GCHQ

EASE

PA Consulting Group

Applying EA and SE in GCHQ

"The art of traction, business engagement and benefits delivery "

6 Feb 2008

Integrated Enterprise Architecture '08

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About GCHQ

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Business requirements

At the enterprise level we need clarity of requirements if we are to form a useful Enterprise Architecture

- **Agility**
- **Business continuity**
- **Interoperability**
- **Legalities**
- **Reuse**
- **Security**
- **Tempo**
- **Total cost of ownership**
- **Use of suppliers**

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So how do we form this enterprise architecture?

Can we learn from history?

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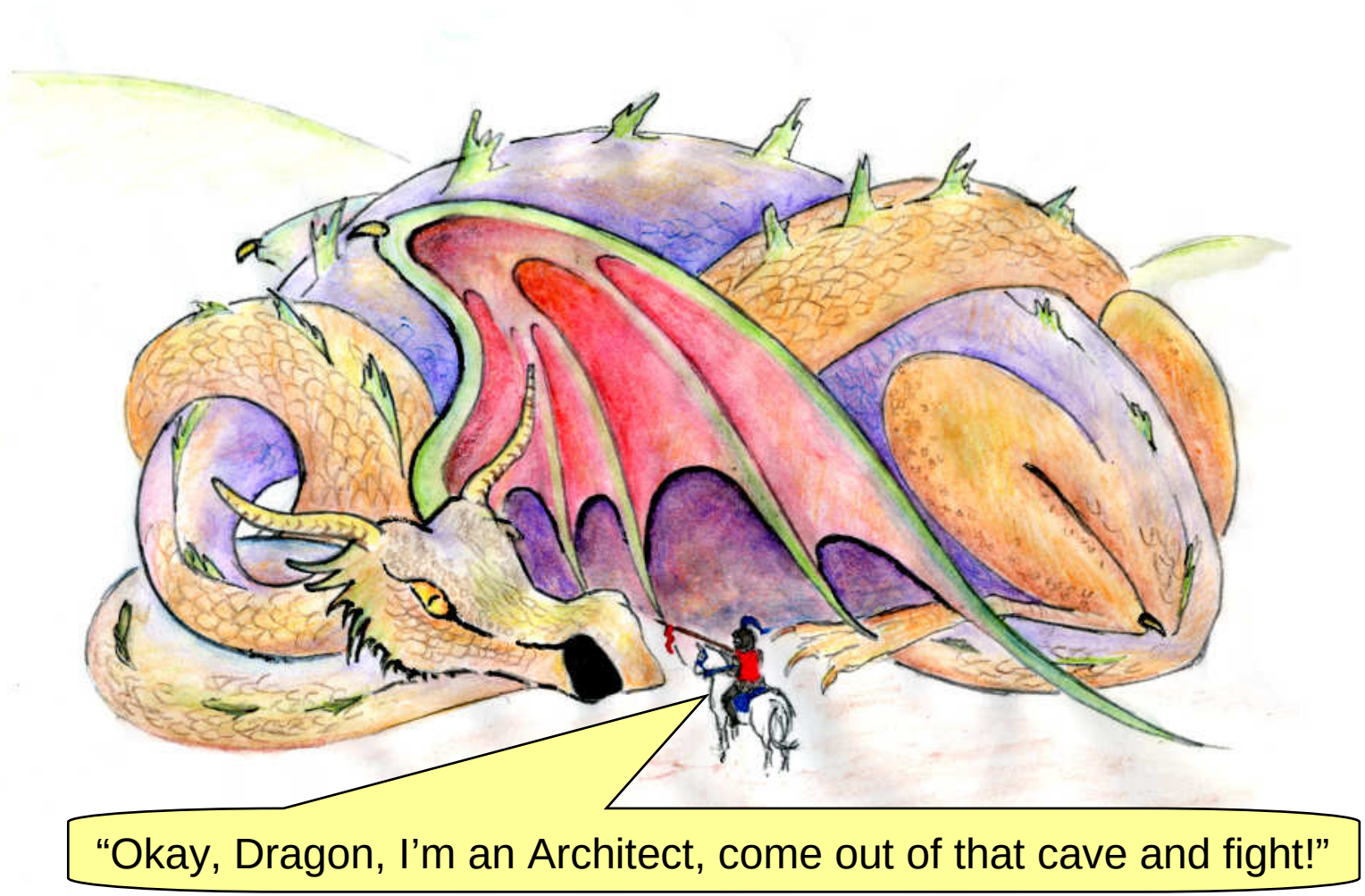
We need a true perspective of the Enterprise Architecture task



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Our new approach.....a scaled structure with traction

- Common Processes
- The skills to operate them
- Checks for compliance
- Handling of exceptions

- Methods for self improvement.

