



IALA WORLD –WIDE ACADEMY

Briefing to SWPHC on risk management and the quality of
Maritime Management in the Pacific Region



International Obligations: SOLAS V Regulation 13

Chapter V Regulation 13.1 requires a Contracting Government to provide “as it deems practical and necessary” by itself or with other Governments “such AtoN as the **volume of traffic justifies** and the **degree of risk requires**”

Ch V Reg 13.2: AtoN should conform to **international standards** (IALA recommendations and guidelines)

Ch V Reg 13.3 **information** about AtoN must be **given to all concerned** (mariners; stakeholders etc.) - **MSI**

International Standards – IALA Publications



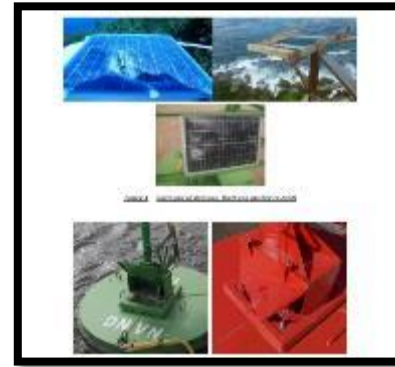
Guideline 1109 on **theft and vandalism deterrents**

Guideline 1091 on **bird deterrents**

Guideline G1136 - **AtoN services in extremely hot and humid climates**

Guideline G1138 on **Simplified IALA Risk Assessment – SIRA**

www.iala-aism.org/publications





Risk Management

The IALA Risk Management Toolbox



Causality



$$\text{Risk} = P * C$$



IALA Risk Management Toolbox



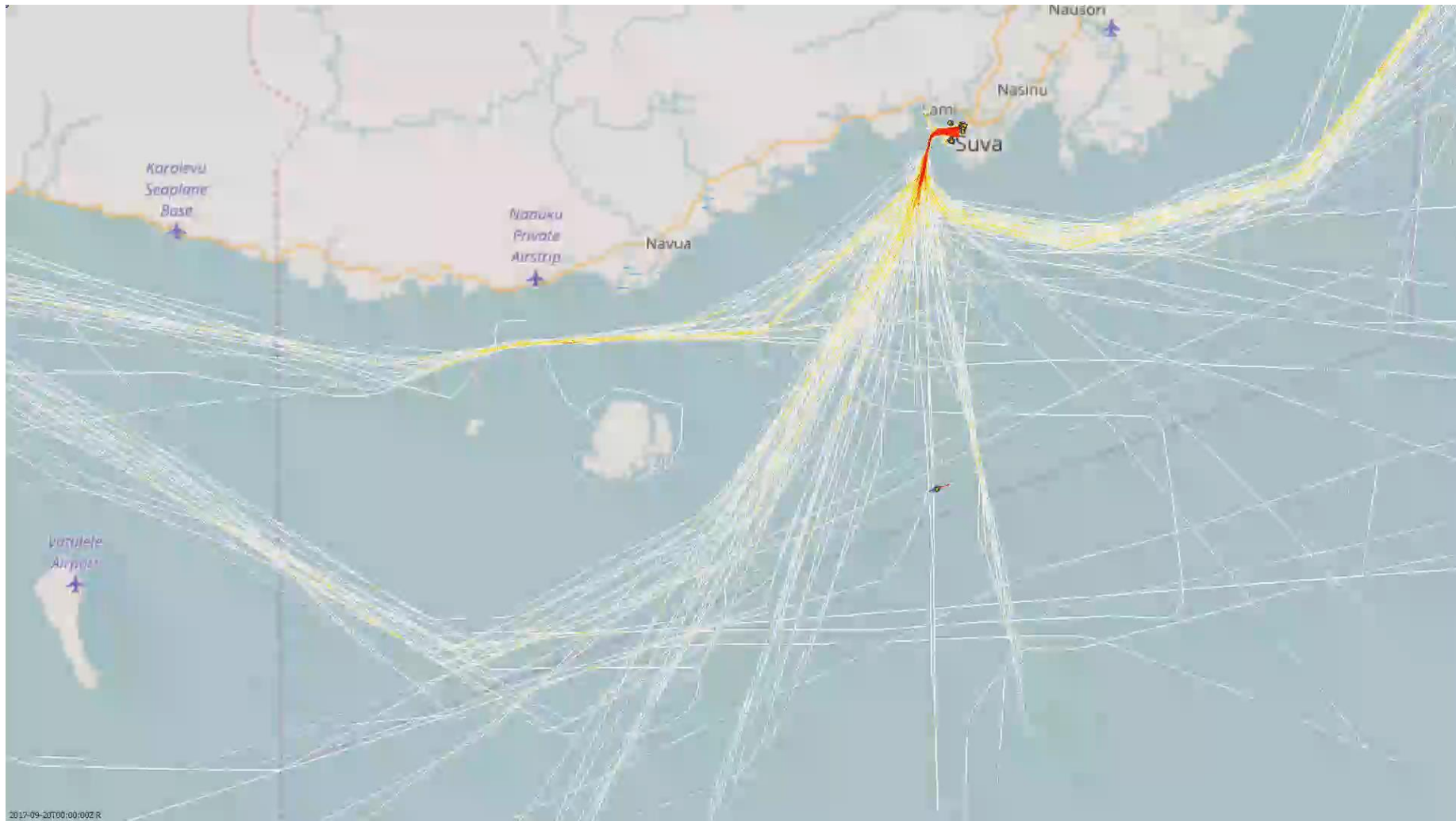
PAWSA – 30 experts

IWRAP MkII – calculates statistics

SIRA – a few stakeholders who really care



IWRAP Mk II Video (three days off Suva)





Risk Value Matrix (SIRA G1138 Table 3)

		PROBABILITY OR LIKELIHOOD				
		Very Rare (1)	Rare (2)	Occasional (3)	Frequent (4)	Very frequent (5)
CONSEQUENCE OR IMPACT	Catastrophic (5)	5	10	15	20	25
	Major (4)	4	8	12	16	20
	Severe (3)	3	6	9	12	15
	Minor (2)	2	4	6	8	10
	Insignificant (1)	1	2	3	4	5

ALARP (As Low As Reasonably Practicable) is indicated by a green arrow pointing from the top-left towards the bottom-right of the matrix.



Risk Control Options (RCO)

RCO for each undesirable incident reduce the risk to a level (**As Low As Reasonably Practicable - ALARP**) which is acceptable to stakeholders

The Risk Value will determine what action is required (**G1138 Table 4**)

Risk Value	Risk Category	Action Required
1 - 4	Green	Low risk. No RCOs unless implemented at low cost
5 - 8	Yellow	Moderate risk. Reduce to ALARP level through RCOs
9 - 12	Amber	High risk requiring RCO and significant funding
15 - 25	Red	Very high and unacceptable risk – immediate action required with major funding. Ports/waterways may need to close until risks are at ALARP level

