From Sitting to Energising: Where do you want to be?

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WP6 T4

GN5-1

OAV Drivers

Orchestration

ensure consistent behaviour across technical domains

end-to-end fulfilment and assurance

Automation

moving from human- to machine-centric paradigm
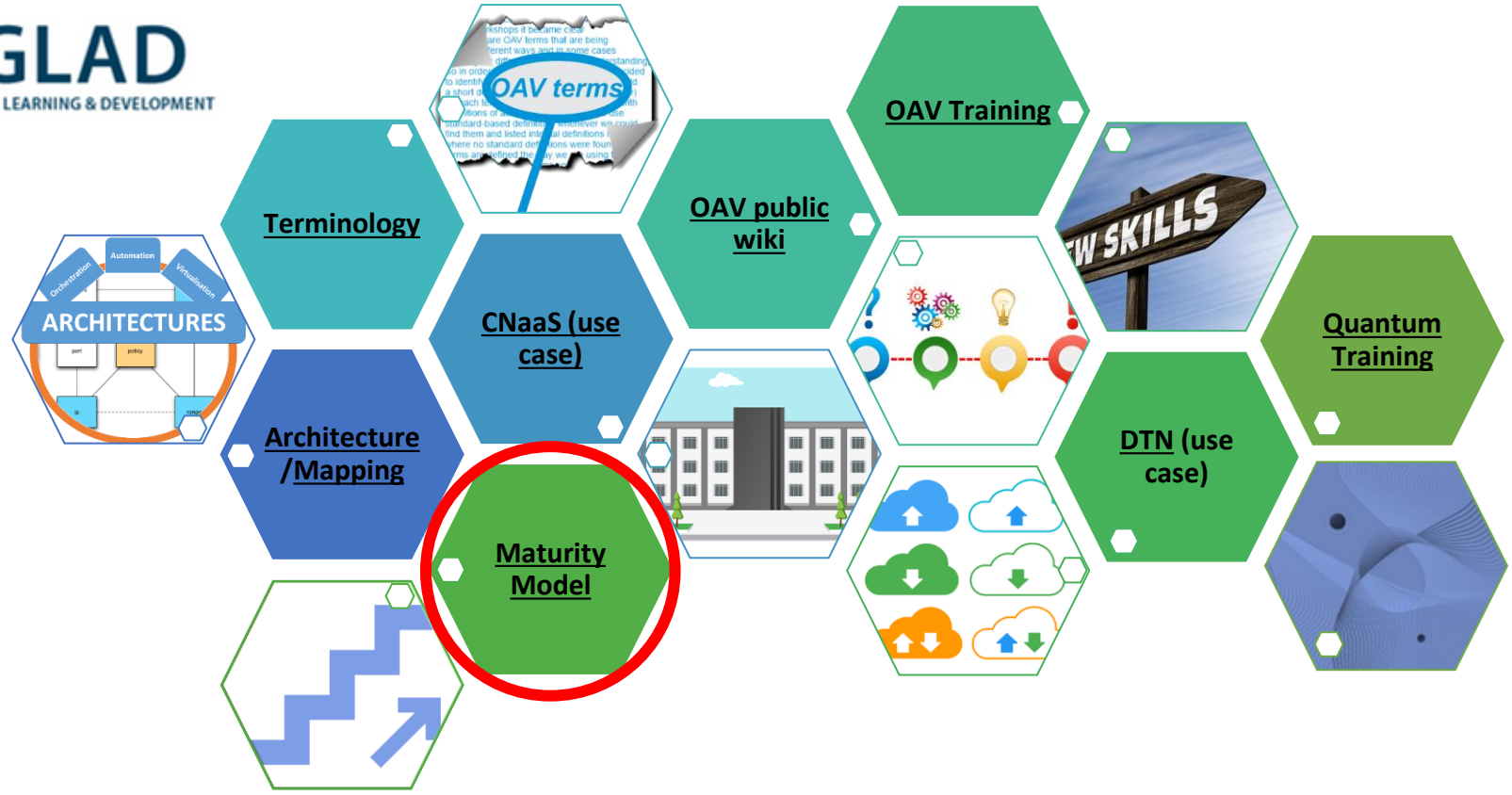
domain expert engineers focus on strategic activities

