Assessing National Cybersecurity Capacity in the Pacific

OCSC Oceania Cyber Security Centre

Global Cyber Security Capacity Centre

OXFORD MARTIN SCHOOL

UNIVERSITY OF OXFORD

The Oceania Cyber Security Centre (OCSC)

- Not-for-profit located in Melbourne, Australia and funded by the Victorian government & 8 member universities

- Provide a front door to access over 120 cyber security experts across 8 universities from technical expertise through to strategy, policy and law

- Focused on collaboration and partnering with universities, industry and governments on research and capacity building

- Regional research and deployment partner with the Global Cyber Security Capacity Centre (GCSCC) at the University of Oxford for CMM reviews in the region

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OCSC Experts

Funded by

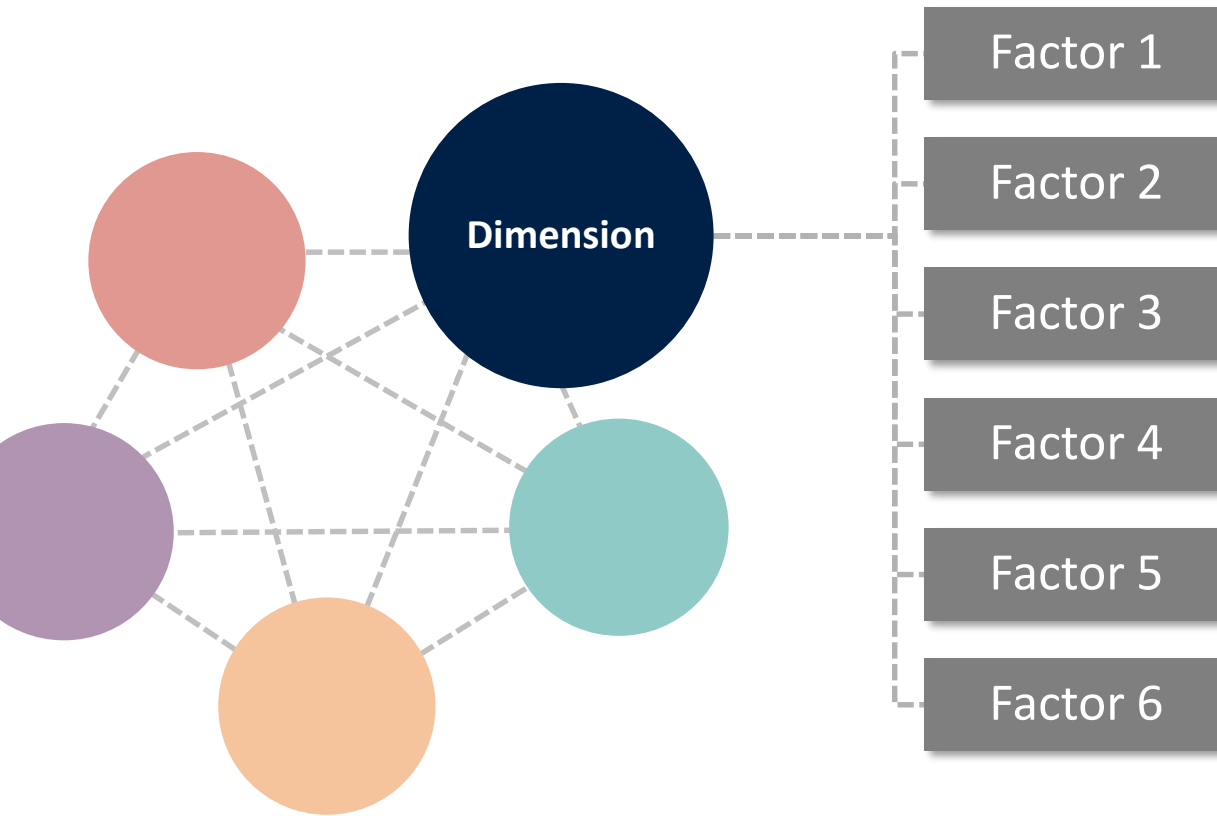# Cybersecurity Capacity Maturity Model for Nations (CMM)

Why use the CMM?

