

ATKINS

Member of the SNC-Lavalin Group



Getting it right...the earlier, the better!

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Delays

Cutbacks

Over Budget

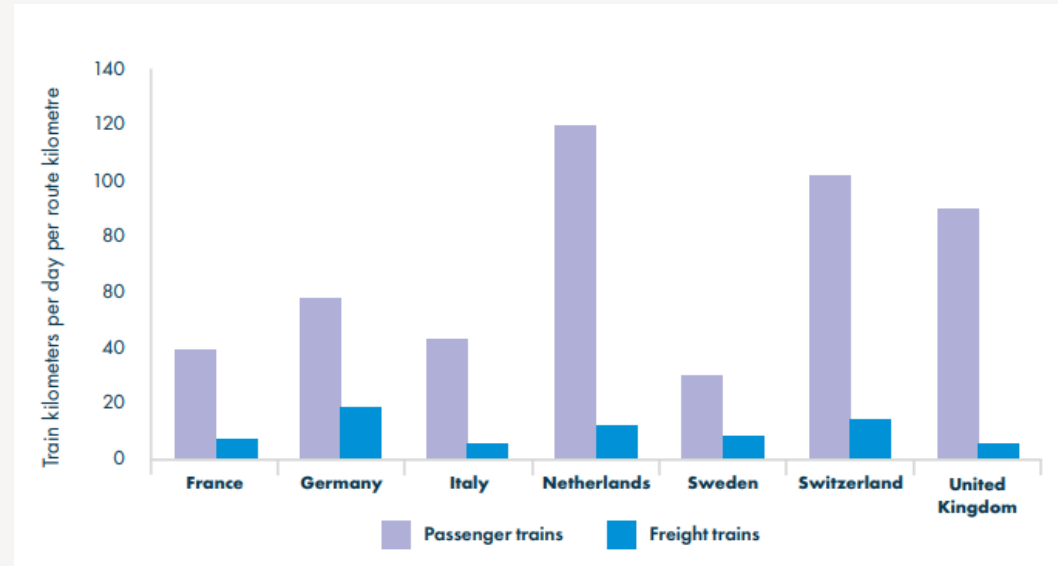
Run out of
money/time

