THE HYPERLEDGER CAPITAL MARKETS SPECIAL INTEREST GROUP ANNOUNCES

A presentation

Project Janus Tokenizing Insurance Linked Securities

By The Civitas Team

Founder: Kirthi K

Capital Markets SME: Habib Annous

Market Advisor: Ken Marke



Where:

https://zoom.us/my/hyperledger.community.backup?pwd=dkJKdHRlc3dNZEdKR1JYdW40R2pDUT09

When: February 24th, 10:00 am EST(15:00 UTC)

Discuss: https://wiki.hyperledger.org/display/CMSIG/2021-02-24



Insurance Linked Securities



Insurance Linked Securities (ILS) are financial instruments, which are sold to investors, where the value of the security is linked to an insurable loss event.

ILS are an alternative form of risk mitigation for insurance and reinsurance firms, offering a means for them to transfer risk to the capital markets through insurance special purpose vehicles (ISPVs)*

What are the benefits?**

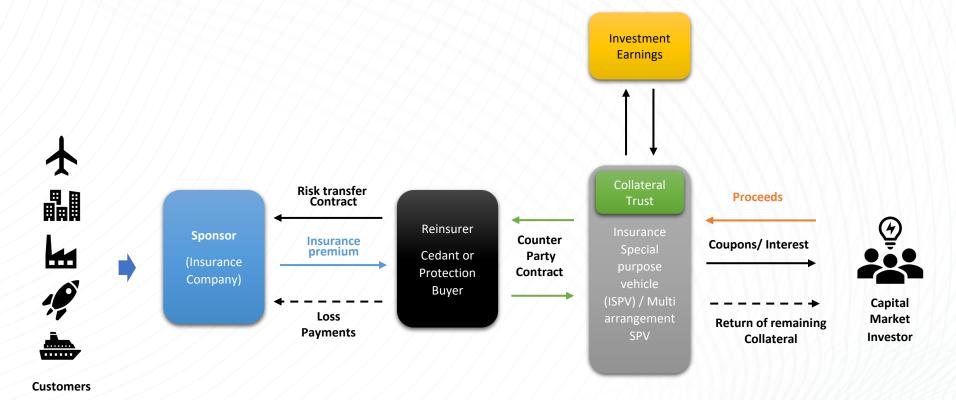
For investor For issuer Uncorrelated to Attractive returns, Alternative source of Low / no exposure to Ability to access capital particularly in loweconomic cycle counterparty default risk mitigation to Defined maximum loss (depending on specific markets directly interest rate reinsurance risk Environment risk transferred) Potential to lock in Flexible potential for Generous tax Diversification of multi-year protection capital optimization. investment portfolio exemptions

*FCA
** Actuaries UK





Simplified view of transforming risk into a financial instrument



Why is ILS an attractive asset class?



Advantage of Insurance Linked securities

As of 2019 it is a \$104 billion* market and growing

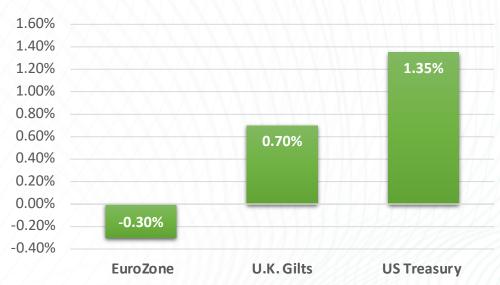
ILS have low correlation with the broader financial markets and offer a high degree of diversification to an asset portfolio

Between 2006- 2020 performance range has been between -5.4 % to 13.2 %**

ILS are floating rate instruments and are not exposed to interest rate risk

Yield ranges on Government Bonds, Feb 2021





^{*} Insurance Linked Securities Managers & Funds (ILS Fund Managers) - Artemis.bm

^{**} Eurekahedge ILS Advisers Index - An index of insurance-linked securities investment funds performance (artemis.bm)

Need for efficiency in ILS



2020 Global Insurance-Linked Securities Market Survey Report: WTW*

End investors

End Investors cite transparency as the most important characteristic of a good ILS manager.