- Provides holistic nation specific assessment of dimensions related to cybersecurity

- Developed with both input from experts with practical knowledge and lessons learnt from nations using it

- Meets the requirements for capacity building at a national level

- Knowledge generated will assist to inform the government and organisations to adopt policies and make investments to enhance safety and security in cyberspace

- Data and findings can drive research projects across dimensions

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The **5 DIMENSIONS** of Cybersecurity Capacity
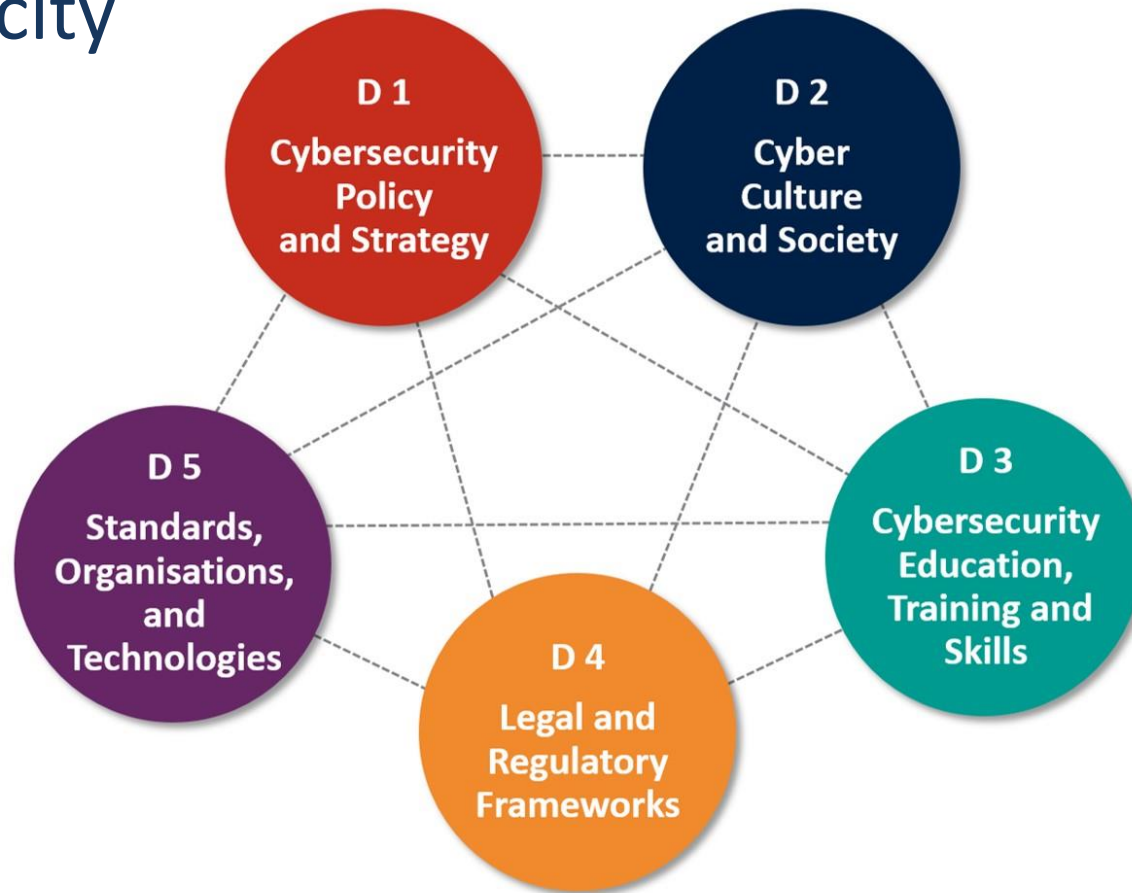
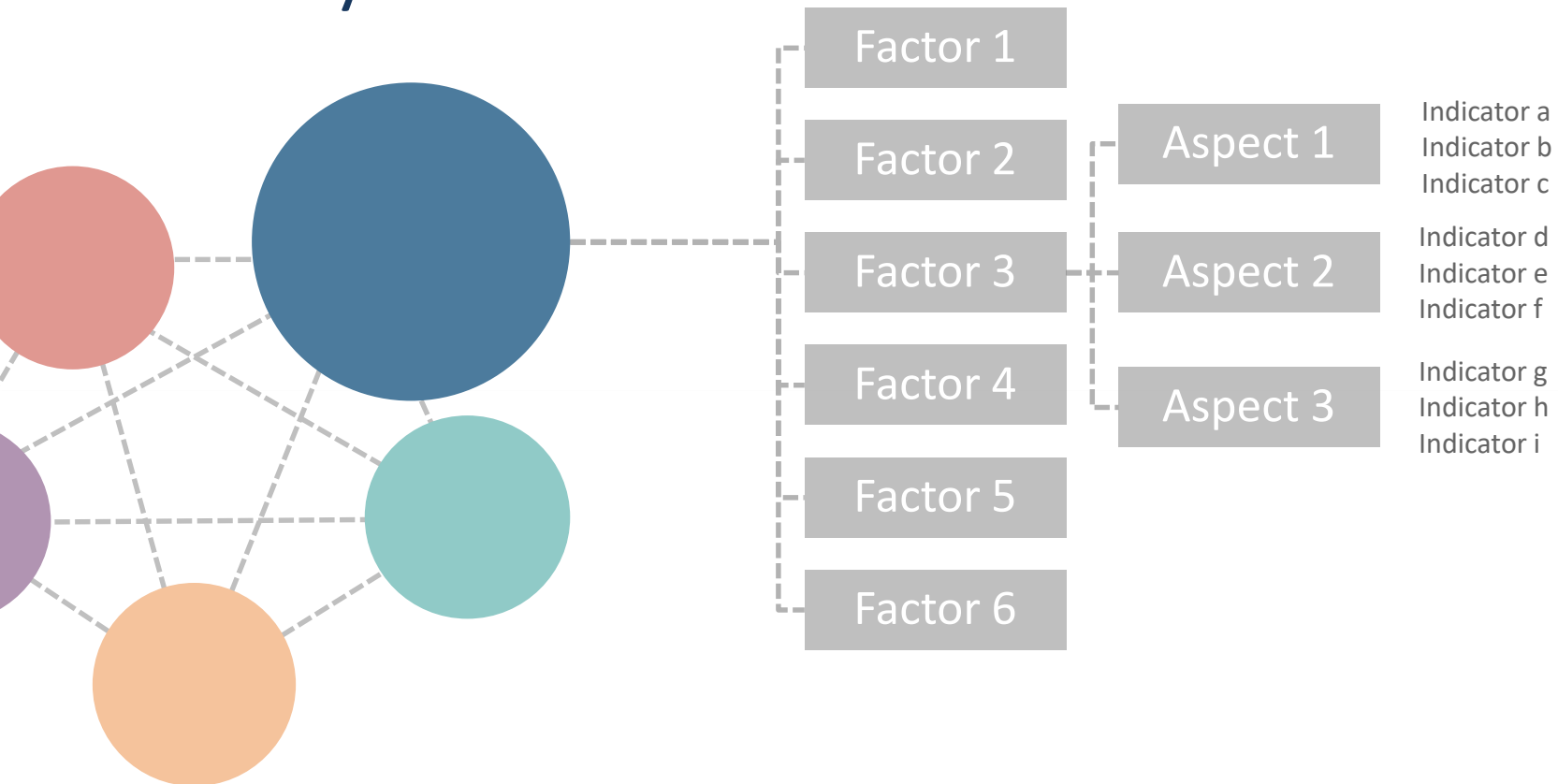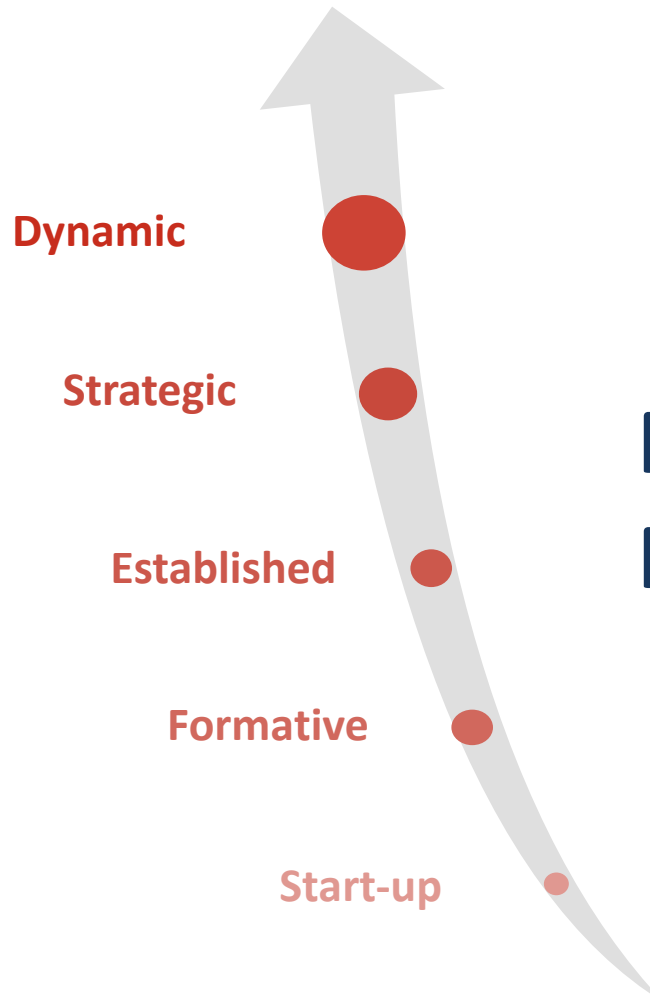# FACTORS: What it means to possess cybersecurity