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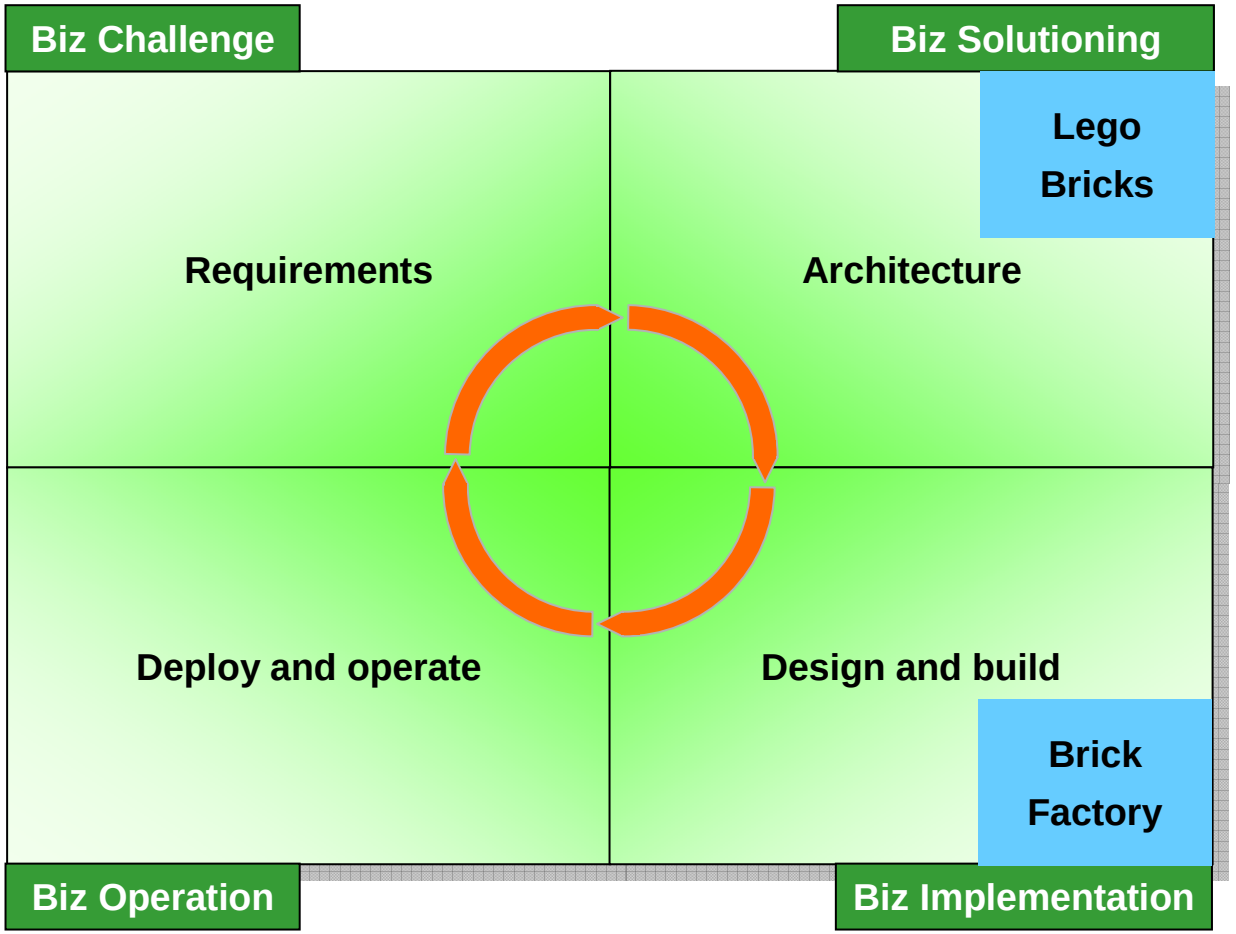
Capability lifecycle



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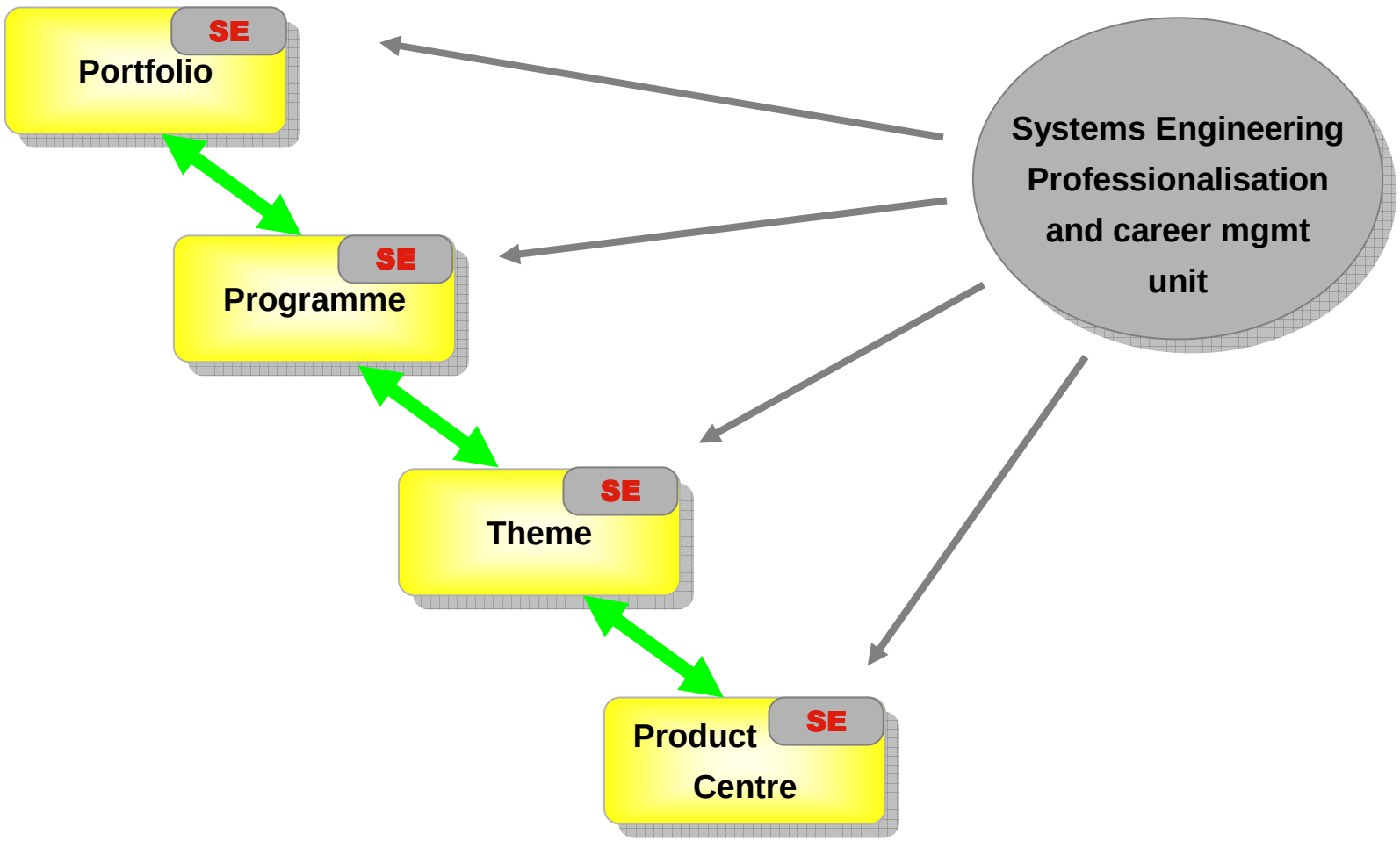
Supply chain model