Beyond natural catastrophe risks, weather insurance and life, accident and health are seen as the most acceptable areas for investment

Flexibility to invest across a full range of ILS opportunities is a requirement for end Investors

Corporate risk managers

Diversification of capacity is the most attractive aspect of ILS.

More than 30% of Corporate risk managers expect to use ILS in the next three years.

Risk managers remain open to accessing it (mainly for multiline covers) if they have more information.

ILS Funds

Property risk, aviation and satellite, and terror are the most attractive non-life risks for ILS funds' future growth.

Trapped collateral has been an issue over the past few years.

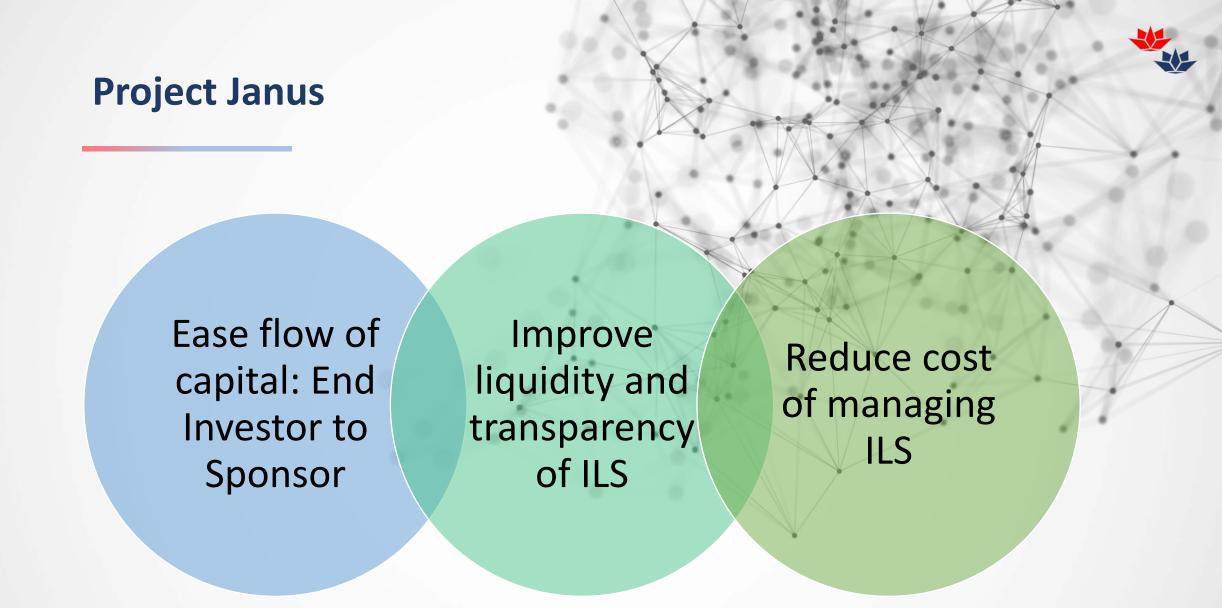
Low management fees also rank as key desirable characteristics for Investors.

Insurance & Re-Insurance Companies

56% of insurance and reinsurance companies access ILS capacity

Use of collateralized capacity on traditional programs is 69% in 2020.

