



On-orbit Satellite Servicing - Insurance Considerations

Second International Workshop on On-orbit Satellite Servicing
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Space insurance

Space insurers provide insurance coverage for:

- pre-launch activities
- launch liability and third party liability
- launch and in-orbit operations

Key facts:

- about 180 to 200 insured satellites in orbit with a total insured value of approximately USD 20 billion
- main focus on GEO communications satellites
- on average about USD 600 to USD 700 million in claims per year

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Risk assessment



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On-orbit satellite servicing from an insurers perspective

"On-orbit refueling and servicing is a game-changing innovation." Thierry Guillemin, CTO Intelsat

- ✓ High value satellites suffer total or major partial losses because they experience component failures, deployment issues or run out of resources like fuel or solar array/battery power.
- ✓ Any technology that helps to mitigate the risk to satellites in orbit and helps to avoid insurance claims is most welcome and has our full attention and support.
- ✓ Before insurers can rely on on-orbit satellite servicing many challenges need to be cope with.

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On-orbit satellite servicing features - requirements - challenges

Features	Requirements	Challenges
propellant transfer	flight proven service model	cost
minor repair work	availability	approval of a service mission
orbit raising		liability

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Insurance considerations

- Will on-orbit servicing help to avoid insurance claims?
- Who will benefit from it?
- Who should pay for it?
- Who has the authority to approve a service mission?
- Would satellite insurers underwrite any differently a satellite that had reduced redundancy of components but had features on it that would make it cooperative with on-orbit servicing?

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Thank you



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