Virtualisation

bridge technologies

dynamic optimisation and tailored solutions

network as software

The Network eAcademy

Powered by:

- Terminology
- OAV terms
- OAV public wiki
- OAV Training
- ARCHITECTURES
- CNaaS (use case)
- Architecture/Mapping
- Maturity Model
- NEW SKILLS
- Quantum Training
- DTN (use case)

Maturity Model Goals

Measure	Measure the current OAV capabilities in a meaningful way
Identify	Enable clear identification of strengths and improvement points, be aware of threats and opportunities
Prioritise	Help prioritise what to do in order to advance and improve
Journey	Identify gaps between the current and future state and how to get there

Why OAV MM?

Provide a common OAV progress indicator for the community

Help organisations on their OAV journey

Building the OAV MM

Adopted a MM development methodology based on design science

Defined OAV as the MM application area

Analysed over 15 existing MMs related to some aspect of OAV

Developed the OAV MM iteratively

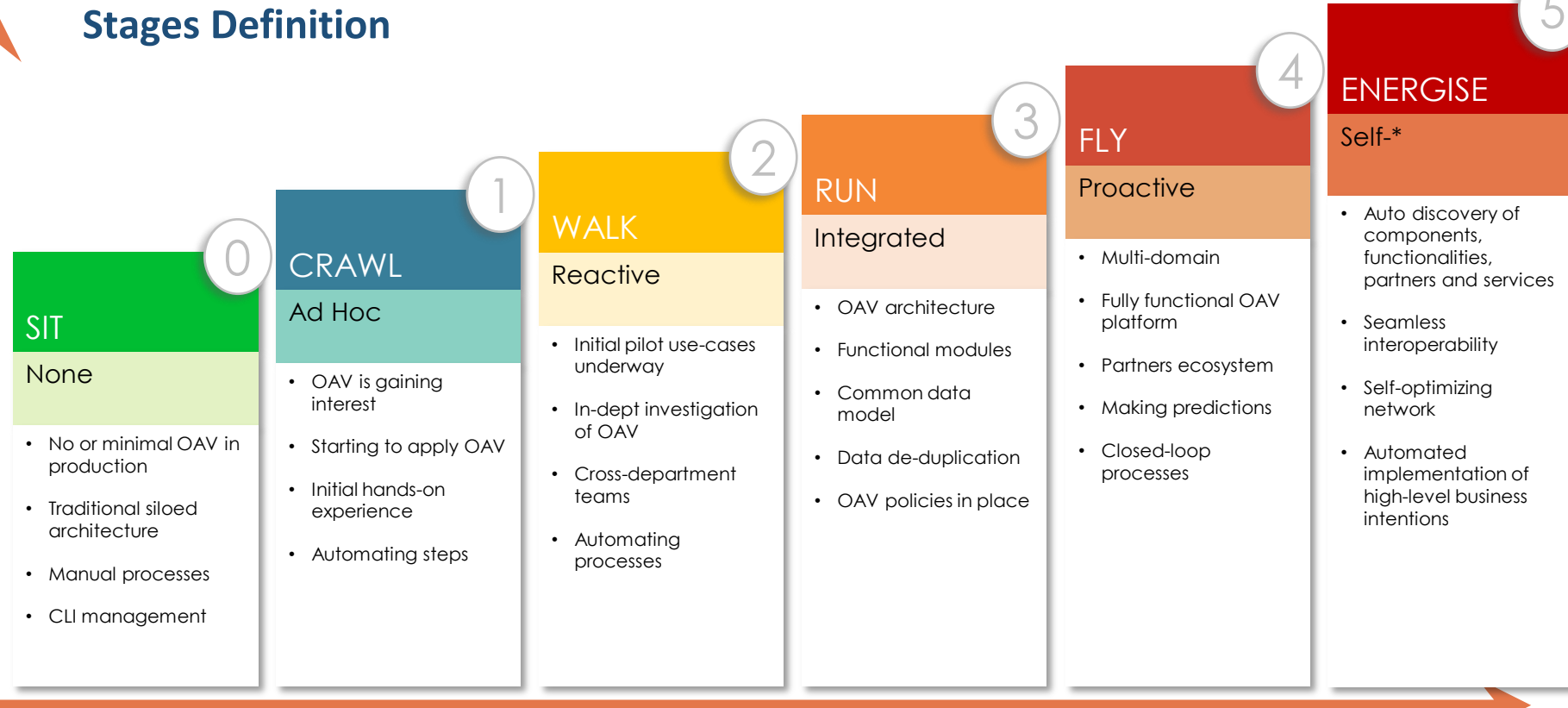Evaluated usefulness, quality and effectiveness

