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**Small Satellite Insurance:  
Strategy Paper for a Hybrid Discretionary Mutual Insurance Scheme**

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***Unlocking the UK's Small Satellite Industry  
with Minimal Government Involvement***

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**Summary statement**

The UK has a world leading reputation for the state licensing of operational satellites. Third party liability (TPL) insurance is a key licensing requirement for satellite operators which currently depends on cost efficient availability of insurance products from the private sector insurance market. For the modern day small satellite or constellation operator, however, a new insurance model is required for the UK to remain competitive in what is increasingly a global market for the most attractive regulatory environment within which small satellite operators to operate from. Enhancing the UK's international competitiveness for the choice of regulatory regime as against other licensing states further supports the Government in leveraging its strategic space sector investments (including in operators, launch sites and manufacturing facilities).

This Strategy Paper (**Paper**) makes the case for the urgent need to address the near market failure that is present in the UK's small satellite insurance sector. In parallel, it sets out a solution comprising the world's first hybrid discretionary mutual scheme specifically for small satellite operators to be set up in the UK. The solution requires collaboration from small satellite operators and a minimal, but necessary, level of Government support for a limited initial period of time.

This Paper sets out:

- (i) the issue adversely affecting the provision of TPL insurance for the UK small satellite industry;
- (ii) a solution which draws upon methodologies used in existing insurance innovation models already implemented and backed by Government in other sectors (such as terrorism, energy, maritime);

- (iii) how the solution would resolve the issue, whilst keeping funds within the UK small satellite industry and increase the competitiveness of the UK as a first choice licensing state;
- (iv) the reasons as to why Government support is a critical requirement at this juncture;
- (v) what level of Government support is required and for how long; and
- (vi) the benefits that would flow to the UK's small satellite sector and the wider UK space economy deriving from such Government support.

The content of this Paper, which is co-authored with experts from Prospect Law and Marsh, is summarised below.

### **Market failure**

An urgent challenge facing small satellite operators is that costs for TPL insurance required as a condition of their licence requirements are prohibitively high and disproportionate to the risks inherent in the class of satellite and mission profiles these companies operate. Business models for small satellite operators combined with current insurance market conditions give rise to key trends which threaten the UK's ability to compete as an operating base in the global, small satellite industry. Small satellite companies are:

- (i) leaving, in whole or in part, the UK to relocate business operations to a jurisdiction with more favourable licensing and insurance conditions;
- (ii) electing not to come to the UK on the basis that the TPL insurance costs required as a licence condition are too high; or
- (iii) facing very high TPL premia, which is negatively affecting their business models and their trading competitiveness.

There is a clear disconnect between operators' ability or willingness to meet the UK's licensing requirements as regards levels of TPL insurance cover and what is available at affordable premia rates in the international insurance markets. This amounts to a near market failure which threatens the future of the UK's small satellite operating sector and its wider supply chain. It is also making UK-based ancillary services (such as insurance and finance) more vulnerable to overseas competition as operators are attracted to other licensing states and their financial services markets. The current status of the small satellite operating sector is not sustainable and requires immediate and focused Government support if the UK is to remain a globally competitive jurisdiction for private sector small satellite operational activities.

The global commercial insurance sector is not incentivised to develop new TPL products suitable for the small satellite operating market and therefore the insurance market alone cannot be relied upon to provide the solution. This is because the satellite TPL insurance market is relatively insignificant as a market which, compared with other much larger portfolio sectors, is perceived as high risk and low reward. Additionally, other than a small number of specialist teams in select firms, insurers do not have the required historical data or expertise to deploy in modelling relevant TPL risk scenarios.

The SFN has conducted market research and engaged with the small satellite industry, the insurance industry (including Pool Re) and experts across other sectors in order to propose a solution to this problem. This Paper is the result of such analysis conducted over an 18-month period.

### **Solution – a hybrid discretionary mutual insurance scheme**

The solution is the establishment in the UK of a hybrid discretionary mutual scheme specifically for small satellite operators. Key advantages of this scheme are as follows.

- (i) The mutual is owned by the small satellite operators themselves as members on a not-for-profit basis; all premia are held and accumulated within the mutual, and this delivers financial benefits directly to the members within the UK industry.
- (ii) It provides the members with complete transparency, with the ability to own and control the majority of their risk and insurance arrangements, creating trust between competing operators.
- (iii) It is wholly independent of any insurer, broker or adviser who would naturally be inclined to operate their product provision in their own interests rather than the small satellite operating industry's interests.
- (iv) It is already a well-established and proven model accepted by Government (e.g. mutuals are used by local authorities, fire services, military and universities as well as in the terrorism, energy and maritime fields).
- (v) It will deliver on the key objectives of providing all stakeholders (including the Government) with a low cost, tax efficient, regulatory-light, competitive and quick-to-market solution.

### **Timing**

Assuming full support from industry participants and Government, a hybrid discretionary mutual can be set-up within three months, and, if started without delay could be in place by summer 2021.