Overruns

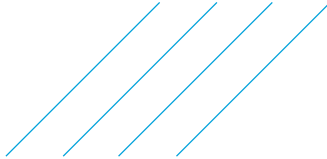
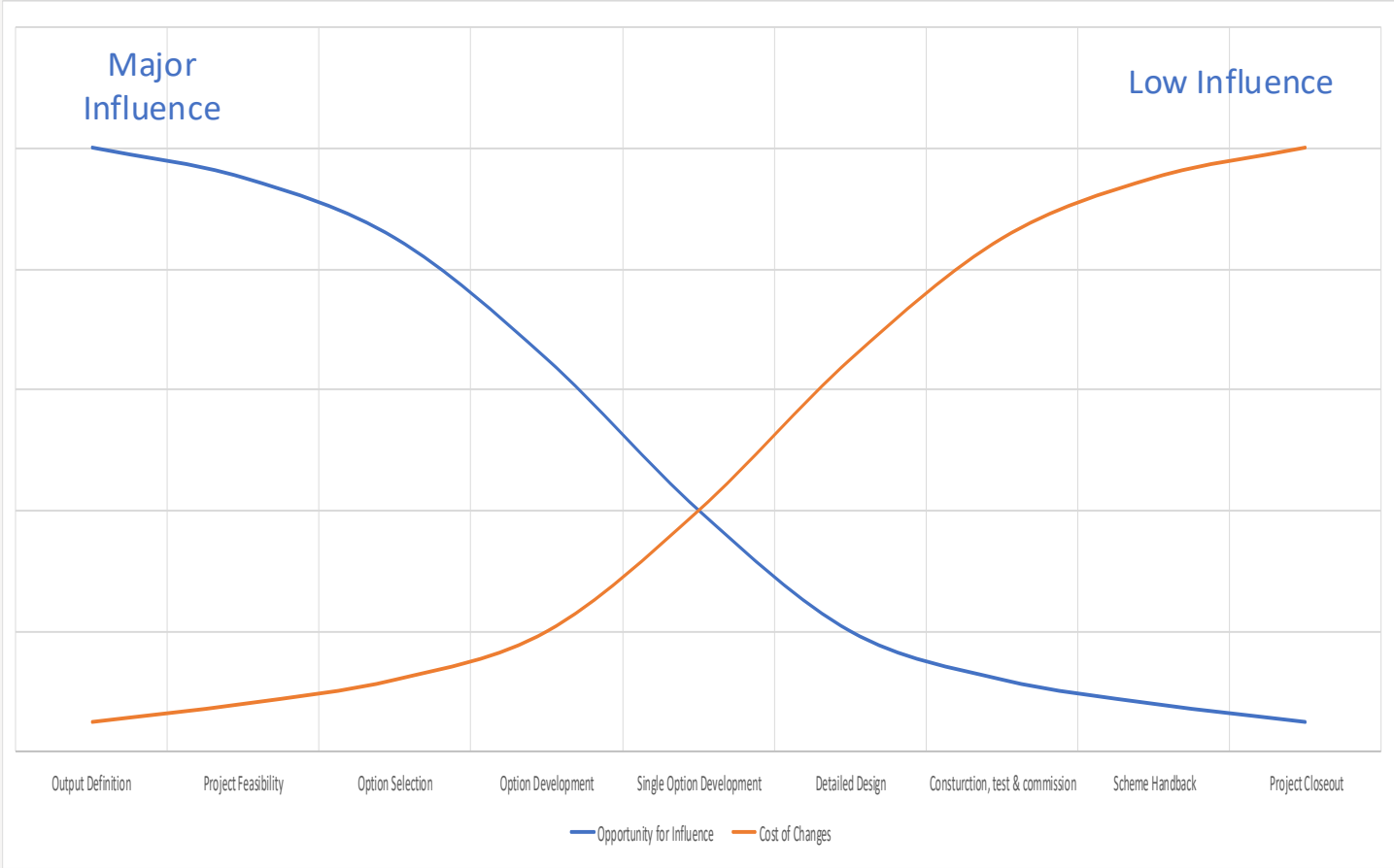
Cancellations

UK Rail Network

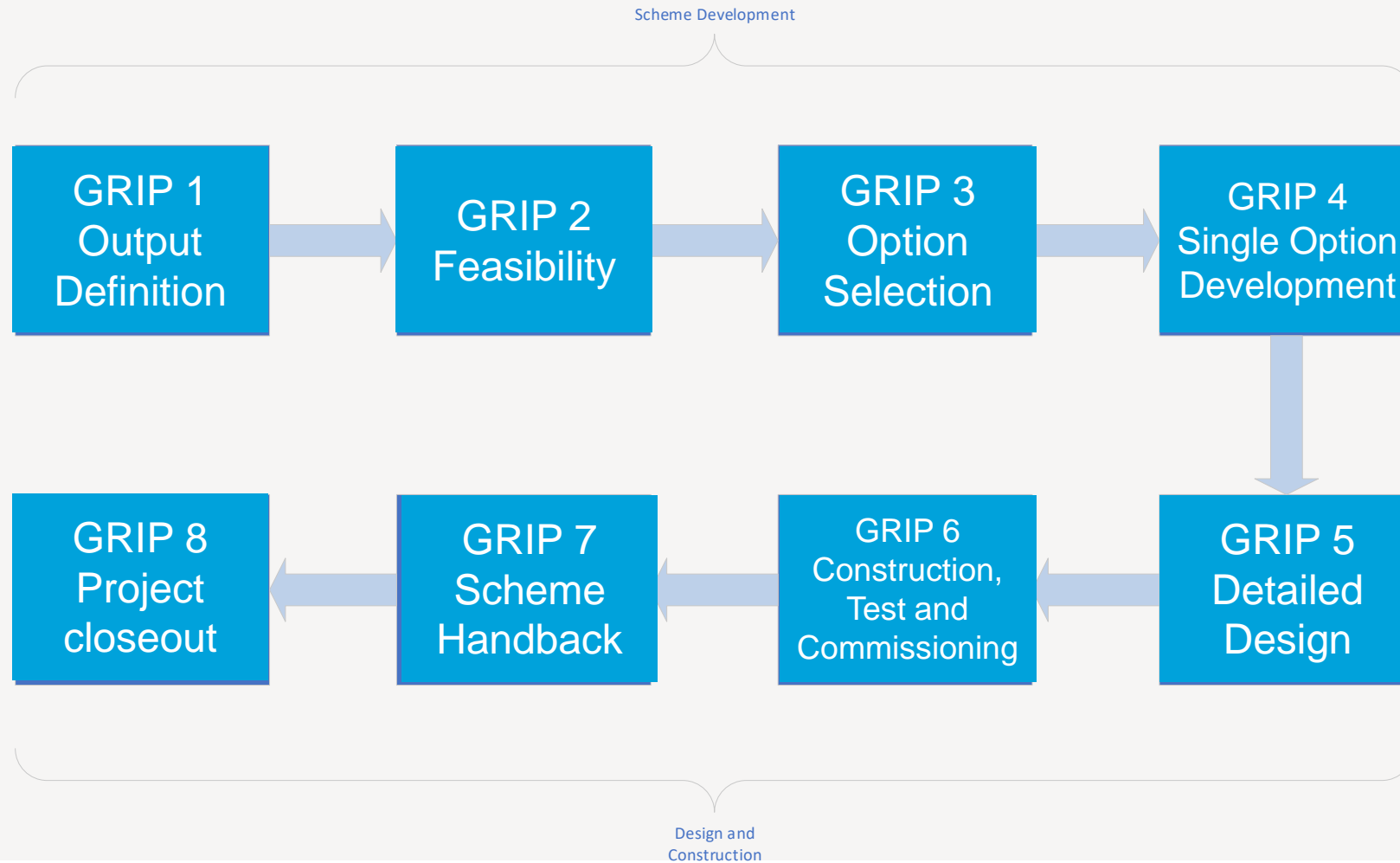
- › 16000km of route serving over 2500 individual stations.
- › 66 billion passenger kilometres in 2017-2018
- › Transported 17 billion tonne kilometres of freight in 2017-2018
- › 14th biggest railway network in the world
- › One of most congested in Europe.
- › Oldest railway network in the world