Prepared a questionnaire to support the self-assessment process
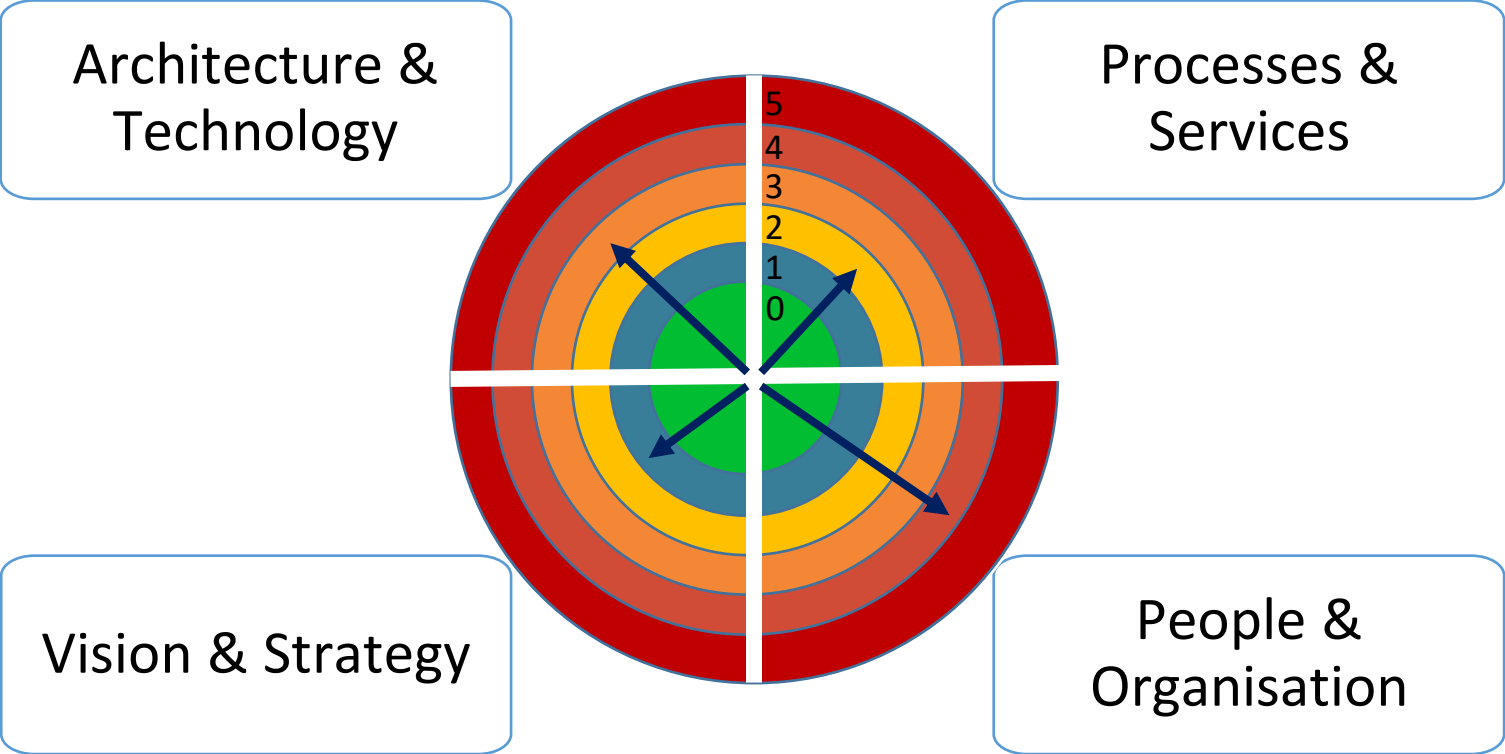
OAV Maturity Model - Stages