ASPECTS: Structure the Factor's content into more concise parts
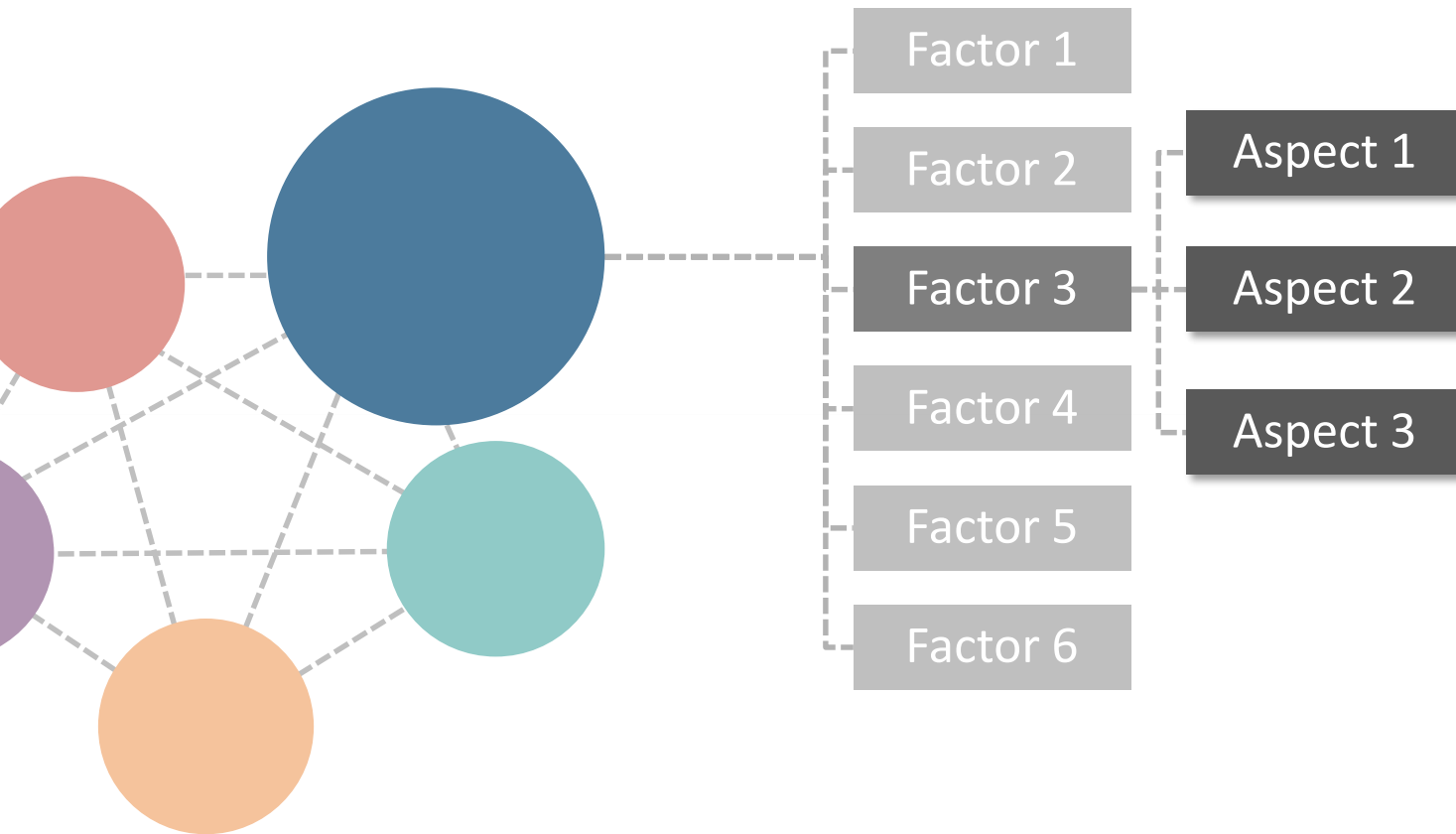
INDICATORS: Describe what it means to possess cybersecurity capacity and how to enhance maturity