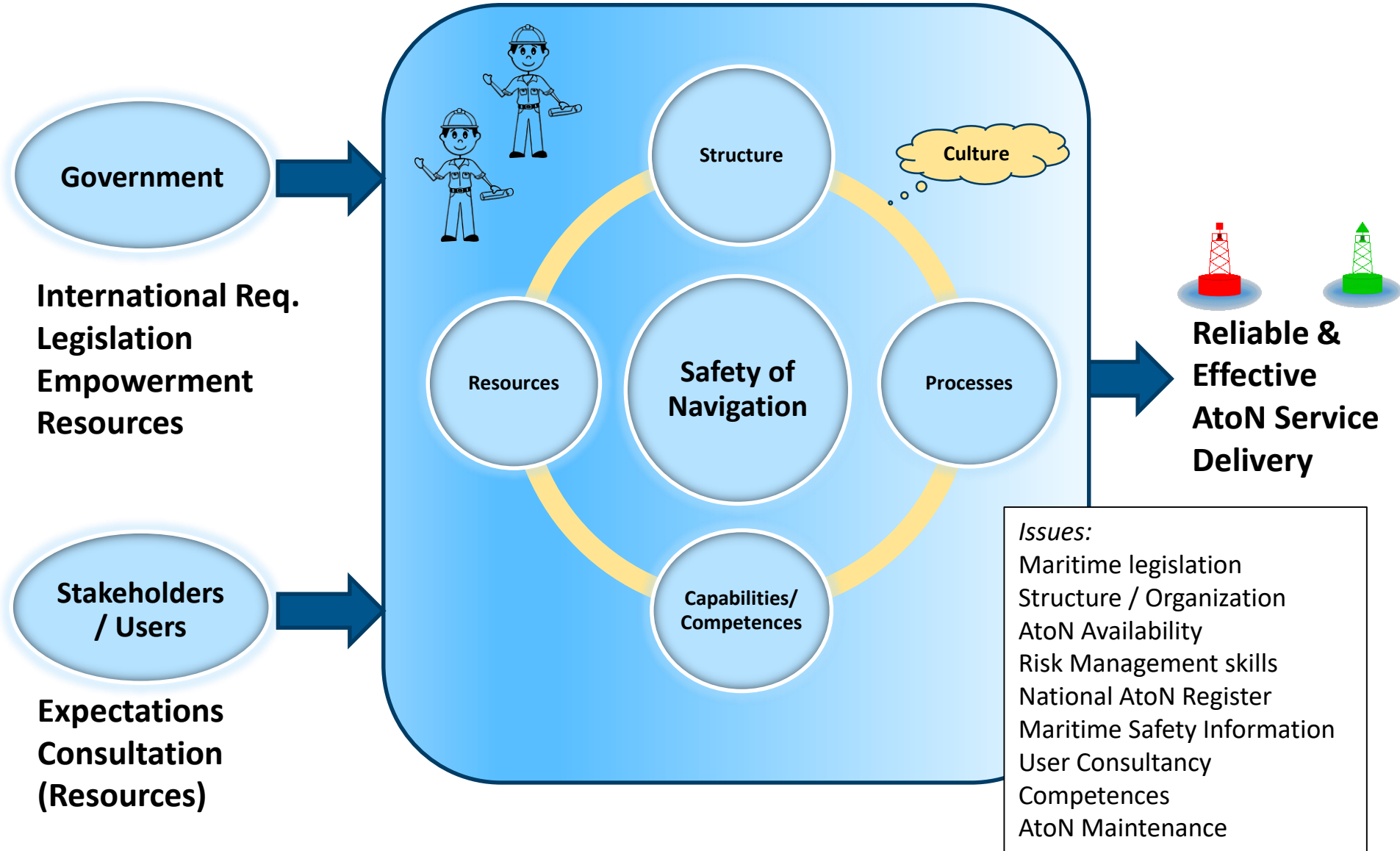


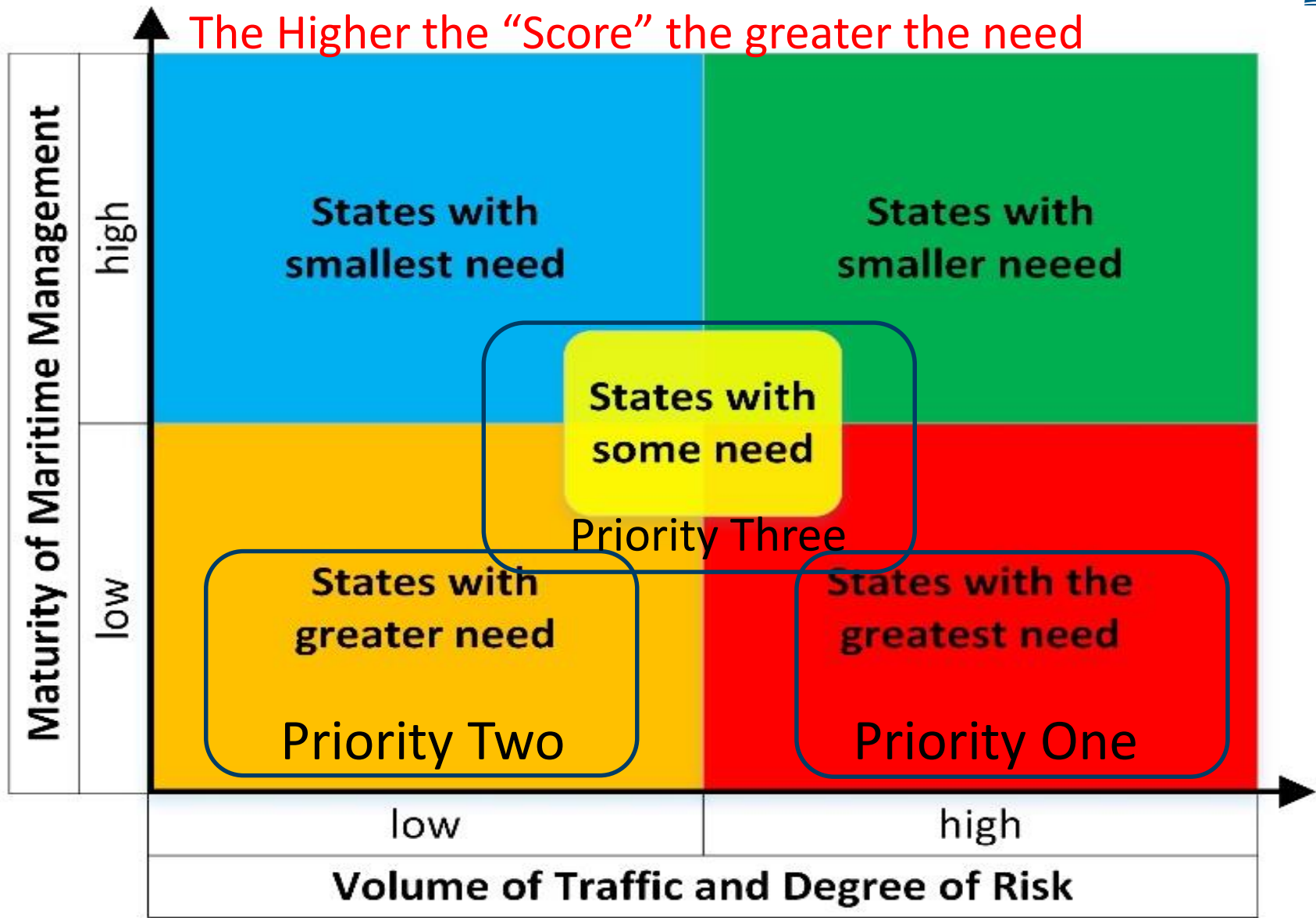
Quality of Maritime Maturity for AtoN service provision