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A Change Programme was needed

Enterprise

Architecture

Systems

Engineering

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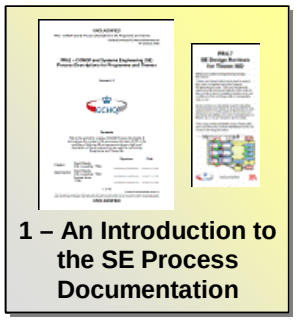
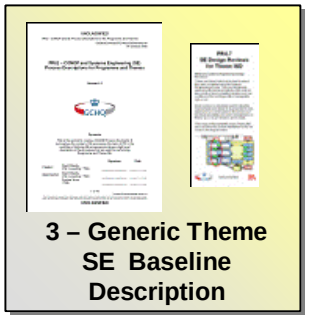
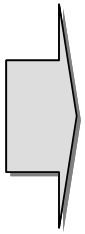
EASE Process

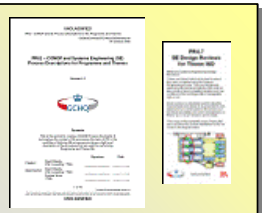

1 – An Introduction to the SE Process Documentation

2 – Systems Engineering Design Reviews for Theme I&D

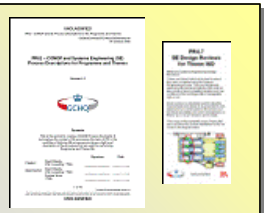

3 – Generic Theme SE Baseline Description



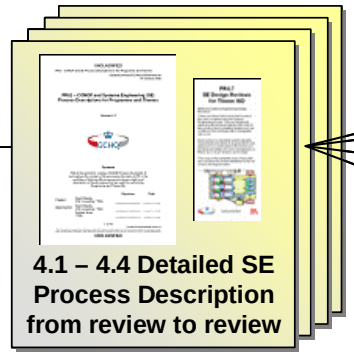
Product Descriptions & Templates

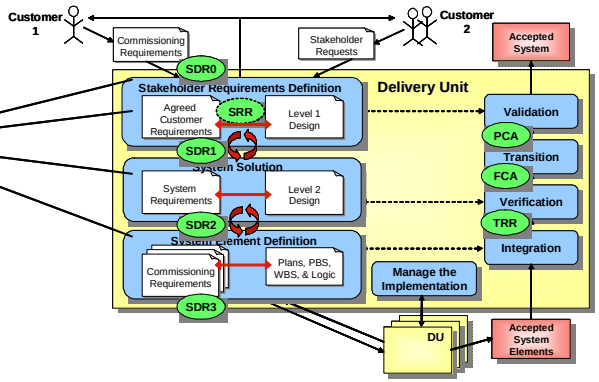

4 – SE Process Overview for Theme Lifecycle

5 – ATM Worked Example


6 – SEMP Writing Guidelines

7 – SE Assurance Description for Theme I&D


4.1 – 4.4 Detailed SE Process Description from review to review



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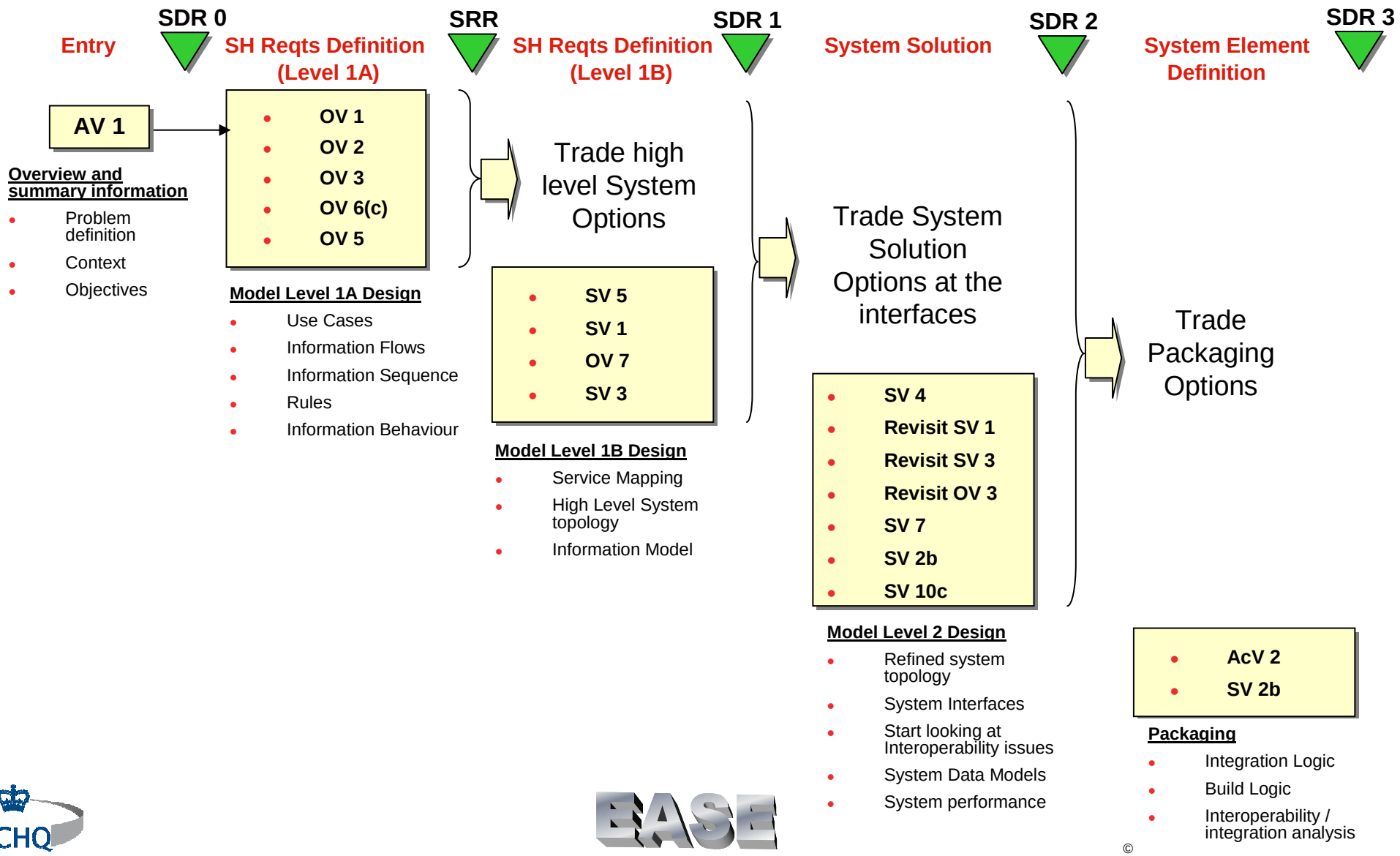
Expressing the Design with MODAF Views



