Supplementary Material S3

Global Weights

Tables S10, S11, S12 and S13 illustrate the calculations of the global weights of the risk elements for Layers 2, 3, 4 and 5, respectively.

Table S10. 2nd Layer - Assets

ASSETS	Local Weight (L)	Parent Nodes (Pn G W)	Parent Nodes Global Weight	Global Weight * (L) x (∑ Pn G W)
Drone (Airborne Component)	0,2668	---	---	**0,2668**
Ground Control Station	0,1156	---	---	**0,1156**
Communication Links	0,1422	---	---	**0,1422**
Regulations/Policies	0,0620	---	---	**0,0620**
Environmental Conditions	0,2715	---	---	**0,2715**
Operator	0,0936	---	---	**0,0936**
Area of Operations	0,0483	---	---	**0,0483**

Both the global and local weights of Layer 1 (Objective of the Hierarchy) sum up to 100%; thus, both the global and local weights of its child layer coincide. Therefore, regarding the assets' weight, which is the child layer of the objective, the calculated relative weights of assets are also considered global.

Table S11. *3rd Layer – Vulnerabilities*

VULNERABILITITES	Local Weight (L)	Parent Nodes (Pn G W)	Parent Nodes Global Weight	Global Weight (L) x (∑ Pn G W)
Ineffective power source	0.1557	Drone	0,2668	**0,0415**
High power consumption	0.0953	Drone Environmental Conditions	0,2668 0,2715	**0,0513**
Defective components	0.1410	Drone Ground Control Station Communication Links	0,2668 0,1156 0,1422	**0,0740**
Wrong Handling	0.0576	Drone Ground Control Station Operator	0,2668 0,1156 0,0936	**0,0274**
High Susceptibility to wireless attacks	0.1173	Communication Links	0,1422	**0,0167**
High Susceptibility to Extreme Weather Conditions	0.2292	Communication Links Environmental Conditions	0,1422 0,2715	**0,0948**
Lack or Violation policies/regulations	0.0347	Regulations/Policies	0,0620	**0,0021**
Faulty Operation	0.0512	Operator	0, 0936	**0,0048**
Lack of Expertise/Training/Skills	0.0523	Operator	0, 0936	**0,0049**
Susceptibility to Adversarial Actions	0.0657	Area of Operations	0,0483	**0,0031**

Table S12: 4th Layer – Threats

THREATS	Local Weight (L)	Parent Nodes (Pn G W)	Parent Nodes Global Weight	Global Weight (L) x (∑ Pn G W)
Power Failure	0.2152	Ineffective power source	0,0415	**0,0440**
		High power consumption	0,0513	
		Susceptibility to wireless attacks	0,0167	
		Susceptibility to Weather Conditions	0,0948	
Equipment Failure	0.1133	Ineffective power source	0,0415	**0,0130**
		Defective components	0,0740	
Control Loss	0.0552	High power consumption	0,0513	**0,0112**
		Wrong Handling	0,0274	
		Susceptibility to wireless attacks	0,0167	
		Susceptibility to Weather Conditions,	0,0948	
		Lack/Violation policies/regulations	0,0021	
		Faulty Operation	0,0048	
		Lack of Expertise/Training/Skills	0,0049	
Wireless Attack	0.1580	High power consumption	0,0513	**0,0151**
		Wrong Handling	0,0274	
		Susceptibility to wireless attacks	0,0167	
Extreme Weather Conditions	0.2028	Ineffective power source	0,0415	**0,0381**
		High power consumption	0,0513	
		Susceptibility to Weather Conditions	0,0948	
Collision w/ Objects	0.1273	Susceptibility to wireless attacks	0,0167	**0,0040**
		Lack/Violation policies/regulations	0,0021	
		Faulty Operation	0,0048	
		Lack of Expertise/Training/Skills	0,0049	
		Susceptibility to Adversarial Actions	0,0031	
Unsuccessful Navigation	0.0542	High power consumption	0,0513	**0,011**
		Wrong Handling	0,0274	
		Susceptibility to wireless attacks	0,0167	
		Susceptibility to Weather Conditions	0,0948	
		Faulty Operation	0,0048	
		Lack of Expertise/Training/Skills	0,0049	
		Susceptibility to Adversarial Actions	0,0031	
Physical Attacks	0.0740	Lack/Violation policies/regulations	0,0021	**0,0004**
		Susceptibility to Adversarial Actions	0,0031	

Table S13. 5th Layer – Requirements

REQUIREMENTS	Local Weight (L)	Parent Nodes (Pn G W)	Parent Nodes Global Weight	Global Weight (L) x (∑ Pn G W)
Confidentiality	0,0362	Wireless Attack	0,0151	**0,0006**
		Physical Attacks	0,0004	
Integrity	0,0519	Wireless Attack	0,0151	**0,0008**
		Physical Attacks	0,0004	
Availability	0,1004	Power Failure	0,0440	**0,0099**
		Equipment Failure	0,0130	
		Control Loss	0,0112	
		Wireless Attack	0,0151	
		Collision w/ Objects	0,0040	
		Unsuccessful Navigation	0,0110	
		Physical Attacks	0,0004	
Safety	0,3545	Control Loss	0,0112	**0,0093**
		Collision w/ Objects	0,0040	
		Unsuccessful Navigation	0,0110	
Reliability	0,1004	Power Failure	0,0440	**0,0093**
		Extreme Weather Conditions	0,0381	
		Unsuccessful Navigation	0,0110	
Maintainability	0,1682	Equipment Failure	0,0130	**0,0119**
		Wireless Attack	0,0151	
		Extreme Weather Conditions	0,0381	
		Collision w/ Objects	0,0040	
		Physical Attacks	0,0004	
Survivability	0,1883	Power Failure	0,0440	**0,0179**
		Equipment Failure	0,0130	
		Extreme Weather Conditions	0,0381	