, and works well, explained West, adding that while she doesn't think anything will eclipse that model, there is an ongoing evolution process.

"One thing I was thinking about, when we were talking about the Asian market in general, I see the potential for capital markets funded reinsurance to actually potentially move into a direct position, potentially bypassing the further development of the traditional reinsurance model," concluded West.

The final panel of the day, moderated by Chi Hum, Global Head of Distribution at GC Securities, opened with an exploration of the distribution process of a traditional catastrophe bond placement, and the mechanics of completing a deal.

Part of the placement process often includes a roadshow, explained Hum.

"We typically go to concentrated cities where investors usually are, such as New York, Bermuda, Zurich, and London. Asia we haven't come yet, but I'm sure soon we'll include Asia into our roadshows."

Attendee education continued with an overview of the secondary cat bond market, and the audience were informed about the tradable side of ILS by panelist Steve Emmerson, Head of ILS & Insurance at Tullett Prebon.

After Hum and Emmerson provided insight into the workings of the placement and distribution process, and the secondary marketplace and live cat trading, panelists Lorenzo Volpi and Yuko Hoshino discussed considerations for investors.

"As far as my experience dealing with Japanese and Asian clients. They spend ample time to analyze the risk and the benefits of including ILS into their portfolios.

"They typically spend one to five years, if you're patient enough to wait for the outcome, to get investment committee approval of inclusion of ILS as a new asset class, as well as deciding what percentage they would like to allocate, which manager they would like to allocate to, and which product they would like to allocate to," said Yuko Hoshino, Partner, Distribution & Investment Relations, Japan/Asia, Securis Investment Partners LLP.

The financial world is comprised of different types of investors with varying levels of sophistication, and with differing types of internal structures combined with different types of investment buckets, explained Lorenzo Volpi, Partner, Leadenhall Capital Markets.

Pension fund investors have become a dominant force in the ILS community, but generally, in Asia, with the exclusion of Japan and to a certain extent Korea, "we haven't seen yet the demand from the pensions. So, for investors in ILS there is a lot of education needed to bring them up to speed.

"The trend is generally private equity, infrastructure and real estate, for our asset class it's still quite niche and is not mainstream at all. And there is always a demand to know how much capacity can we actually deploy in our space, and is our research actually justified in terms of the efforts, just to understand the asset class.

"In Asia, it's not as sophisticated as the U.S., for example, so I think the education process is really what is needed more and more in this part of the world," said Volpi.

The panel discussed pricing in both the primary and secondary market, with a view to what both cedents and investors might need to consider in relation to a supply demand imbalance for diversifying bonds, which Emmerson explained does have an impact on pricing, especially in the secondary market.

Hum, said; "For Asian market purposes, we've been involved in quite a few Japanese bonds, and it holds true that supply and demand, there have been very little diversifying risk bonds. So, for anybody looking to increase issuance out of Asia there would be a very, very strong investor bid to support it, particularly if there's some risk in it."

Emmerson, added; "In the secondary market many of my clients have been asking for diversifying risks, but the problem is there just hasn't been enough to date. So, it's very, very difficult, and one would hope that the answer would be new issuance. And Asia, in general, is a territory with risk exposure, there's a risk gap, so it seems to be a natural step."

Lorenzo Volpi –
"I think the education process is really what is needed more and more in this part of the world"

Interest in, and the understanding of ILS varies by geography, and in Asia "there is still a lot of work that needs to be done, as lots of regions are not familiar at all with ILS.

"Everyone is searching for diversifying yield so the interest is there, but as we said, education is very important and it does take a long time, so we have to be patient and be persistent," said Volpi.

That concluded the day's panel sessions, and next, event attendees were treated to a catastrophe bond investment primer from Lixin Zeng, the Chief Executive Officer (CEO) of AlphaCat Managers Ltd.

Zeng provided an overview of the current catastrophe bond market, highlighting the dominance of U.S. risks, and explained that for many investors in the space the cat bond market, over broader ILS investments, is typically their first involvement in the space.

His talk focused on both an active and passive management approach to an ILS portfolio, educating the audience on the benefits of each in respect to investment requirements and desires.

"If your ILS universe is broadly defined to include all the reinsurance transactions beyond the 144A security market, then there is definitely room to actively manage a portfolio and create alpha. However, if you prefer to restrict your universe to cat bond only, then I would like to present arguments supported by data to show that a passive approach is probably the best you can do," said Zeng.

He offered some insight into reasons one might choose to actively manage a broad ILS portfolio, underlining the potential to deviate from the market position by taking advantage of investment opportunities.

But when considering an investment portfolio that focuses on just the traditional catastrophe bond sub-sector of the ILS arena, after discussing the reasoning behind this type of an investment, Zeng concluded, "it is better to use a passive strategy to lower your cost, and a way to execute that strategy is to buy new bonds."

Dr. Marcel Grandi – **"So, how we think you can develop the ILS market in Asia, ex-Japan, is by a parametric structure"**

To end the day, Dr. Marcel Grandi, Head of Underwriting, Credit Suisse Insurance-Linked Strategies, discussed the potential for ILS development across Asia, broadening its scope outside of Japan for the benefit of those in need of protection and the continued momentum of the sector.