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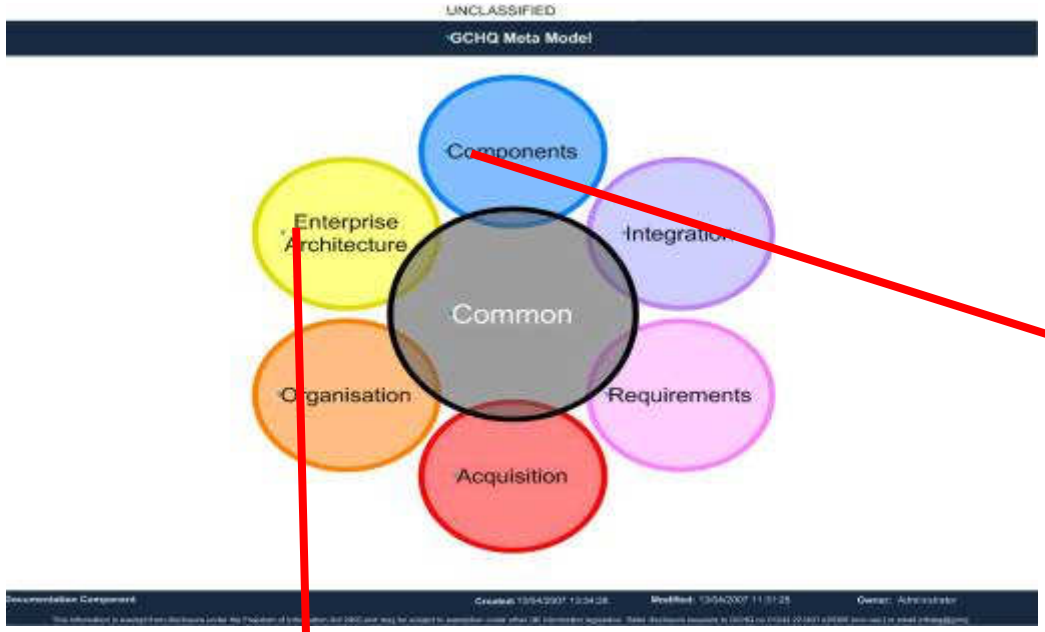
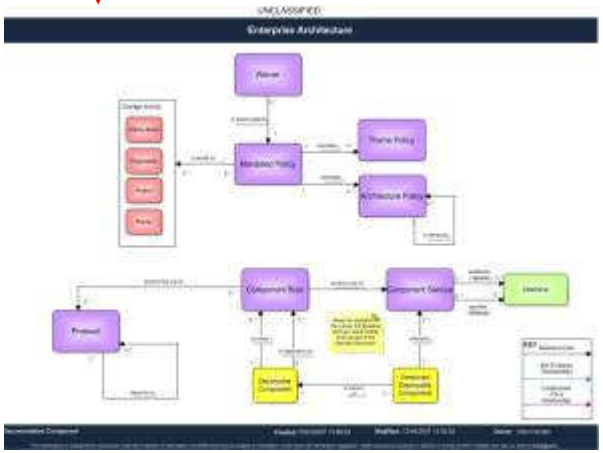
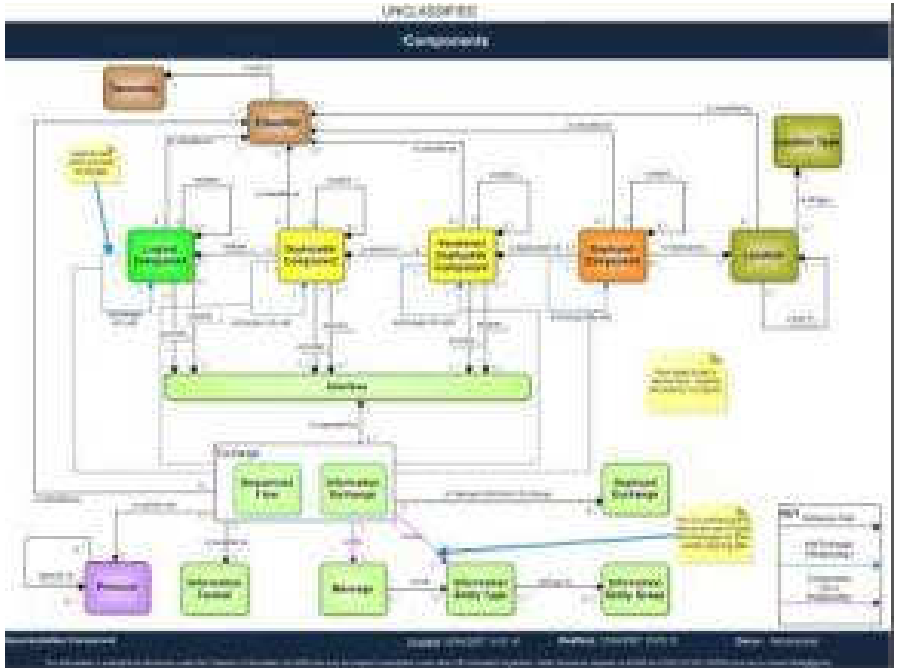
EASE Metamodel for MODAF







