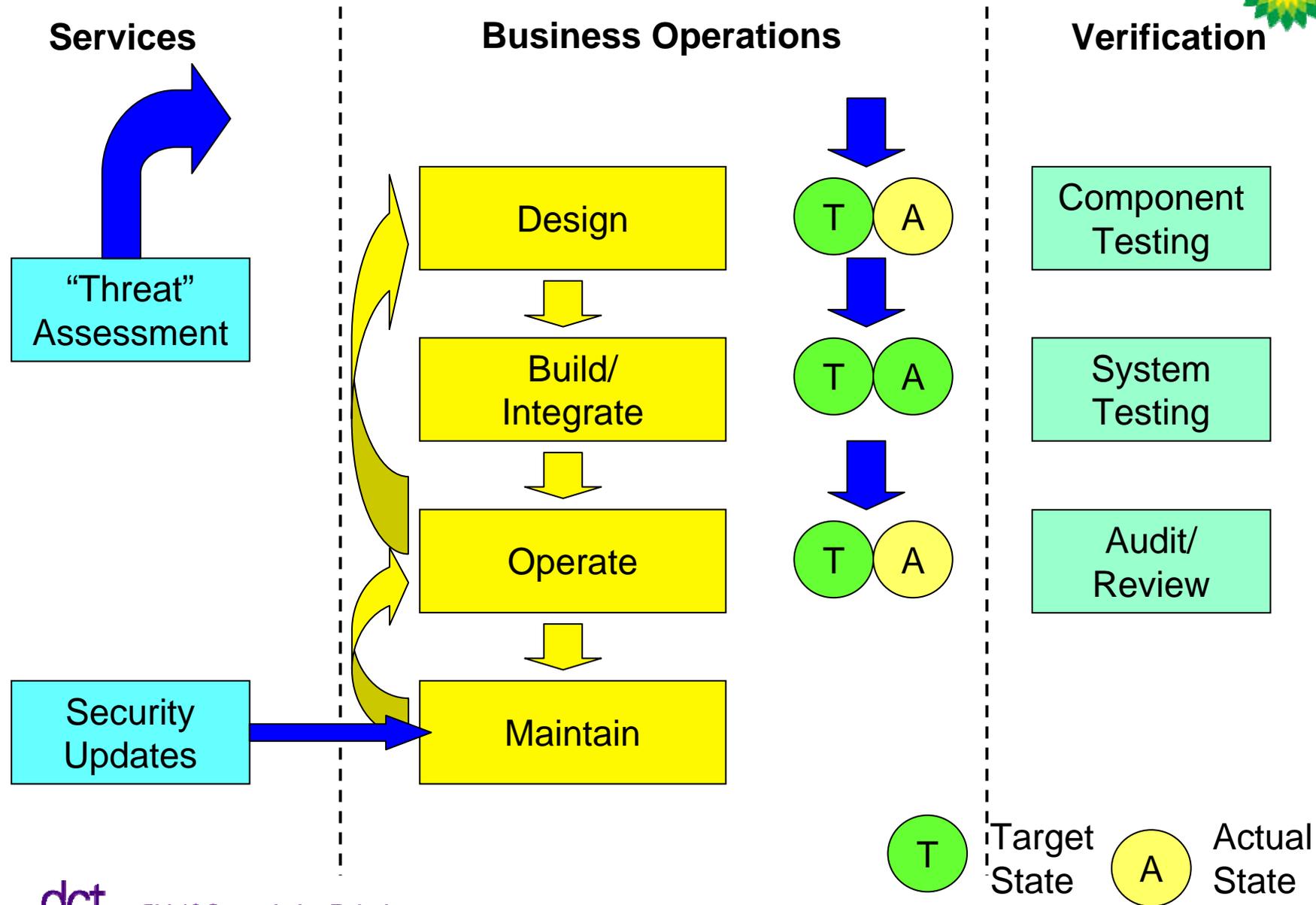




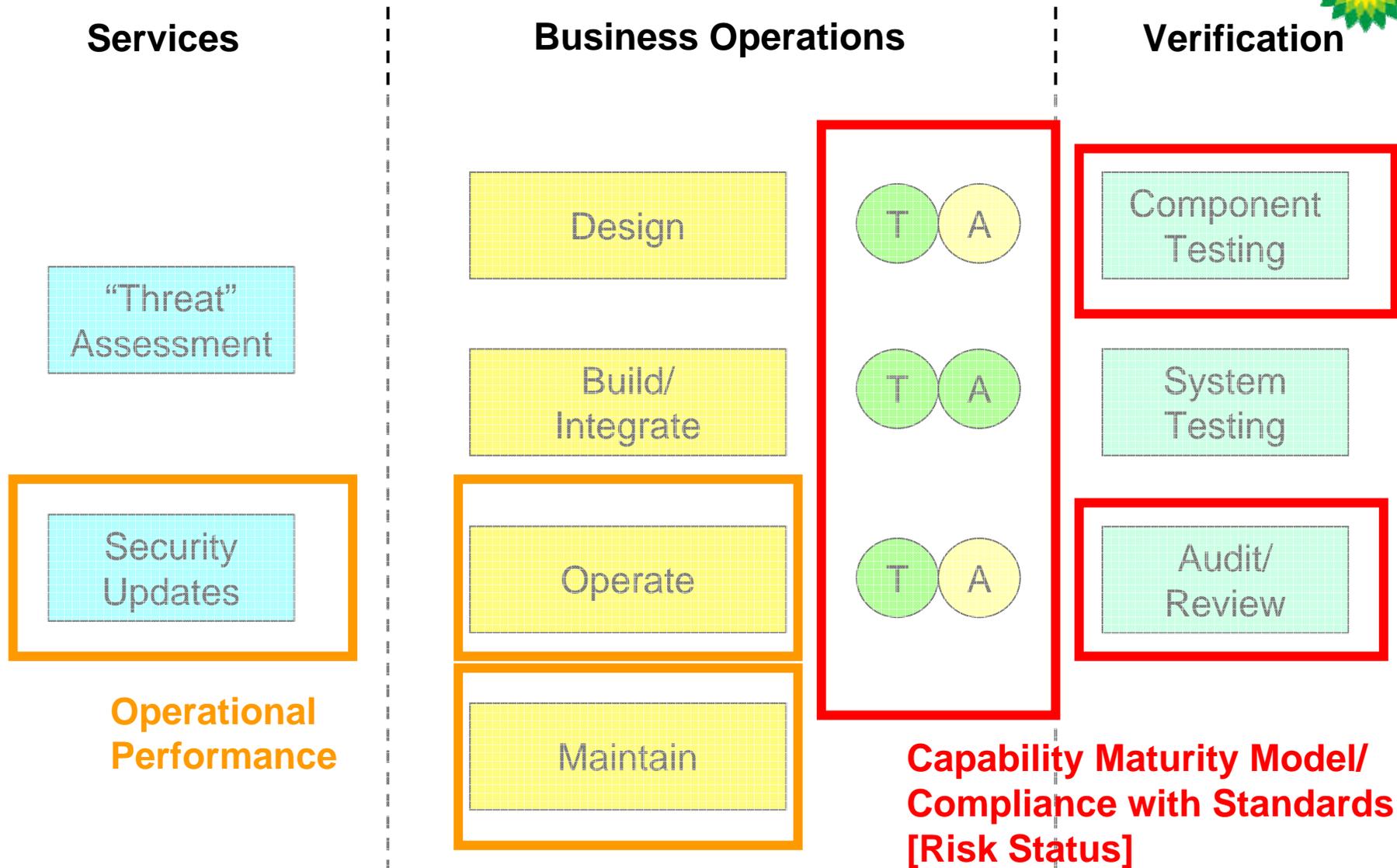
The use of Measurement in Process Control Security: An operators experience.