Meeting international obligations – or not!



Competent Authority







Maritime Maturity “Score”

12 categories e.g.

Effective Maritime Safety Information

Funding arrangements adequate

National register of AtoN compiled and updated

Stakeholder consultancy effective

Coastal State Assessment Matrix - Part 1 - Maturity of Maritime Management				
3	a.1	MSI National Coordinator nominated and effective?	Yes = 1.0; nominated only = 0.5; pending = 0.25; no = 0	1
4	a.2	Powers of AtoN/VTS CA embodied in law?	Yes = 0.25; pending = 0.1; no = 0	0.25
5	a.3	Maritime incident records	Register maintained = 0.25; pending/partial records = 0.1; none = 0	0.25
6	a.4	National Governmental Maritime Committee formed?	Yes = 0.5; pending = 0.25; no = 0	0.5
7	b.1	AtoN strategic plan published?	Yes = 0.5; pending = 0.25; no = 0	0.5
8	b.2	AtoN Operational Plan; LoS statements published; EWM PLAN?	Yes = 0.5; pending = 0.25; no = 0	0.5
9	b.3	Funding arrangements approved and adequate?	Yes = 0.5; pending = 0.25; no = 0	0.5
10	b.4	Spares; resources and manpower adequate?	Fully resourced = 0.5; partial = 0.25; inadequate = 0	0.5
11	c.1	National AtoN register produced and maintained?	Fully = 1; partially = 0.5; pending = 0.25; no = 0	1
12	c.2	IALA categories allocated; availability statistics produced?	Fully = 0.5; partially = 0.25; pending = 0.1; no = 0	0.5
13	c.3	ISO 9001 QMS accreditation?	Yes = 0.25; in-house equivalent = 0.1; no = 0	0.25
14	c.4	Stakeholder fora developed?	Effectively = 0.25; partially = 0.1; none = 0	0.25
15	d.1	Level 1 AtoN managers/ VTS supervisors	> 4 = 1; 2 or 3 = 0.5; 1 = 0.25; none = 0	1



Final Quality "Score"

A "perfect" State would score 1. In practice a score of less than 20 forms the "Premier Division"

