



# Planning and Strategy for 2021

**January 2021**

Author: Oasis Loss Modelling Framework Ltd



## **1.0 Mission statement**

ODS should be the standard used for exposure data, result outputs and contract(s) terminology for the (Re)Insurance industry and other interested parties in catastrophe modelling and exposure management across all classes of business.

## **2.0 Current Situation of ODS**

The (Re)Insurance industry has for many years used a variety of standards for defining exposure, results and contracts. For property business mostly, the formats used have been created by RMS. It has been agreed by some key companies that an industry owned set of standards are required for consistency, independence and cost reduction. Aside from property other lines of business have not yet been implemented.

Over the last two years, OED has become the data input format for all models on the Oasis platform and has been adopted by multiple users in the market including a key broker.

To ensure success of our vision we need to increase the scope and adoption of ODS in the community. This will involve identifying the user's key requirements and promoting exactly what ODS should and will encompass.

### **2.1 Summary of Developments in 2020**

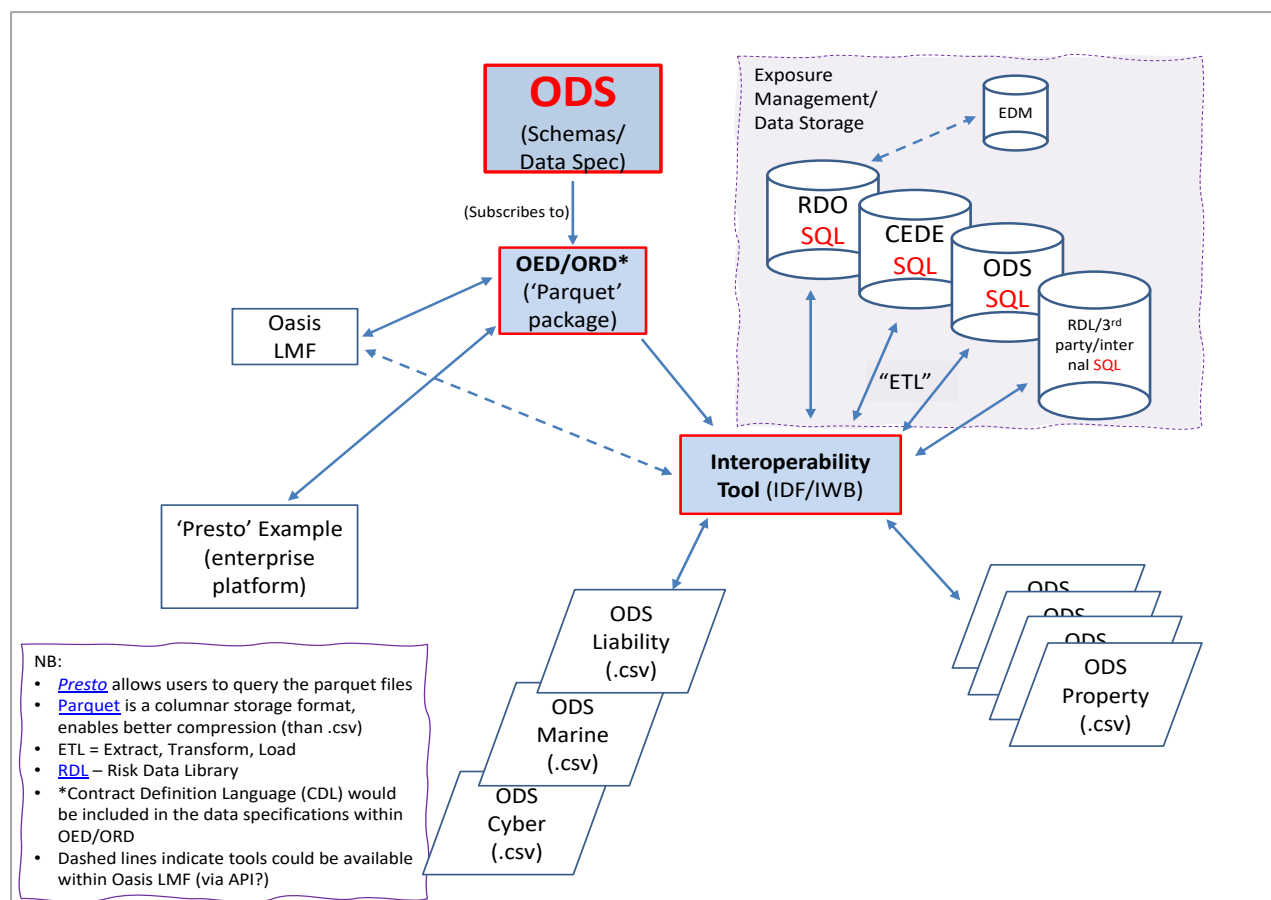
ODS took significant steps forward in 2020 that developed the standard and increased awareness in the market through numerous activities:

- OasisLMF migrated over the OED GitHub repository from Nasdaq, set up a steering committee (SC) and created the governance structure of that committee. All information is now available on GitHub which is being curated by OasisLMF (<https://github.com/OasisLMF/OpenDataStandards>).
- Oasis presented multiple market webinars covering the details and benefits of ODS and real-world use cases from users in the market. These included demonstrations of possible conversion tools highlighting how to get exposure data into the OED format.
- Oasis have produced promotional videos that include messages from vendors, reinsurers and other markets endorsing the need for an open standard. These webinars and videos are publicly available on the Oasis YouTube Channel

([https://www.youtube.com/channel/UCVHljdIp5JwbspEHhHDnBXg?view\\_as=subscriber](https://www.youtube.com/channel/UCVHljdIp5JwbspEHhHDnBXg?view_as=subscriber)).

- There is now an ODS page on the Oasis LMF website covering FAQs and the links to You Tube (<https://oasislmf.org/open-data-standards>).
- OED in particular has been covered as part of the webinar series presented to an extensive audience in the Philippines and Bangladesh as a part of the German government funded IKI project. As insurance penetration and the use of cat models is still relatively low in these emerging economies, the transparency and efficiency presented by a consistent open data standard will ease the adoption of these new processes.
- Oasis continue to work with the Insurance Development Forum (IDF) on various initiatives, specifically as a part of the interoperability working group (ITWG) which has developed a conversion tool for ODS. The next stage is to expand this capability for more data formats and be able to interact with alternative technologies which will continue throughout 2021.
- The *Cat Modelling Operating System* (CMOS) is a US based initiative set up by "The Institutes" who have created a proof-of-concept project around the need and development of an open data standard focused on the US market. Following some investigation, it was decided that OED was an appropriate approach and so CMOS will be in collaboration with ODS to remain aligned going-forward.
- An initial meeting was held in December 2020 with attendees from multiple companies to focus on technology options and possible next steps for ODS. The figure below outlines an idea of how ODS should be structured in regard to technology and interoperability.

The proposed structure of ODS is outlined below:



### 3.0 ODS Strategy

The SWOT analysis below highlights the key areas for development of ODS:

<b>S</b> <b>Strengths</b> <ul style="list-style-type: none"> <li>•Diverse and broad community</li> <li>•Trusted Brand</li> <li>•Focused on core activities</li> <li>•Open Source</li> <li>•Experienced team</li> <li>•Agile team</li> <li>•Proactive community</li> </ul>	<b>W</b> <b>Weaknesses</b> <ul style="list-style-type: none"> <li>•Limited resources</li> <li>•Inertia from existing standards</li> <li>•Limited geographic reach</li> <li>•Limited communication and marketing</li> <li>•Inertia in existing system</li> </ul>
<b>O</b> <b>Opportunities</b> <ul style="list-style-type: none"> <li>•Cost effective alternative for Industry, governments, academics and others and huge potential market</li> <li>•Ability to innovate quickly</li> <li>•Scale and efficiency benefits from interoperability</li> <li>•Cover all lines of business</li> <li>•Get contract definition language standard</li> </ul>	<b>T</b> <b>Threats</b> <ul style="list-style-type: none"> <li>•Key model providers refuse to engage</li> <li>•Key partners lose trust</li> <li>•Inertia too hard to remove</li> <li>•Technology weakness of Insurance industry</li> </ul>

The key highlights of the strategy to create ODS into a standard will be:

1. Get critical mass for property OED: Get the top 3 brokers, top 20 reinsurers and top 5 global Insurers to use and promote ODS.
2. Roll out OED for other classes to include Liability, Cyber, Marine and Aviation.
3. Built or support the development of interoperability tools to support ODS.
4. To have all model producers use ODS.
5. Built or promote the development of an open contract definition language.
6. Ensure that model schema interoperability is resolved via a variety of technology solutions

## 3.1 Target Markets

The following are the key target markets for ODS:

1. Global Insurers
2. Reinsurers
3. National Insurers
4. Brokers
5. Developing countries
6. Corporates.

## 4.0 Aims for 2021

There are several goals for 2021 to develop and progress ODS through multiple projects. These will include expanding the lines of business, improving the technological approach, increasing awareness and adoption. The initial projects are detailed below.