Stages Definition

ORGANISATION REACH

MINDSET ADOPTION

0

SIT

None

- No or minimal OAV in production
- Traditional siloed architecture
- Manual processes
- CLI management

1

CRAWL

Ad Hoc

- OAV is gaining interest
- Starting to apply OAV
- Initial hands-on experience
- Automating steps

2

WALK

Reactive

- Initial pilot use-cases underway
- In-dept investigation of OAV
- Cross-department teams
- Automating processes

3

RUN

Integrated

- OAV architecture
- Functional modules
- Common data model
- Data de-duplication
- OAV policies in place

4

FLY

Proactive

- Multi-domain
- Fully functional OAV platform
- Partners ecosystem
- Making predictions
- Closed-loop processes

5

ENERGISE

Self-*

- Auto discovery of components, functionalities, partners and services
- Seamless interoperability
- Self-optimizing network
- Automated implementation of high-level business intentions

OAV Maturity Model - Dimensions

Dimensions definition

- architectural and technological capabilities
- necessary to develop, establish and continue to evolve an OAV environment

- process management
- service lifecycle management
- OAV activities needed to achieve successful digital services

Architecture & Technology

Processes & Services

Vision & Strategy

People & Organisation

- aligning OAV with corporate objectives
- defining corresponding priorities across the organisation

- organisational culture that supports the adoption and advancement of OAV
- all stakeholders
- open, innovative, agile and flexible collaboration

OAV Maturity Assessment

		Architecture & Technology	Processes & Services	Vision & Strategy	People & Organisation
Level 5	Self-*				
Level 4	Proactive				
Level 3	Integrated				
Level 2	Reactive				
Level 1	Ad Hoc				
Level 0	None				

Granular OAV Maturity Assessment

	Architecture & Technology			Processes & Services			Vision & Strategy		People & Organisation	
	Components	Virrtualisation	Data modeling	Service design	Monitoring and reporting	Security management	Policies development	Standardisation	Culture	Training
Level 5 — Self-*										
Level 4 — Proactive					■					
Level 3 — Integrated			■	■	■	■	■	■		
Level 2 — Reactive	■		■	■	■	■	■	■	■	■
Level 1 — Ad Hoc	■		■	■	■	■	■	■	■	■
Level 0 — None	■	■	■	■	■	■	■	■	■	■

Architecture & Technology Subdimensions

Components integration	APIs	Compatibility
Virtualisation	Security	Data modelling
Analytics	AI	Data

Processes & Services Subdimensions

Process automation	Service design	Service lifecycle management
Monitoring and reporting	Troubleshooting	Security management

Vision & Strategy Subdimensions

OAV policies	Data governance	Strategic approach
Service management capability	Agility	Standardisation
	Investments	

