

OSPENTEK SOLUTIONS

**Disaster Impact Assessment on
Business Assets**

04/06/2024

Risk Management Team



Who are we?



OSPenTek Solutions is a leading company in the information technology sector, specializing in the development of innovative software solutions for clients across various industries. With a team of expert developers and consultants, OSPenTek Solutions is committed to delivering high-quality services and products to its clients, ensuring efficiency, security, and operational continuity. Our mission is to support customers in digitizing their business processes.

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Introduction

a)

This report, commissioned by the management of TechSecure Inc., aims to quantitatively assess the potential impact of various disasters on the company's critical assets.

b)

Through a detailed analysis of the Annualized Loss Expectancy (ALE) and potential annual losses per asset in scenarios involving earthquakes, fires, or floods, this report provides critical insights to support informed risk management decisions and ensure operational continuity.

c)

A thorough risk assessment is essential for any organization, especially for those like TechSecure Inc., which rely on physical and digital assets to deliver services. By identifying and quantifying the potential financial impacts of disasters, we enable the company to strategically allocate resources for risk mitigation and develop effective response plans.

d)

The methodology used in this report follows a quantitative approach, combining asset values, disaster-specific exposure factors, and historical annual frequencies. Key results highlight high-risk areas and provide a foundation for targeted recommendations to reduce the financial and operational impact of disasters.

Quote

Activities	Hours	Hourly Rate	Total Cost
Analysis and Preparation	20 ore	150€	3.000€
On-Site Assessment and Data Collection	10 ore	150€	1.500€
Data Processing and Riskodeling	30 ore	150€	4.500€
Final Report Drafting and Presentation	15 ore	150€	2.250€
Project Management and Communications	10 ore	150€	1.500€
Total Quote			12.750€

Metodology

a)

Identification of critical assets:

- Primary building
- Secondary building
- Data center

b)

Determination of the monetary value of each asset, based on internal financial and accounting data.

c)

Calculation of SLE (Single Loss Expectancy) by multiplying the asset value by the specific exposure factor for each disaster.

The exposure factor represents the percentage of total asset loss in the event of a disaster. These factors were derived from historical data and predictive models used in the insurance industry.

d)

Calculation of Annualized Loss Expectancy (ALE) by multiplying the SLE by the annual frequency of each disaster type, as determined by statistical analysis of past events.

Data

a)

ASSET VALUATION

Asset	Value
Primary building	€350,000
Secondary building	€150,000
Data center	€100,000

b)

EVENT FREQUENCY

Event	ARO (Annualized Rate of Occurrence)
Earthquake	1 in 30 years
Fire	1 in 20 years
Flood	1 in 50 years

c)

EXPOSURE FACTORS

Asset	Earthquake	Fire	Flood
Primary building	80%	60%	55%
Secondary building	80%	50%	40%
Data center	95%	60%	35%

Results

a)

SLE and Annualized Loss Expectancy by Asset and Disaster Type

Asset	Earthquake	Fire	Flood
Primary building	SLE: 280.000€ ALE: 9.333,33€	SLE: 210.000€ ALE: 10.500€	SLE: 192.500€ ALE: 3.850€
Secondary building	SLE: 120.000€ ALE: 4.000€	SLE: 75.000€ ALE: 3.750€	SLE: 60.000€ ALE: 1.200€
Datacenter	SLE: 95.000€ ALE: 3.166,67€	SLE: 60.000€ ALE: 3.000€	SLE: 35.000€ ALE: 700€

b)

c)

Key Observations

- Fire presents the highest aggregate annual loss (€17,250) due to its higher frequency, despite having a lower ALE compared to earthquakes.
- Earthquakes have significant annual impact (€16,500), primarily because of the high risk exposure of the primary building.
- While floods show the lowest annual impact (€5,750), they still represent a non-negligible risk.

These results highlight the importance of considering both loss magnitude and frequency in risk assessments.

Recommendations

The Risk Management Team recommends the following actions:

- Implement a robust, redundant data backup system, with both on-site and off-site copies, to ensure critical data availability during fires, earthquakes, or other disasters.
Consider cloud storage solutions for enhanced resilience.
- Develop and regularly test a Disaster Recovery (DR) Plan that includes detailed procedures for IT system and data restoration after catastrophic events.
Ensure the plan is well-documented and staff are adequately trained.
- Evaluate specialized insurance coverage for cybersecurity and business interruption, to transfer financial risks associated with cyber incidents or prolonged service disruptions caused by disasters.
- Conduct regular employee training on cybersecurity best practices and data protection protocols, including disaster response procedures. Perform periodic incident response drills to test DR plan effectiveness and identify areas for improvement.

Conclusion

This quantitative impact and annual exposure assessment, conducted by OSPenTek Solutions' Risk Management Team on behalf of partner company TechSecure Inc., provides a clear understanding of the financial risks associated with various disasters. The results underscore the importance of adopting a comprehensive risk management approach that considers both the magnitude of individual losses and their frequency. By implementing the provided recommendations—with particular focus on data protection, cybersecurity, and operational continuity—TechSecure Inc. can effectively mitigate risks with the highest annual impact. Integrating these findings into strategic planning and emergency response protocols will enable the company to enhance its resilience against operational disruptions caused by disasters or cyber incidents.

Contacts

On behalf of OSpenTek Solutions, we would like to express our deepest gratitude to TechSecure Inc. for entrusting us with this critical risk assessment. We are honored by the confidence placed in our expertise and capabilities in risk management and cybersecurity.

This engagement has allowed us to demonstrate our commitment to delivering comprehensive analyses and tailored recommendations to help our clients enhance their resilience and operational continuity.

Our Risk Management team remains fully available for any further discussions, clarifications, or assistance with implementing the provided recommendations. We look forward to collaborating with TechSecure Inc. to refine risk management and cybersecurity strategies, aligning them with your specific business needs and objectives.

Please do not hesitate to contact us for any additional needs:

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