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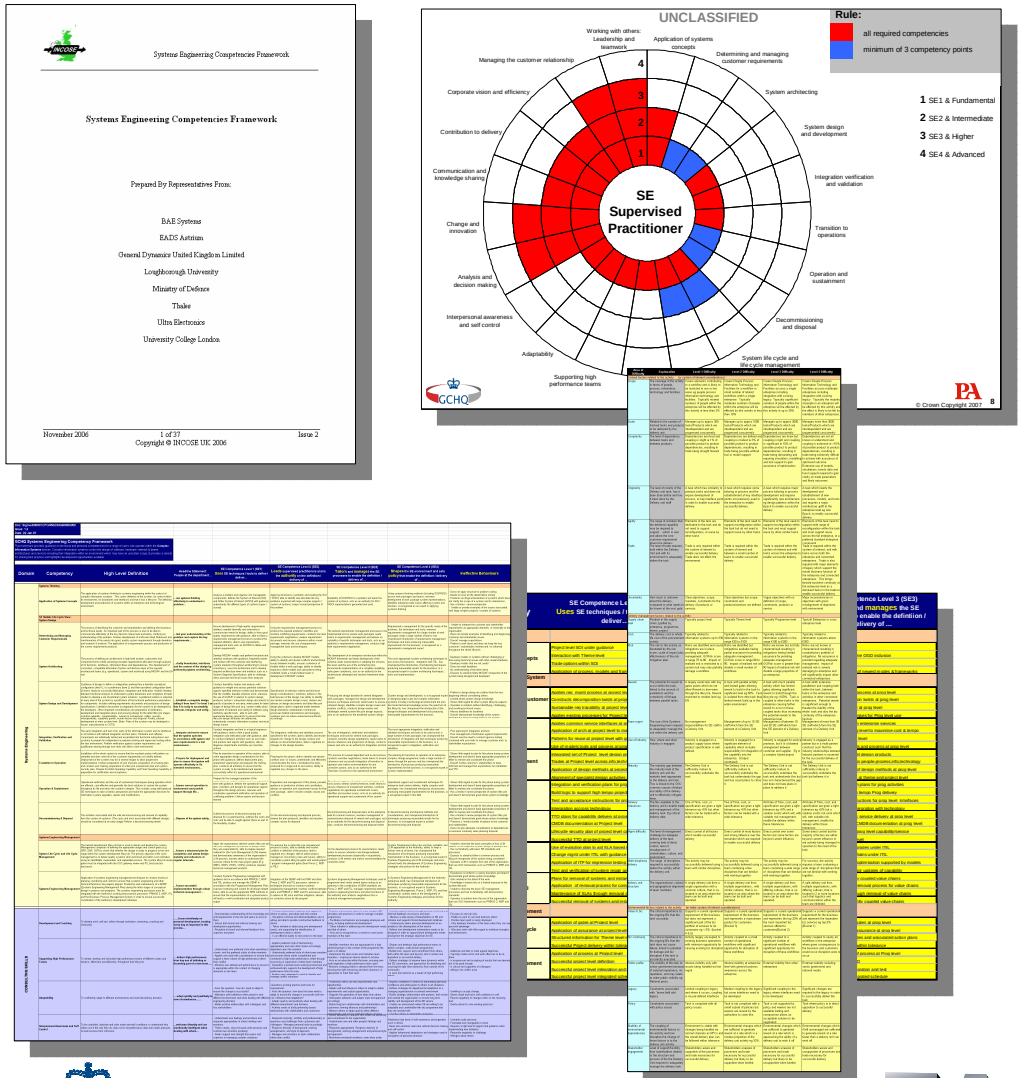
Developing the GCHQ SE Competence Framework



- Based upon INCOSE UK SE competence framework (initially v1.0)
- Developed in the context of the roles SE staff are being deployed into within GCHQ
- Additional “difficulty matrix” to qualify the complexity of situation in which SE competences are being exercised
- “Yardstick” to bring clarity on boundaries between grades
- Used as basis for nominal competence profiles for 4 grades of SE:
  - Supervised practitioner
  - Practitioner
  - Higher practitioner (additional level)
  - Expert

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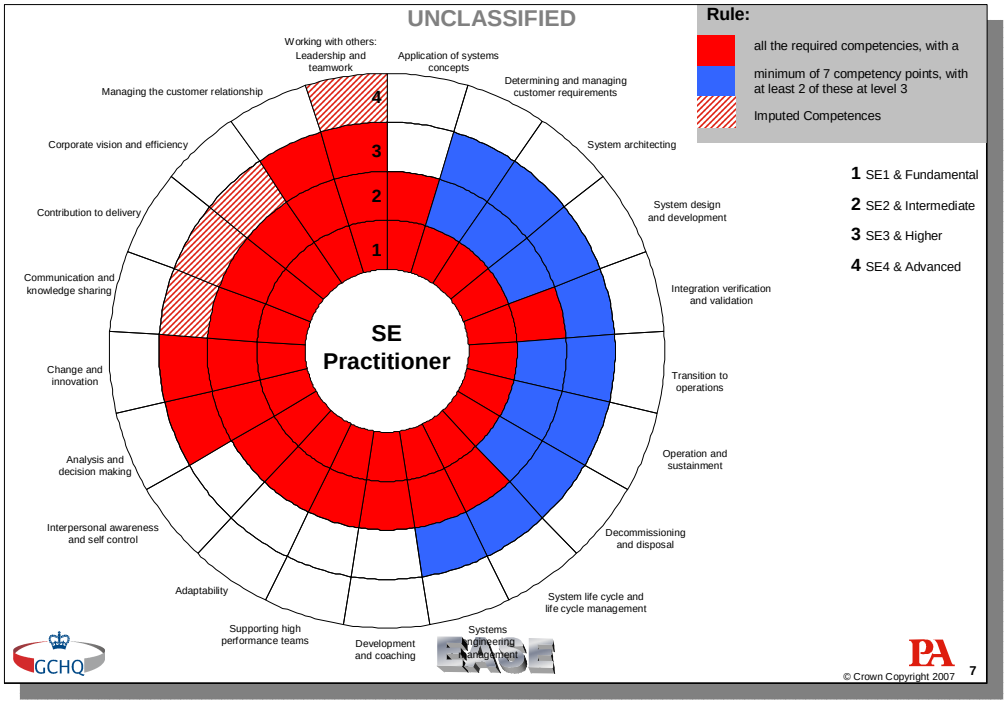
GCHQ SE Competence Framework