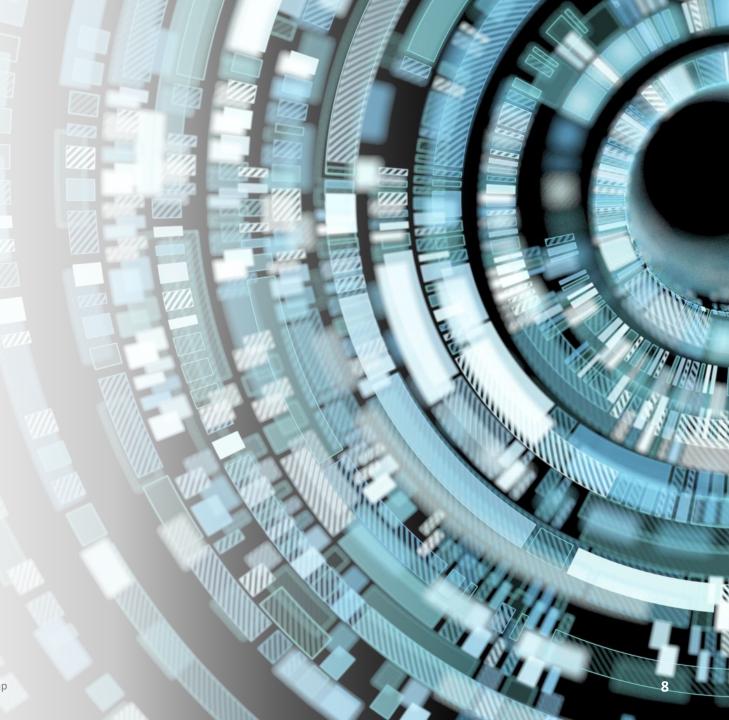
*After Big Tests, ILS Market Shows Resilience - Willis Towers Watson



Project Janus

Phase 1: Intelligent Contract Data

Delivering superior capital efficiency and customer outcomes at pace



Activating ILS capabilities using a tech-stack



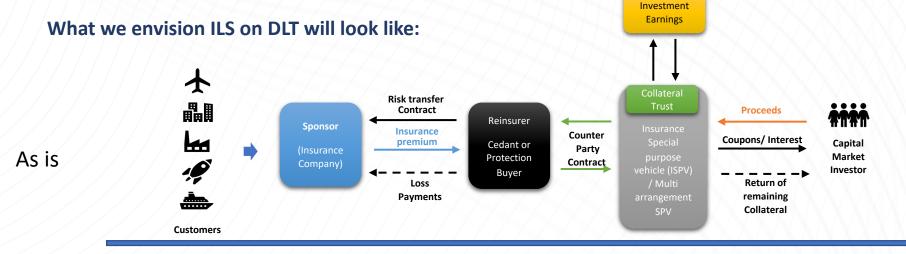
Project Janus: Delivery Objectives

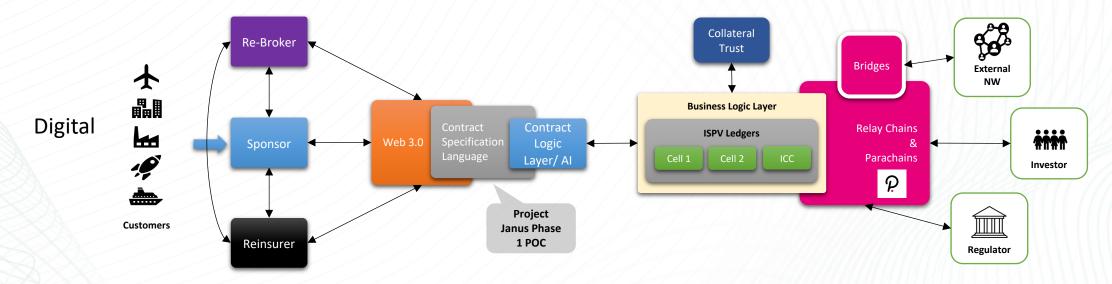
User Interface Project Janus Phase Legal Contract Interface 1 POC Al & Logic Layer Substrate **Polkadot** Ocean Chain Link Polymath Protocol

- Polkadot capabilities allow dynamic needs of ILS instruments to be modelled effectively within the S2 framework.
- 2. Polkadot now facilitates economic scalability by enabling a common set of validators to secure multiple blockchains.
- Polkadot enables cross-blockchain transfers of any type of data or asset, not just tokens.
 - a) Compliance by design: Ringfencing capital, Data and Identity
 - b) Enabling on demand capital for Carriers
 - c) Lowering Expense ratio of ILS instruments
 - d) Unlocking the ability to fund ILS instruments via Stable Coins or stable cryptographic assets.
 - e) Smart execution of Interest payouts
 - f) Ability to create staking models for tokenized ILS instruments
 - g) Linking parametric triggers to a specific Insurance risk for instant pay out.