5 STAGES of Maturity

Dynamic

Strategic

Established

Formative

Start-up

**Nation specific
Not a ranking**

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Standards, Organisations and Technologies

Cybersecurity Policy and Strategy

Cyber Culture and Society

Legal and Regulatory Frameworks

Cybersecurity Education, Training and Skills

Cryptographic Controls

Cybersecurity Marketplace

Responsible Disclosure

National Cybersecurity Strategy

Incident Response

CI Protection

Crisis Management

Cyber Defence Consideration

Communications Redundancy

Technical Security Controls

Software Quality

Internet Infrastructure Resilience

Adherence to Standards

Cybersecurity Mind-set

Formal and Informal Cooperation Frameworks to Combat Cybercrime

Trust and Confidence on the Internet

Criminal Justice System

User Understanding of Personal Information Protection Online

Reporting Mechanisms

Legal Frameworks

Media and Social Media

Framework for Professional Training

Framework for Education

Awareness Raising

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Deploying the CMM

Stakeholder Clusters

Criminal Justice

Defence/ Intelligence

Critical Infrastructure

Academia/ Civil Society

CERT and IT

Legislators

Government

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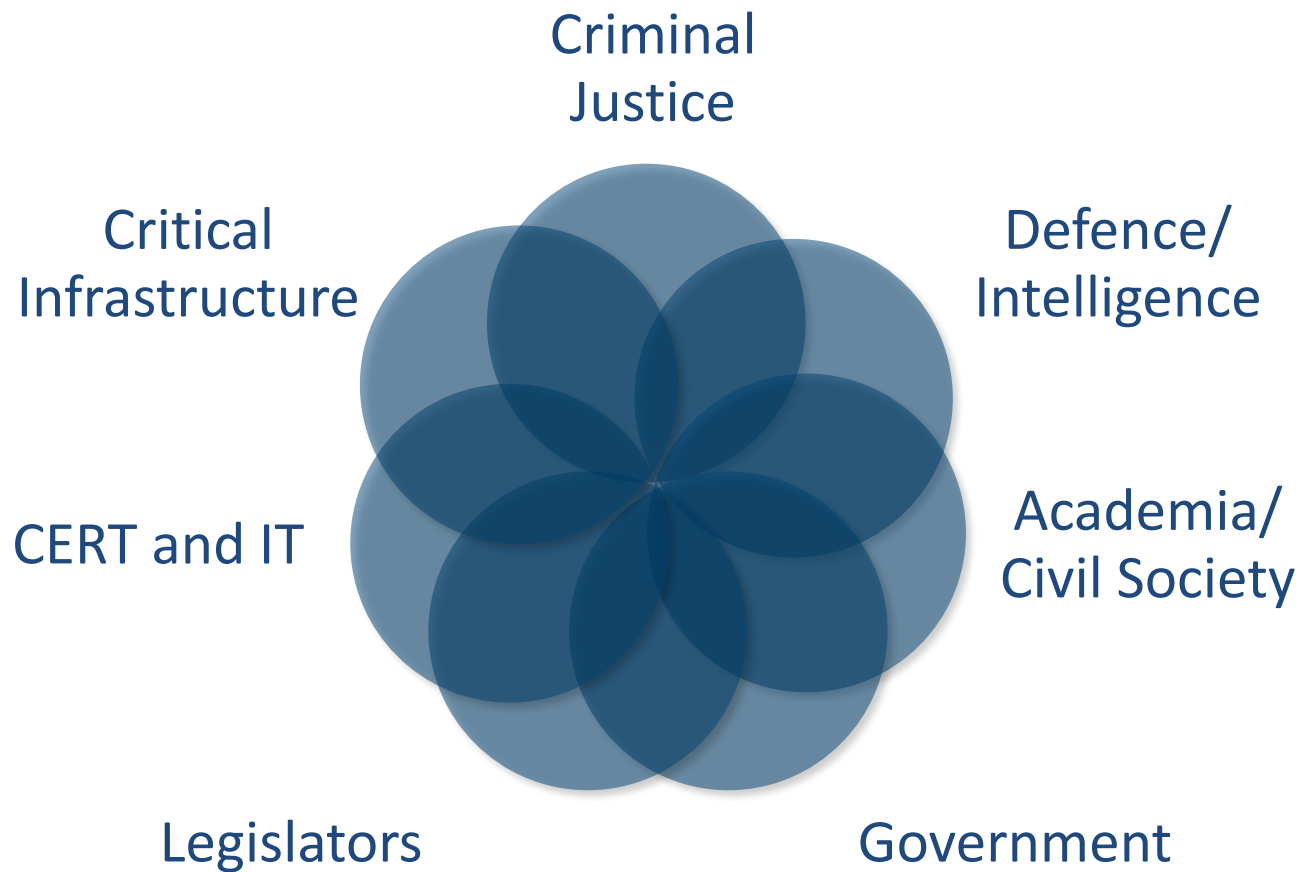