28 States in the Premier Division

China – score 7

Australia

Brazil

India

Republic of Korea

South Africa

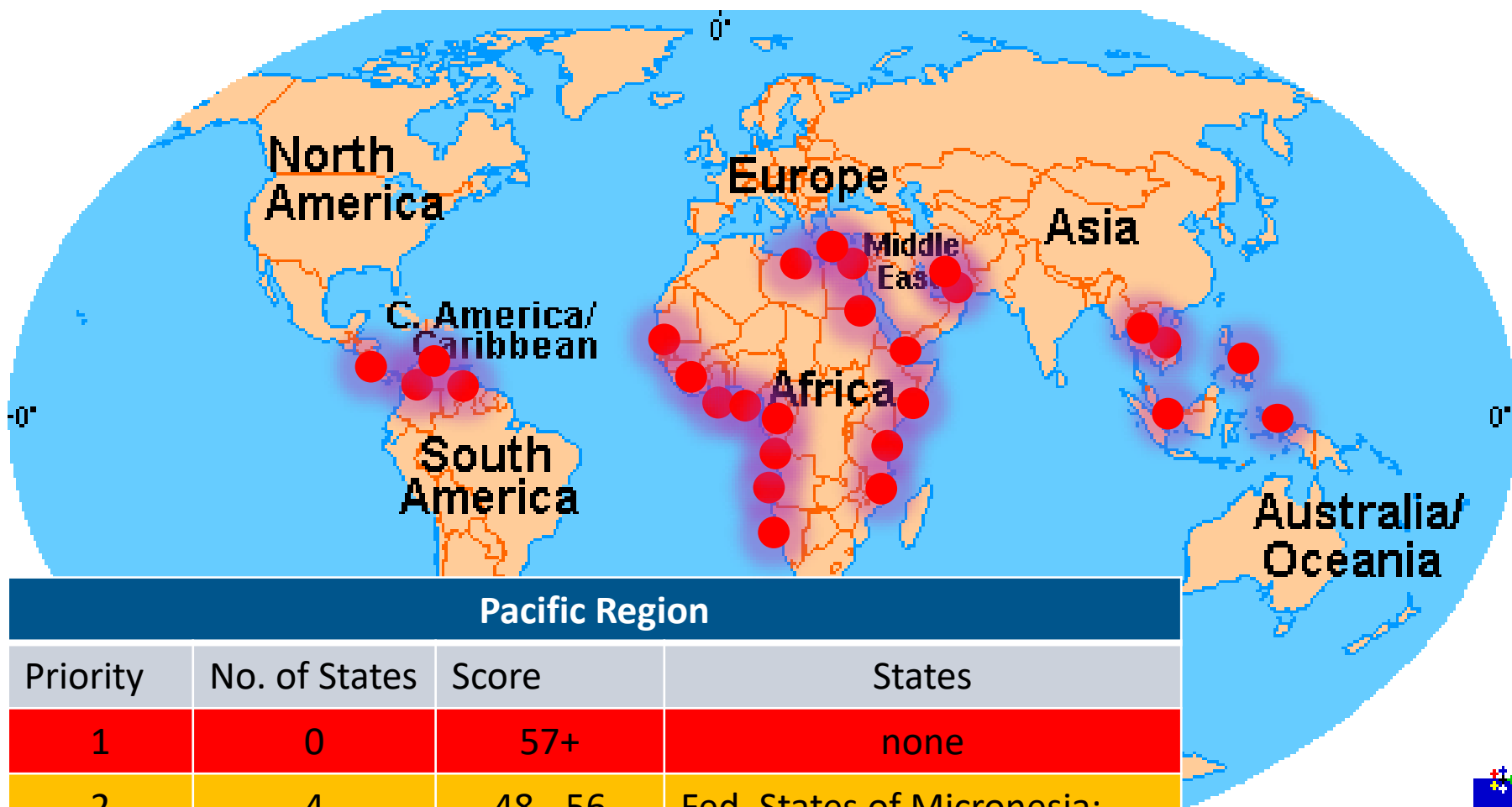
UK

USA etc.

A	B			C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
1	Region 60 (Brazil, India and 49 Pacific Island Countries and States - PICTS)																						
					Arctic	Antarctica	Asia	Central Asia	Central Europe	East Asia	EU	EU-10	EU-12	EU-14	EU-16	EU-18	EU-20	EU-22	EU-24	EU-26	EU-28	EU-30	
					China	India	Japan	South Korea	USA	UK	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other
Summation																							
23	Summation	Score	Total																				
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Priority 1 States – Score of 57 or more



Pacific Region			
Priority	No. of States	Score	States
1	0	57+	none
2	4	48 - 56	Fed. States of Micronesia; Palau; Tonga; Vanuatu
3	1	45 - 47	Tuvalu (until next Thursday!)



THANK YOU

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