Drawing on topics discussed throughout the day, Dr. Grandi explored the trigger structure that might be best suited to the development of ILS in Asia, outside of Japan.

If you're going into unknown territory, in places like China, for example, where the risks are challenging from a modelling perspective and where the exposure is constantly changing, deductions must be made from the accuracy of the modelling, explained Dr. Grandi.

"So, how we think you can develop the ILS market in Asia, ex-Japan, is by a parametric structure. They are independent from the underlying economic exposure in the area, they can be modelled more easily, you don't have a long development of the claims," he added.

In many emerging regions, risk transfer schemes, mechanisms and pools for natural catastrophe risks frequently utilize a parametric trigger. The structure enables rapid payout post-event, and can be tailored to provide the most effective and affordable protection absent the most advanced modelling capabilities, so it's not surprising that throughout the day the potential for parametric insurance in Asia was highlighted.

Dr. Grandi continued to explore the sub-sectors of the ILS market, and advised that in order to innovate and get exposure to Asia ex-Japan, it is probably best achieved via collateralized reinsurance, or collateralized retrocession.

"A number of ILS managers are active underwriting business in Asia, but they mainly do so using fronting reinsurers and segregated account companies, so probably private transactions are probably, in the short-term, the best way to gain exposure in Asia ex-Japan," added Dr Grandi.

For ILS to expand in Asia Dr. Grandi discussed the needs of the investor base, highlighting diversification, transparency, low-correlation and other advantages outside of yield.

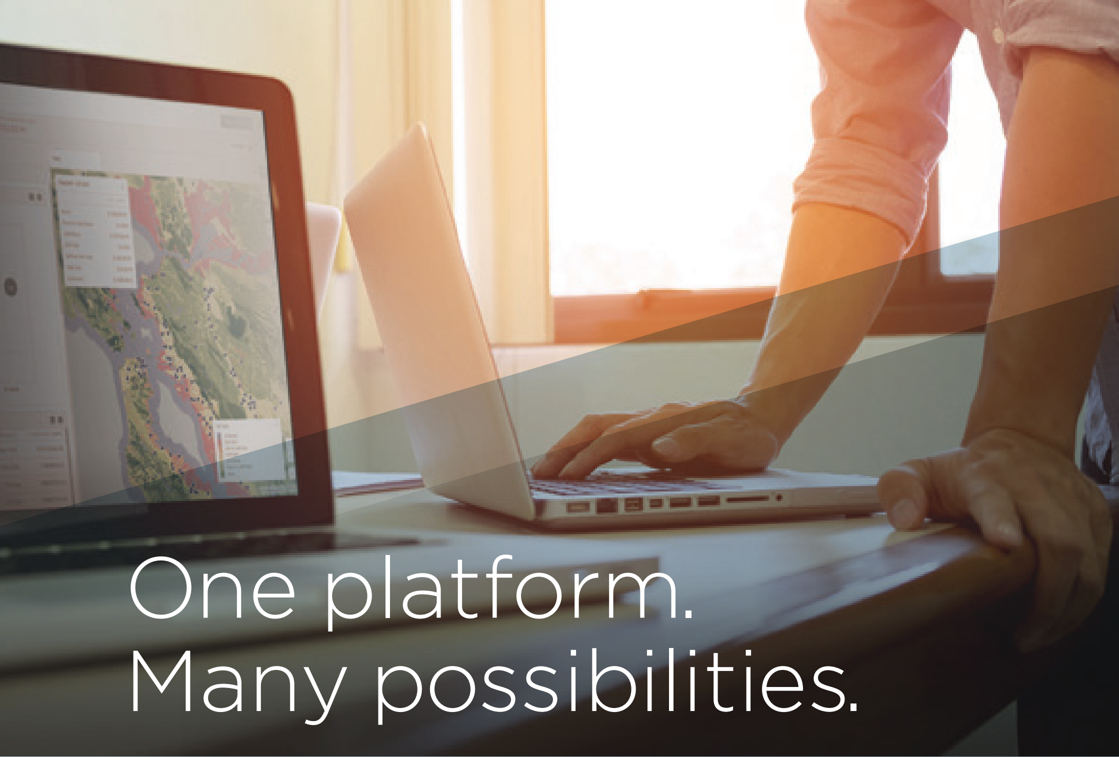
There's opportunity for ILS to participate in the natural catastrophe risks of numerous Asian regions, said Dr. Grandi, noting China and India as interesting opportunities, alongside crop exposure and also the potential for ILS to influence non-natural catastrophe risks.

To all our attendees, thank you for joining us, we hope you enjoyed the day and will attend again next year in July for ILS Asia 2018.

To all our speakers, thank you for travelling so far to participate, for providing insightful and thought-provoking discussions and for engaging positively with the Asian market attendees.

Finally, we'd like to thank our kind sponsors of the event, without whom the day would not have been possible.

Artemis ILS Asia will be back in Singapore in July 2018.
We hope to see you there!



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