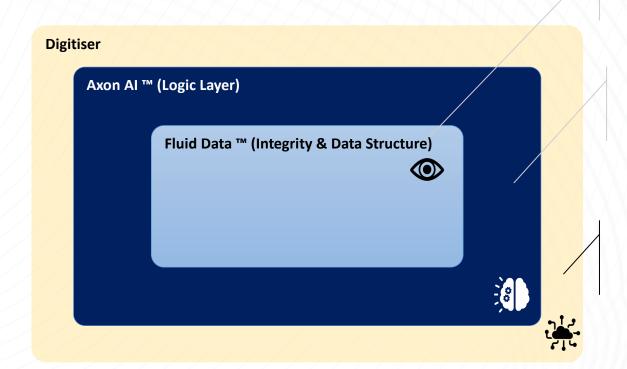




Enabling intelligence in contract data



Simplifying complexity of an Insurance Contract using Structure and Intelligence



Monitor contract integrity and compliance; proactively notify any change

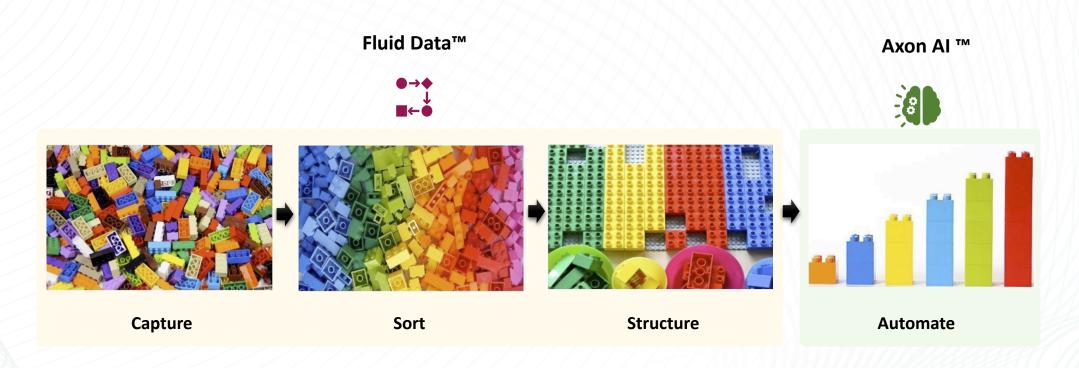
Process real time contract specific information i.e. Tax, Schedule, Exposure, Credit Line

Interoperability and digital portability for easy plug and play adapters: Unity Domain Model

Our approach to Capital Efficiency



Modular technology helps us build Intelligent Risk Data that autonomously manages lifecycle events.



"Our technology is legacy friendly: our solutions are technology agnostic"

Improved visibility and efficiency of Portfolio



Simply Fast, up to 10x

Seamless AI & rule based automation. Consistent real time reflection of contractual truth: Digital Twin; One truth. Future Ready Infrastructure

Future ready information structure for interoperability and electronic ledgers.

Virtual Presence

Fully virtual, digital and scalable capability for Capital Management

Projected 15 – 20 % reduction in Expense Ratio. Pay back within 12 -14 months of implementation.



Reduces Cost & Errors

Reduced duplication of activities and possibility of errors; better contract lifecycle event management.

Improved Efficiency

Data Quality by design i.e. clear visibility via Digital Cockpit, auditability and accountability of data trail.