Dr Paul G Dorey
VP Digital Security & CISO
BP PLC

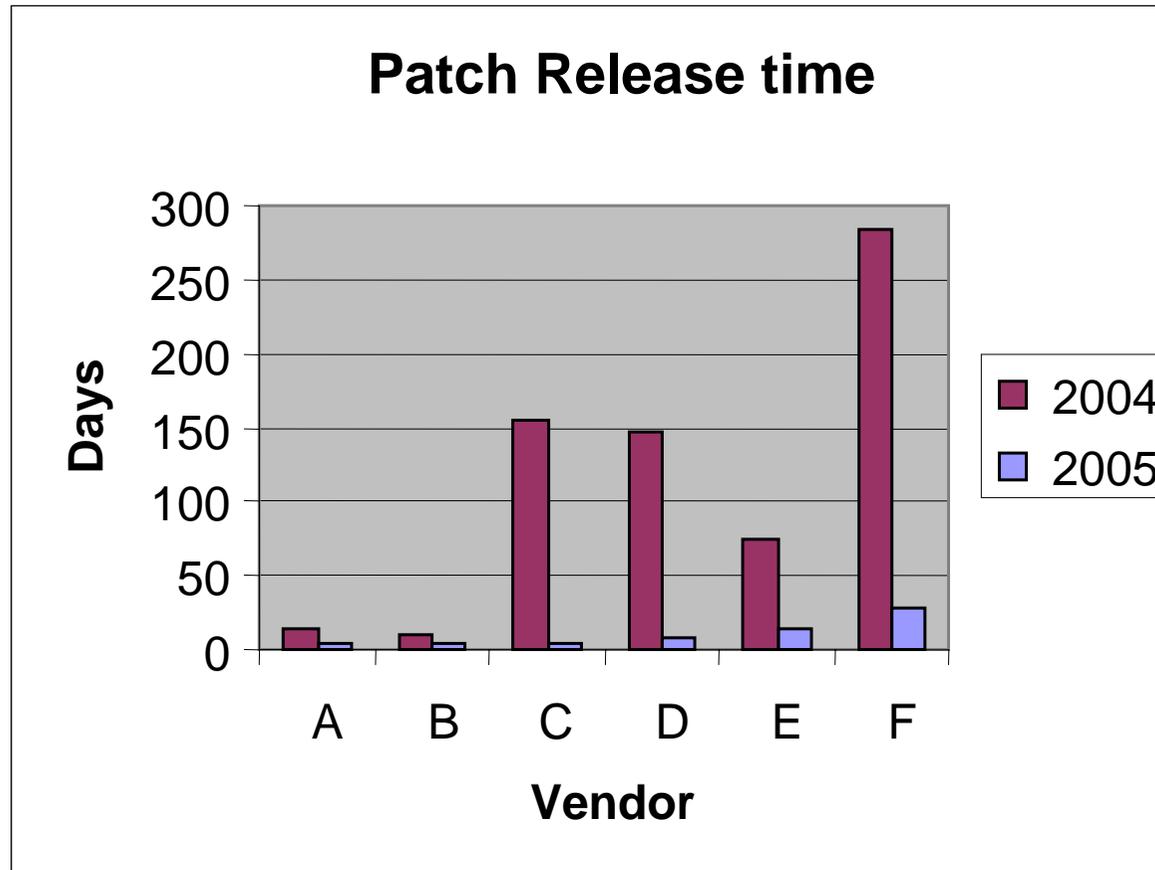
The Context of Measurement



The Context of Measurement



Operational Performance



Capability Maturity/Standards



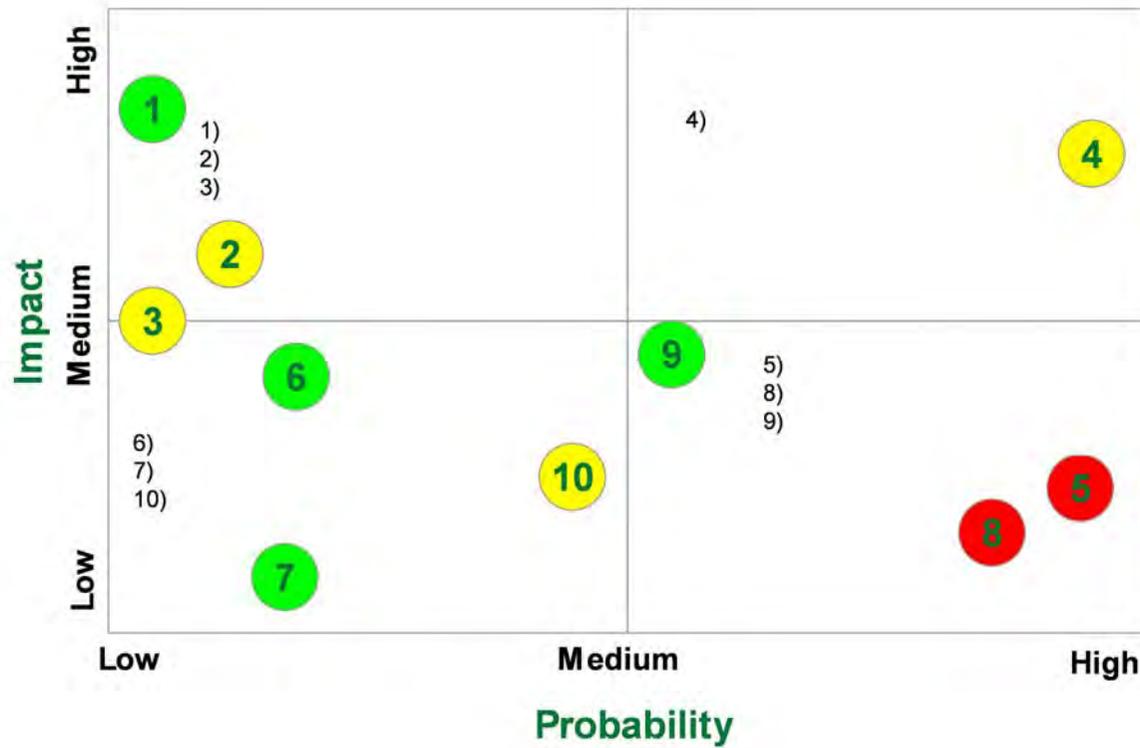
- Architectural Standards
- Configuration Standards
- Test criteria for pass/fail
- Checklists for reviews
- Underpinned by Security capability definition
- Then expressed as risk...

Site	Firewall	Wireless	Compone	PCN	Network
Aberdeen	Yellow	Green	Red	Green	Green
Belfast	Green	Green	Yellow	Green	Green
Cardiff	Green	Green	Yellow	Yellow	Green
Dallas	Green	Green	Yellow	Green	Green
Edmondton	Green	Red	Yellow	Green	Green
Felixstowe	Green	Green	Yellow	Green	Green
Georgetown	Green	Green	Yellow	Green	Green
Hollywood	Green	Green	Yellow	Green	Green
Inverness	Yellow	Red	Red	Green	Red
Julio	Green	Green	Red	Green	Green
Kilree	Green	Green	Yellow	Green	Green
Landudno	Green	Green	Yellow	Green	Green

Risk



2006 Risk Matrix



● Managed
● ↑
●

2

The capability maturity model



- Stripped to its essence, it's a scale of 1-5, which measures maturity as:
 1. **Ad hoc** – reactive, inconsistent across the organisation
 2. **Repeatable** – some repeatability but no organisation-wide standard exists
 3. **Defined** – a standard is defined but is not wholly followed
 4. **Managed** – a standard is followed and centrally coordinated
 5. **Optimised** – standards are fully embedded with an active feedback loop in place
- Some add **0. Non-existent** ☹️