### 4.1 ODS for Liability Classes

Oasis will work with Lloyd's and key collaborators with appropriate experience of liability business to develop ODS for these classes through a series of 'workshops' which will be held virtually and be open discussions.

Oasis will arrange the workshops and circulate the key objectives prior to each session so everyone is prepared, however, it's expected that the key attendees will lead the discussions.

#### **Workshop 1 (approx. 2 hours):**

- Key representatives of model developers and users to attend and participate.
- Determine the core requirements and uses of an open liability standard. It should, as for property, support multiple models and users, be open source and accessible to anyone.

- Confirm the core classes of business that will be supported within the liability ODS.
- Determine an appropriate format for the data capture and modelling. If kept in-line with OED for property, should this be in .csv format and split by risks (like a 'loc' file for property) and financial terms ('acc' file)? What format would the liability model users require?
- Start considering the key/mandatory fields required for each class. This will be a significant undertaking and so the attendees will be required to continue this work following the session and before the second workshop. The classes and fields will need to be delegated to the appropriate attendees.
- Confirm the objectives and attendees for the second workshop. Should different representatives and/or companies attend?

#### **Workshop 2 (approx. 2 hours):**

- Continue discussing and confirming the key/mandatory fields for each class of business that attendees should have prepared.
- Start discussions and preparation for the optional fields for each class.
- Confirm the objectives and attendees for the third workshop.

#### **Workshop 3 (approx. 2 hours):**

- Confirm all fields required for each class.
- Confirm format of data fields.
- Discuss any outstanding issues or concerns.

## **4.2 Implement Parquet as the Open Data Format**

*Parquet* is an open data format, that stores data in columns (rather than rows like .csv) and enables far superior compression (than .csv). Although Parquet is not human-

readable, there are many open-source tools that enables the data to be queried, which is vital. Tools such as 'Presto' act as a sort of user interface which can also read .csv files. This tool will require very little IT support and be easy to access and host.

The aim is that all data such as OED, ORD and modelling files (i.e., for vulnerability and hazard) will be zipped together as a 'Parquet package'.

### 4.3 Implement ORD into the Oasis FM

Following the work done in Lloyd's Lab at the end of 2019, there are many users keen to start using the open results data (ORD) which need to be implemented into the Oasis FM. These will be 'packaged' with OED and meta files for model data using parquet but also in .csv format.

### 4.4 Develop the IDF Interoperability Tool

Oasis will continue to work with the IDF and the interoperability working group (ITWG) to develop the functionality of the interoperability tool that was a POC project up to now. Interoperability is a key component of ODS and creating an extensive and robust data conversion and interaction process is vital for a complete open data standard.

There is funding from the IDF available for this development and the details of the road map for that project are still being confirmed by the ITWG and their steering committee (SC).

Oasis will attend the separate IDF SC for this project and Stuart Fraser (consultant from the IDF) will attend the ODS SC to keep both initiatives aligned as it serves the same 'eco-system'.

The chart below, outlines the draft milestones and timeframes for each initiative for 2021:

		Q1			Q2			Q3			Q4		
Tasks	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Strategy and plan Document	Present Strategy and plan to Oasis Board and SC	Complete plan and strategy doc and present to the Oasis Board and ODS SC											
Expanding Classes	Defining Liability classes and data fields into ODS		Workshop 1	Workshops 2 & 3	Test and implement Liability into ODS								
Technology	Parquet and data tool (Presto)	Confirm next steps and resources required		Implement Parquet and readable tool into Oasis									
	Incorporating ORD Outputs in the FM	Confirm required resources and tasks to implement ORD in Oasis		Developing ORD in Oasis (in Parquet)									
	Incorporate Modelling files into Parquet Package								Include Modelling files in Parquet Package		Roll out Parquet Package (OED, ORD, Modelling files)		
	IDF Interoperability Tool	Expand ITWG POC to convert from multiple formats to OED and read CSV									UAT of conversion tool		



## **4.5 Continue and Develop the Collaboration with CMOS (now called *Helix*)**

As mentioned in 2.1, collaboration will continue with CMOS so it remains aligned with ODS for the US market.

## **5.0 Key Performance Indicators (KPIs)**

Tracking KPIs is key to managing progress and identifying where its diminishing. The KPIs to monitor are:

- Number of brokers offering ODS data to clients
- Number of (Re)Insurers accommodating ODS data as internal standard.
- Monitor the volume of premium/limits being transacted using ODS.
- No of modellers able to accommodate ODS.
- No of lines of business supported by ODS.