- 10 INCOSE-derived SE technical competences
- 4 consulting / soft skills competences
- 7 core GCHQ management competences
- Each grade of SE requires a core mandatory set of competences (red) plus a number of points from across a range of optional competences (blue)
- SE competence framework has been validated and scored as the basis for one of GCHQ's core career frameworks
- Being used for re-grading and linked to rewards package
- SE expert extends into Senior Civil Service grade 5 – as a technical specialist



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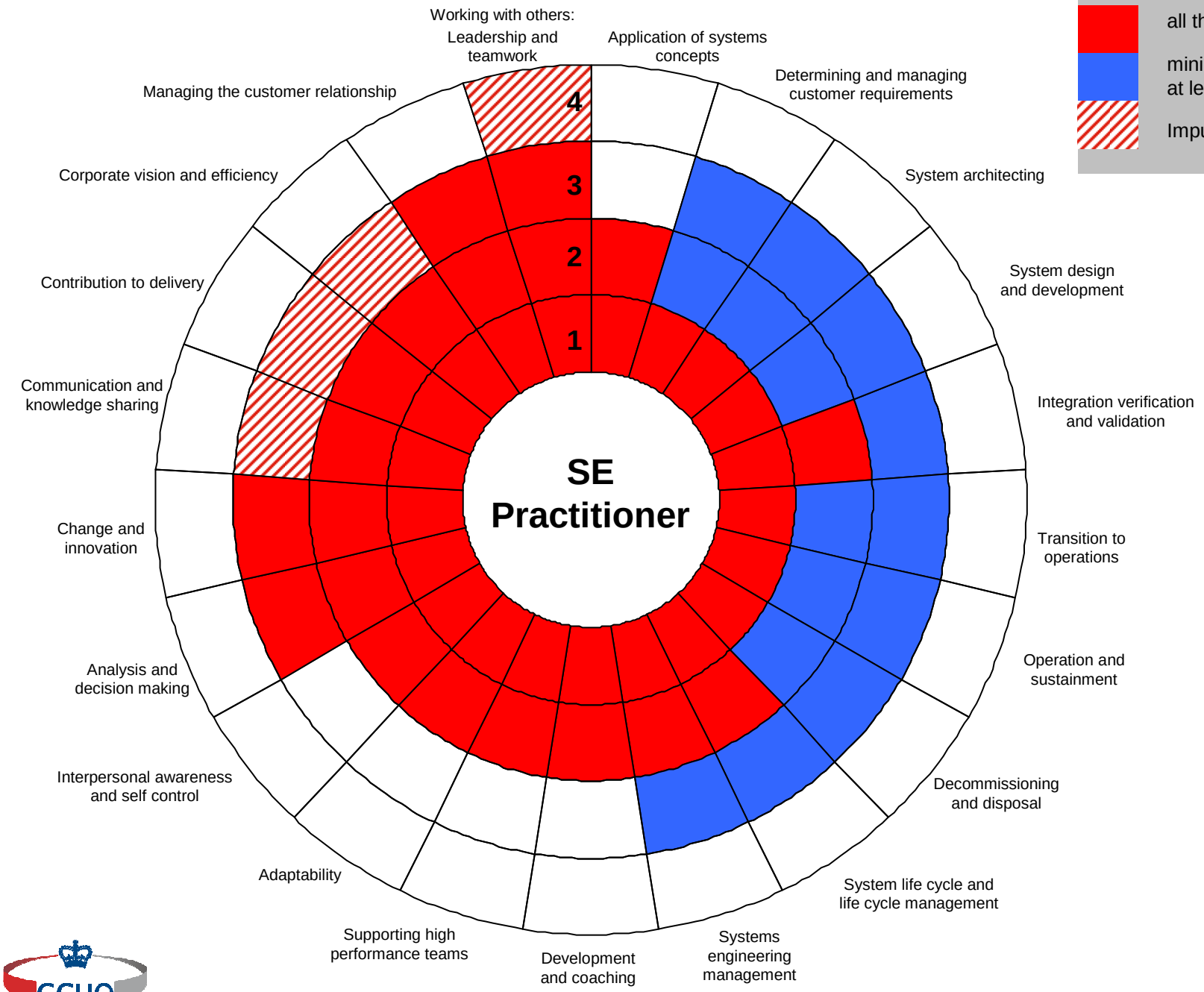
Rule:

all the required competencies, with a minimum of 7 competency points, with at least 2 of these at level 3

Imputed Competences



1 SE1 & Fundamental

2 SE2 & Intermediate

3 SE3 & Higher

4 SE4 & Advanced

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Developing SE Staff

Interest in SE or external recruit

Submit self assessment

Self assessment validation

Yes

Successful?

No

Other career

(Thank you & feedback)

Assessment Centre

- Intro
- Ice Breaker
- Self assessment 1-2-1
- GMA/OPQ
- Group exercise
- Individual exercise
- Self assessment 1st draft

Review with SE Seniors (+ assign mentor)

Successful?

No

Future applicant (Thank you & feedback)

Yes

1-2-1 Discussion with SE Senior

Training Development plan

'Your Career in Systems Engineering'

SE training

1st assignment

(Mentor coaching)

Examination

Final Assessment

Successful?