Cost vs Influence Graph



Governance for Railway Investment Projects (GRIP) Stages



Summary of GRIP Stages

- › In GRIP 1-4 stakeholders must be consulted throughout.
- › GRIP 1: best place to ensure that the final output is resilient and future proofed.
- › Capturing the requirements is important at these early stages.
- › GRIP 5: trying to make a fully resilient design becomes more difficult.
- › Unfortunately, early GRIP stages are often seen as tick box exercises.
- › This means that early GRIP stage costs are squeezed.
- › However, the GRIP process can be successful with the right intentions.



Stakeholder Identification

- › Who are the stakeholders?
- › How do you identify them?
- › When do you get them involved?



Stakeholder Management Techniques

Remember that stakeholders are ultimately people with different personalities and characters.

Any process must go hand in hand with consideration, understanding and a good proportion of people skills.

Stakeholder management: a well known project management tool.

It must be started at GRIP 1!

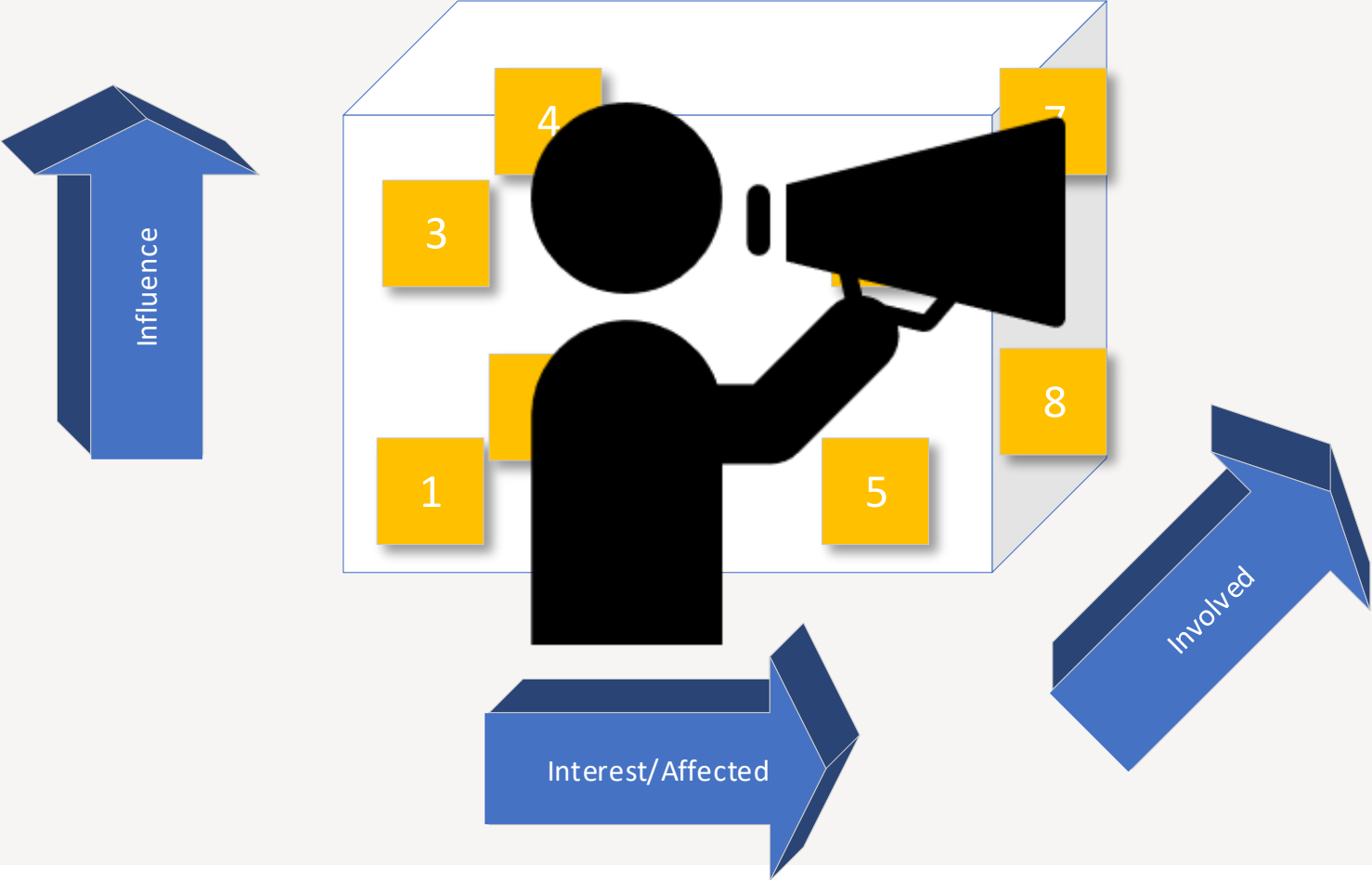
Always remember who is the ultimate customer!

Identify and categorise:

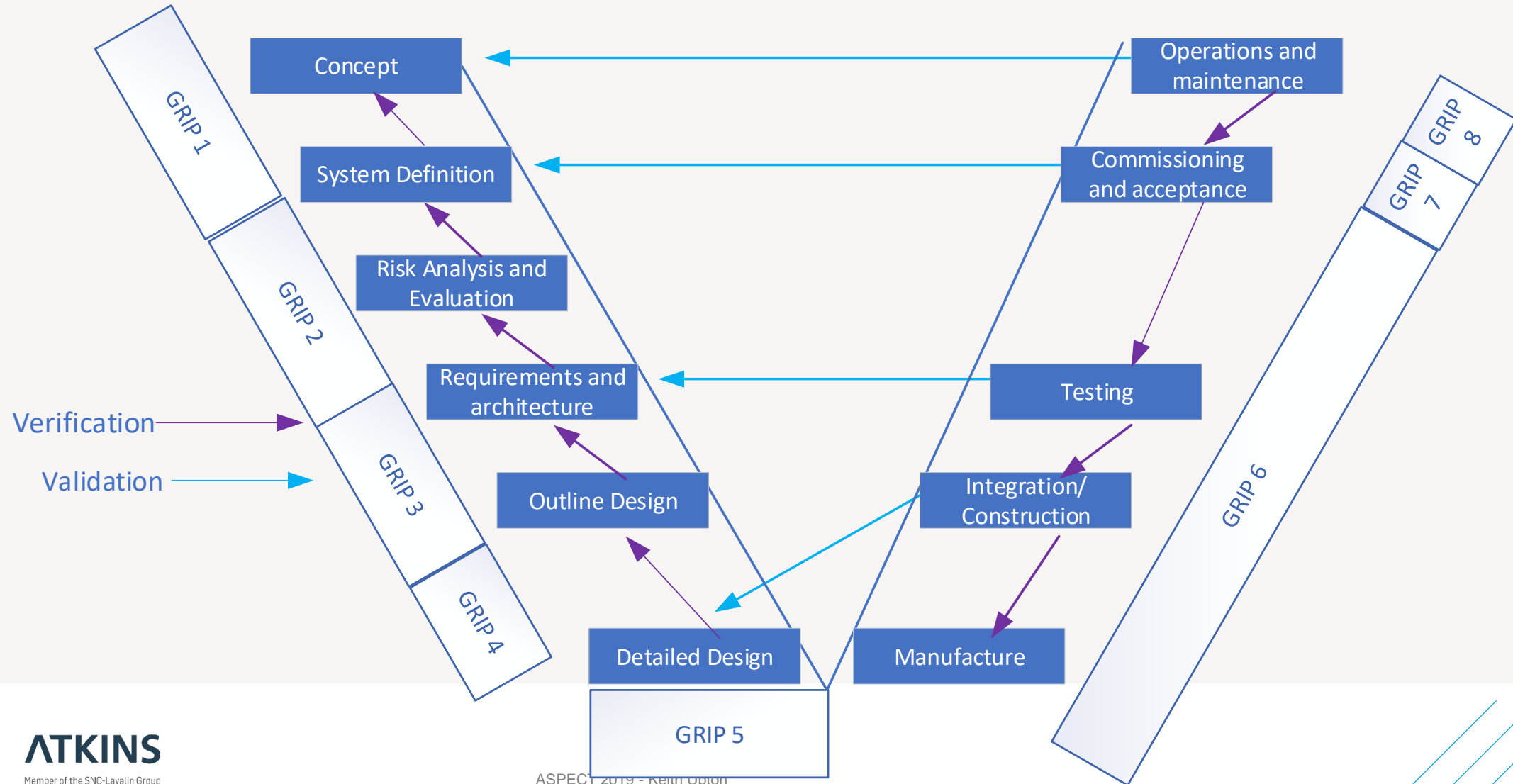
- › Those who can influence a project
- › Those who are interested/affected by the project
- › Those who are involved in a project



Stakeholder Management Techniques



GRIP vs V&V



Requirements Management

King K. IRSE/INCOSE Seminar, Requirements Management. *IRSE News*. July/August 2018. Issue 246. Page 33



Technical Stagegates

- › Apply technical stage-gates to all signalling projects, with any non-compliance to this requirement being very much the exception to the rule and treated with the seriousness it deserves.
- › If the agreed date for passing a stage-gate cannot be met, the implications (including safety) for the planned commissioning date(s) and other critical milestones must be identified and addressed.
- › Any change to the agreed/approved specification during the detailed design, construction, testing and commissioning phases should be avoided. Where change is absolutely necessary, both supplier and client must agree that it can be managed safely.
- › The non-sequential application of signalling design/development processes should be the exception, not the norm.
- › Rigorous change control processes must be applied to all designs issued for construction purposes.



Technical Assurance Process

- › The initial requirements document is developed to define the required output.
- › The options are investigated and evaluated against the initial requirements document.
- › The various technical options are further defined using appropriate option selection criteria and a more substantial requirements document is produced that expands upon the requirements defined at earlier stages.
- › The design is developed further and allows the final detailed requirements document to be produced.
- › The design is developed to allow construction to be undertaken.
- › Construction is completed, tested and validation activities are undertaken to ensure that the assets meet the design and the requirements developed at the initial phase.



Conclusion

- › **Have we forgotten the outputs of the past?**
- › **Do our processes end up being tick box exercises?**
- › **Is a culture change required?**
- › **Are requirements properly captured from all required stakeholders?**
- › **Do projects know the required stakeholders?**
- › **Are stakeholders properly consulted?**
- › **Are stakeholders understood as people with different personalities and characters?**
- › **Are the right people capturing the correct requirements?**