Key benefits

- Self-assessment by cross-sector stakeholders

- Resulting report is owned by the country

- Provides a benchmark to measure progress via a second review in the future

- Recommendations identify areas for capacity building

- Can inform applications for funding for capacity building

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More than 60 Reviews since 2015

Albania
Armenia
Bosnia & Herzegovina
Cyprus
Georgia
Iceland
Kosovo
Lithuania
Macedonia
Montenegro
UK

Brazil
Colombia
Jamaica

The Gambia
Ghana
Lesotho
Madagascar
Mauritius
Nigeria
Senegal
Sierra Leone
Uganda
Zambia

Bangladesh
Bhutan
Kyrgyzstan
Indonesia
Myanmar
Thailand

Fiji
Samoa
Tonga
Vanuatu

GCSCC Strategic & Implementation Partners

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NRD Cyber Security

Norwegian Institute of International Affairs
NUPI

Status: March 2019

**Visit the Cybersecurity Capacity Portal –
a global knowledge resource for Cybersecurity Capacity Building**
www.sbs.ox.ac.uk/cybersecurity-capacity

Incl an Inventory of current intl and regional initiatives in cybersecurity capacity building – partnership with the Global Forum on Cyber Expertise (GFCE)

Thank you!

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www.ocsc.com.au

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