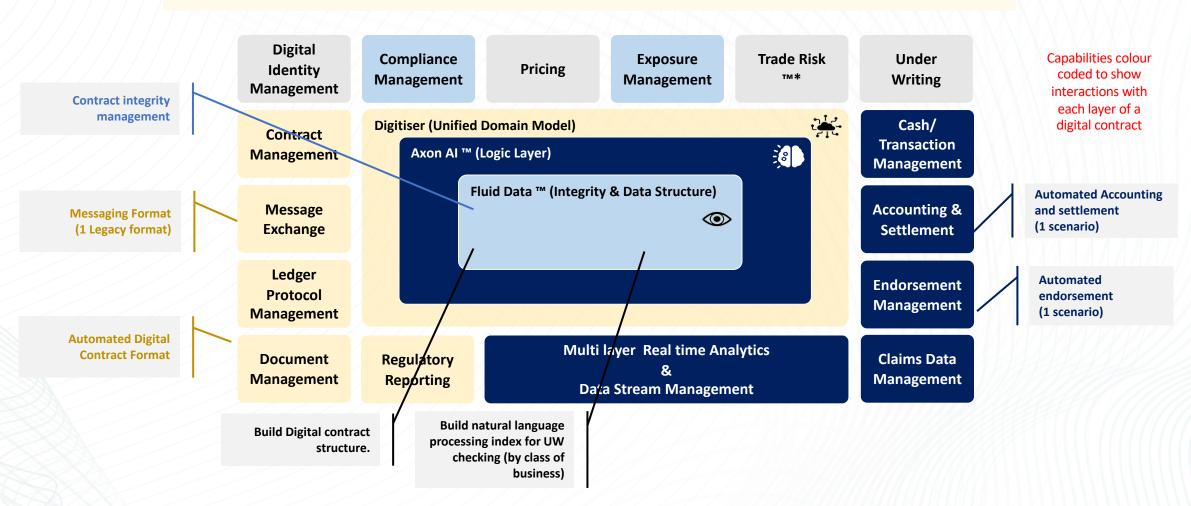
Dynamic Products

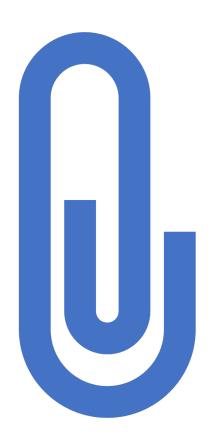
Unmatched flexibility to develop and trial dynamic products for an on-demand era





Fluid Data & Axon Al's Interaction with insurance capabilities: a digital spine to connect and improve management of critical portfolio objectives of the business.





Annex

Team



Non-Executive Director & Capital Markets SME

IT Service & Delivery Advisor

London Market Advisor & Mentor

DLT strategy & Architecture

Technology Alliance: OTC Digital

Business Architect, Founder/ Director

: Habib Annous

: Himanshu Patra

: Ken Marke

: Vipin Bharathan

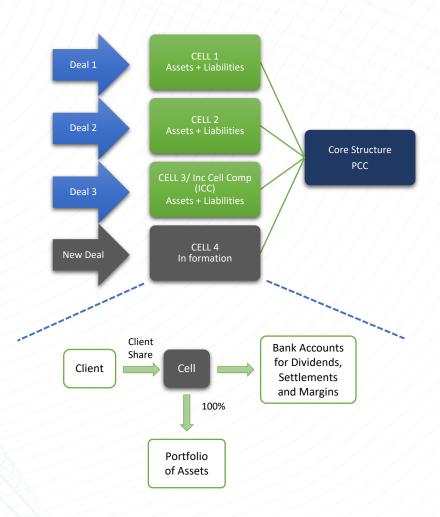
: Mani Pillai

: Kirthi Gogulamudi

Structure of a ILS Cell



Multi-arrangement ISPV (mISPV) using PCC structure



Core requirements for design as set out in the Solvency 2 framework:

- The transfer of risk to an ISPV must be in the form of reinsurance or "similar arrangements"
- The ISPV must be fully funded at all times, in other words that it must have capital available which is sufficient to meet its aggregate maximum risk exposure;
- The rights of investors must be subordinated to the ISPV's obligations to cedants.
- There must be an effective transfer of risk and the extent of the risk transfer must be clear and incontrovertible.
- There must be appropriate systems of governance relating to the management, shareholders and administration of the ISPV.

What are we solving for?



Making Data work for you. Technology agnostic contract data for Capital Efficiency

We help Insurance Market players build rich data-object based contracts. These contracts act as a digital spine to connect and improve management of critical portfolio objectives of the business.



Fluid Data™ solution, structures contract data
 ("Lego style") into a fully digital format that is
 human and machine executable at the same time.
 A possibility of up to 10x improvement in speed of
 the value chain, while lowering cost of operations.



 Axon AI ™ when combined with Fluid Data, enables extensive automation of activities that historically required manual processing. It liberates human capital to focus on growth, innovation and better customer outcomes.