No

Yes

Graduate as SE staff

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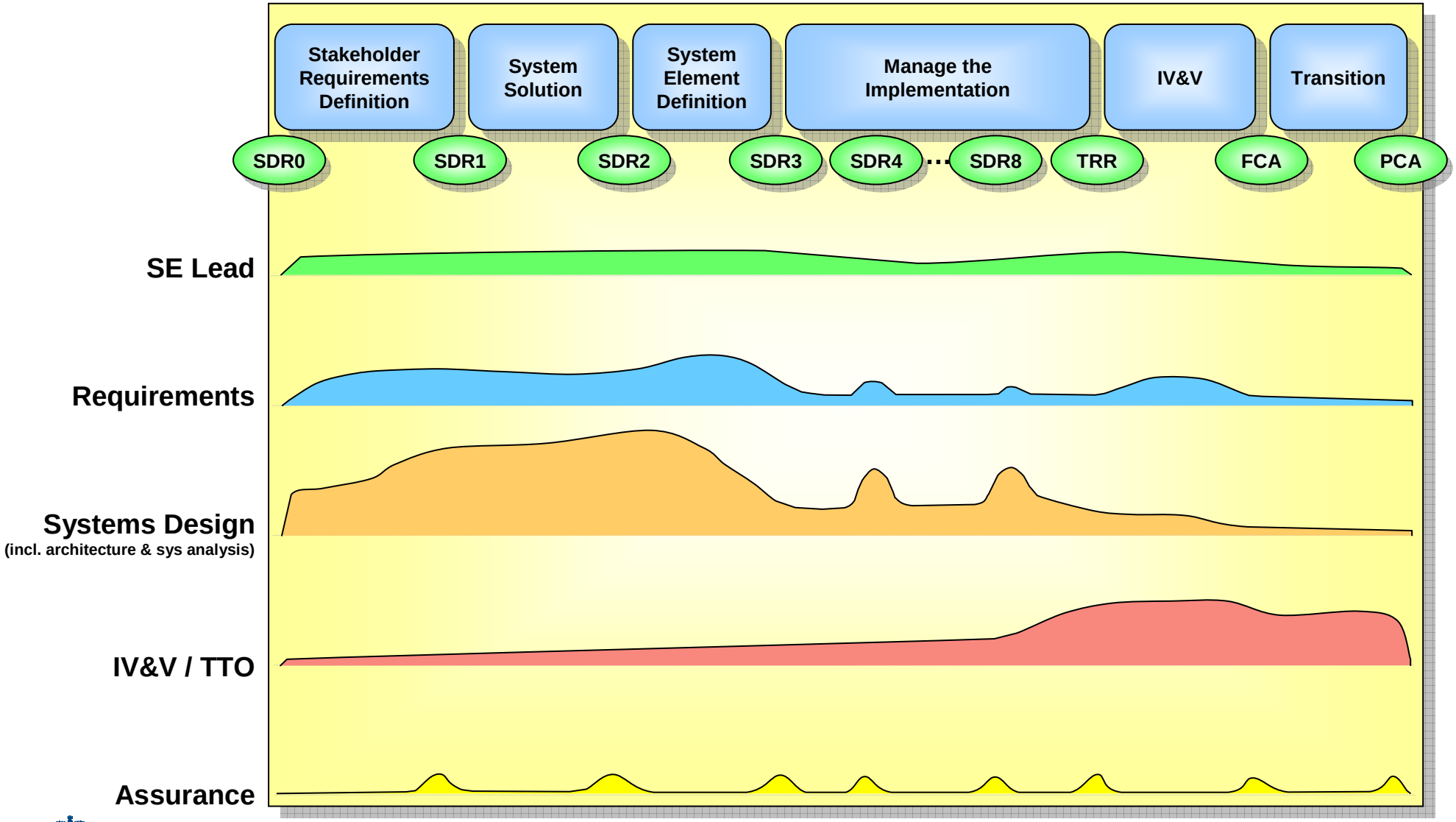
Maximising the benefits of the scarce SE resource



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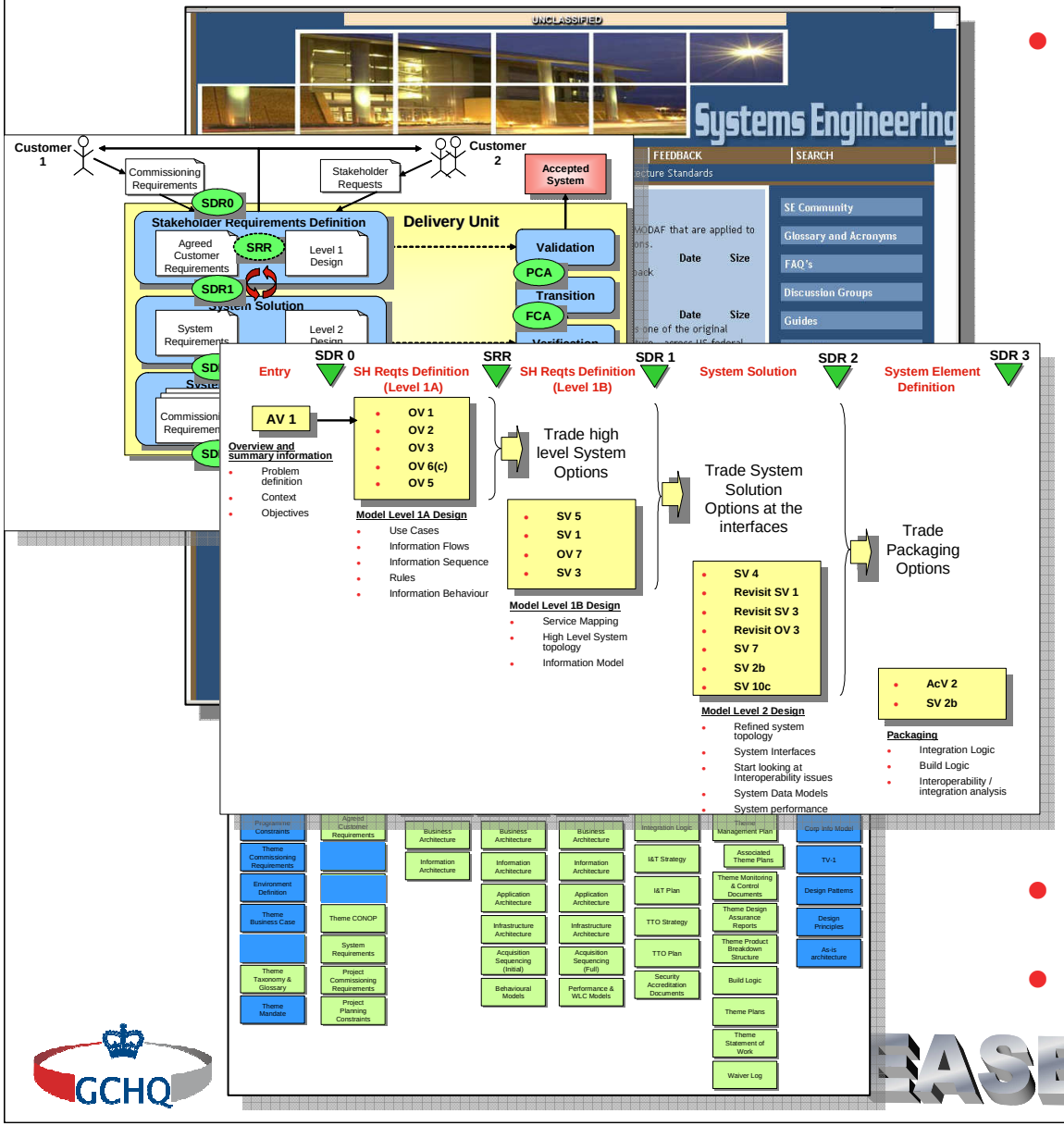
EASE Key Outcomes: Supporting the SE Staff