People & Organisation Subdimensions

Teams development

Stakeholders involvement

Learning and skills

Culture

User experience

Example for Security

None - minimal security

Ad Hoc - may not have all of the security tools and capabilities

Use Case - good cyber hygiene

Integrated - a robust suite of tools to implement security controls

Proactive - next-gen security

Self-* - anticipatory
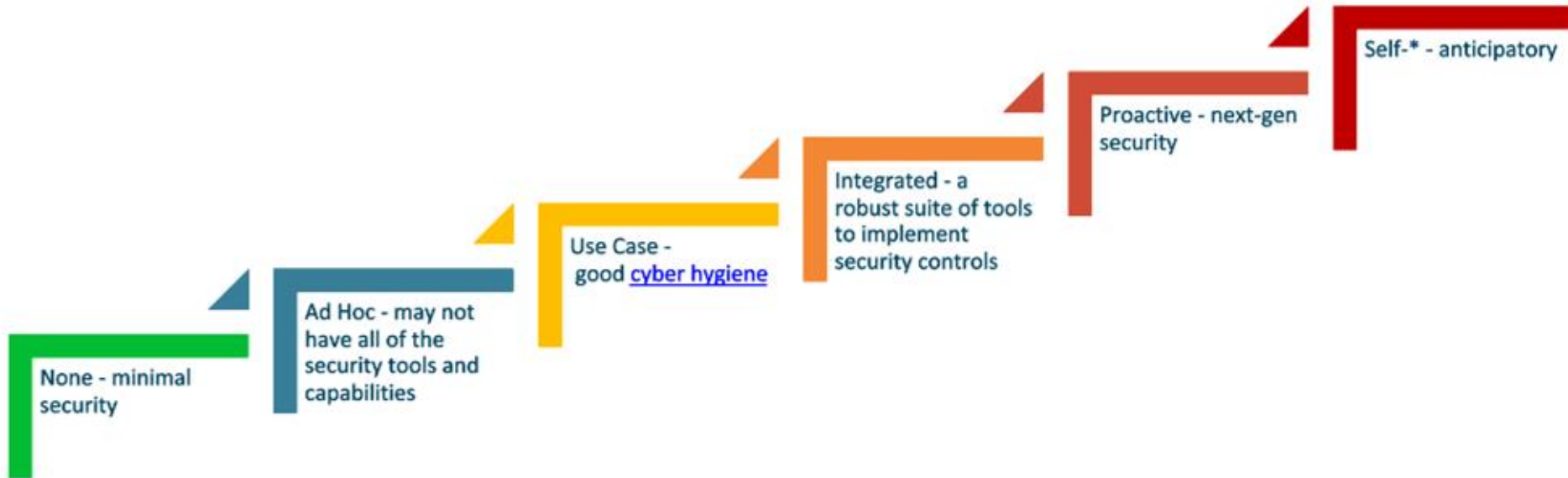
How to use the OAV MM?

Wiki & Survey

OAV MM Wiki

Detailed information about the Maturity Model can be found on the Wiki pages:

https://wiki.geant.org/display/NETDEV/OAV+Maturity+Model

It can help you check your OAV progress through stages and dimensions

Conducting a Maturity Assessment

Assess → Analyse → Address

Three-phase approach

OAV Assessment

- https://www.surveymonkey.com/r/SPYDQVB

- 31 questions

- Data is used for analytical purposes only
  - we do not publish data for individual institutions

- Report is sent to the person defined in survey

Tips & Tricks

Choose	**Choose the best answer by collaborating with relevant parties** • Avoid personal views and opinions • Try to define strict measurable criteria relevant for your organisation
Consolidate	**Consolidate the results and define your to-be stages**
Achieve	**Keep in mind that future state objective does not need to be to achieve the highest level in all areas** • Depends on goals, expenses, applicability…

Important to remember!

Assessing your maturity isn't a one-time exercise

You need to measure your progress toward your desired to-be state

Re-assessing your maturity levels helps review if changes are leading to the right direction

Thank You!

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