- The SE Knowledge Base contains a growing repository of SE resources:
  - Standards
  - Guidebooks and handbooks
  - Methodologies
  - Templates
  - Case studies
  - SE roles and competences
  - Enterprise architecture
  - … and much more
- SE and EASE wiki
- SE surgeries

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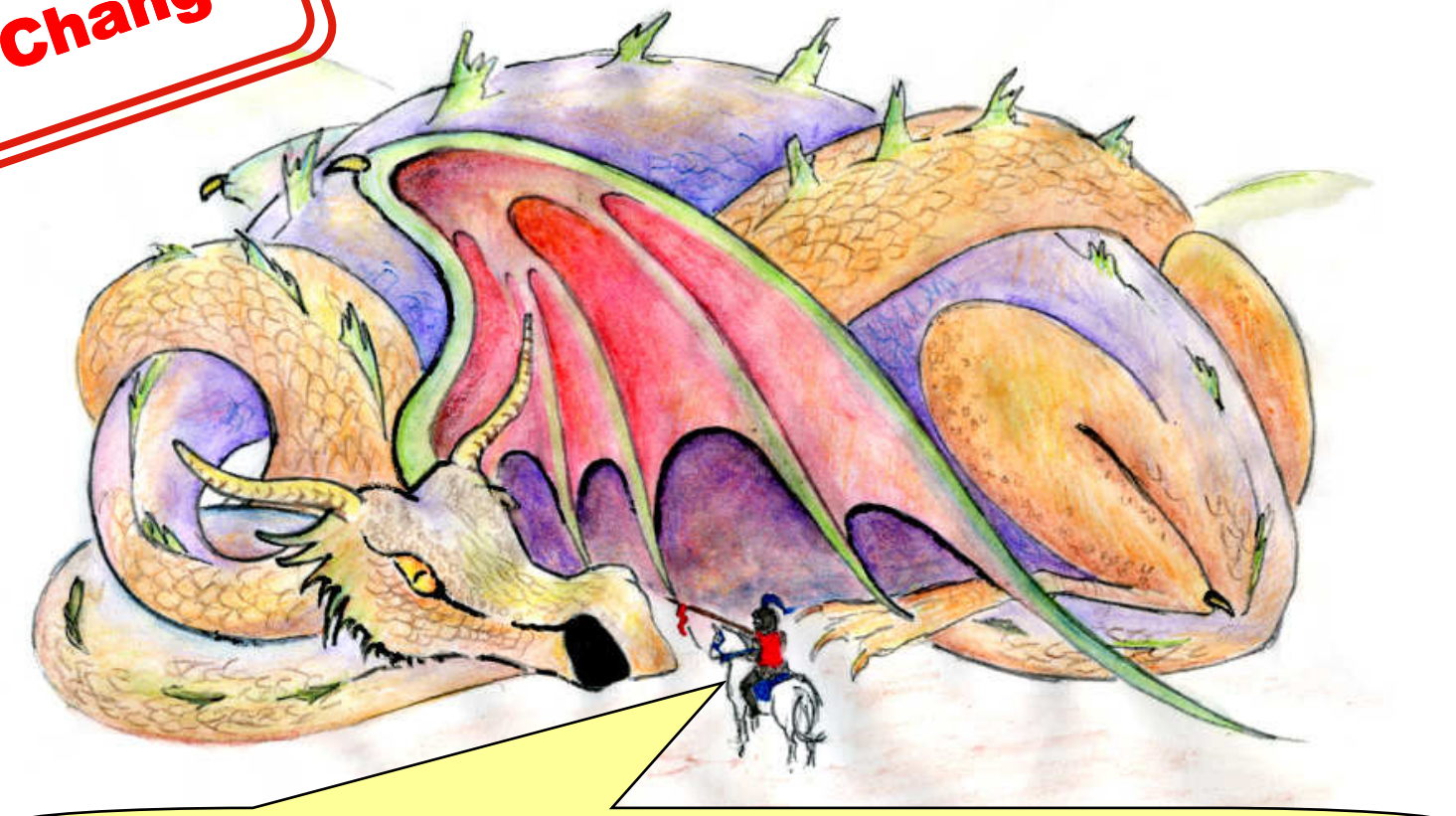
We need a true perspective of the Enterprise Architecture task

Culture Change



"Okay, Dragon, I'm an Architect, come out of that cave and fight!"

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Wisdom on our EA business change initiative

Enterprise Traction comes from skills growth and deployment, not technology and clever designs

You cannot build an integrated system without an integrated organisation

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