



The optimal level of bureaucracy within an NREN – an SA NREN case study

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Bureaucracy

Definition: Administrative systems and processes governing any large(ish) institution Including:

- HR Systems
- Payroll Systems
- Procurement Systems
- Financial Systems
- Etc.

Why does Bureaucracy make sense?

- It saves time by mechanising processes
- It allows large scale projects to be better managed
- Auditability is easier with a bureaucratic process

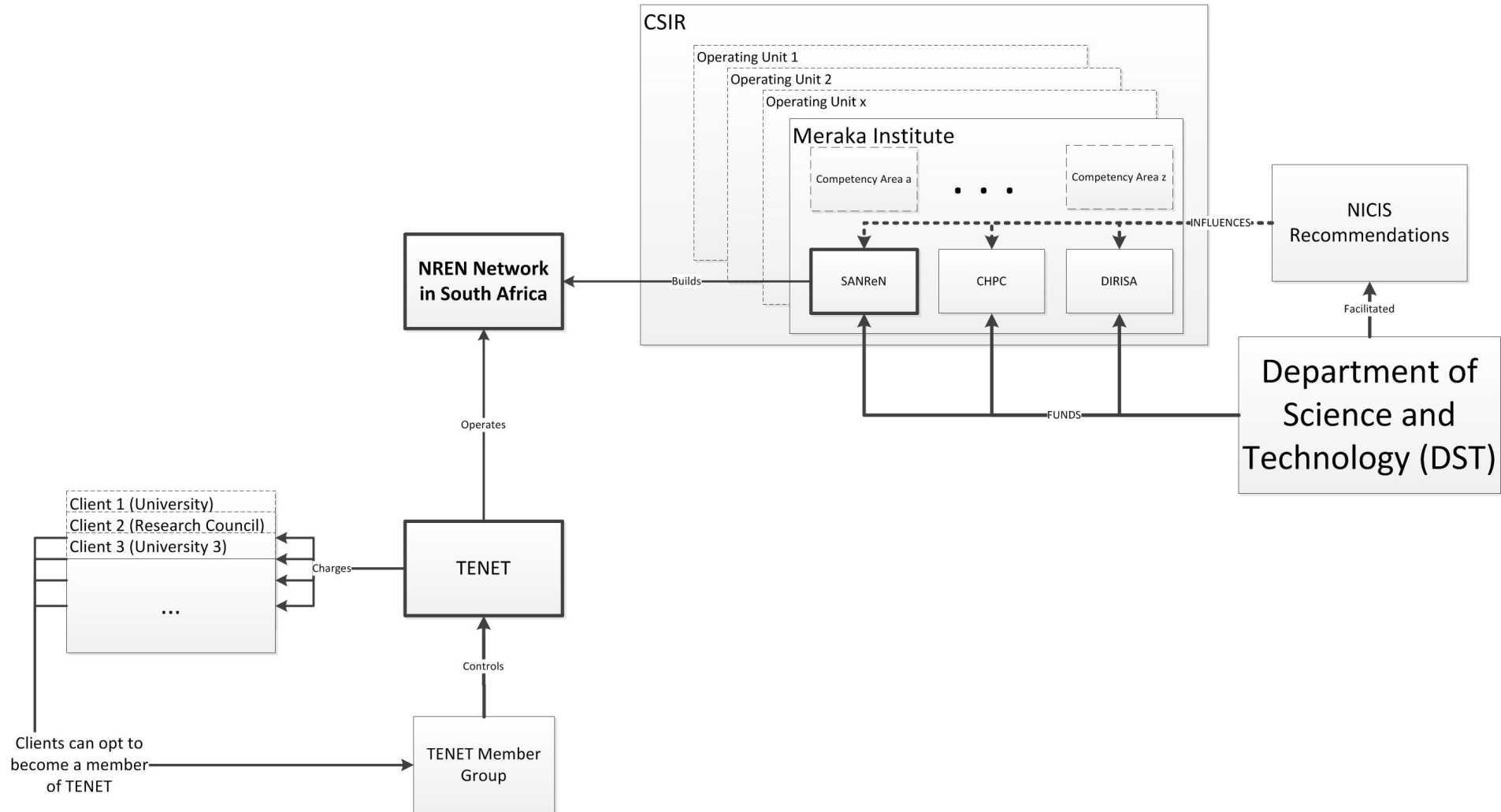
Caveat: not all processes can be mechanised. e.g. Legal aspects, cost-benefit analysis of solutions, intuition and expertise, basically anything where judgement is required

Competing drivers in an NREN

- Innovation vs service management
- Process driven vs flexibility
- Researchers vs IT departments
- Network vs Services

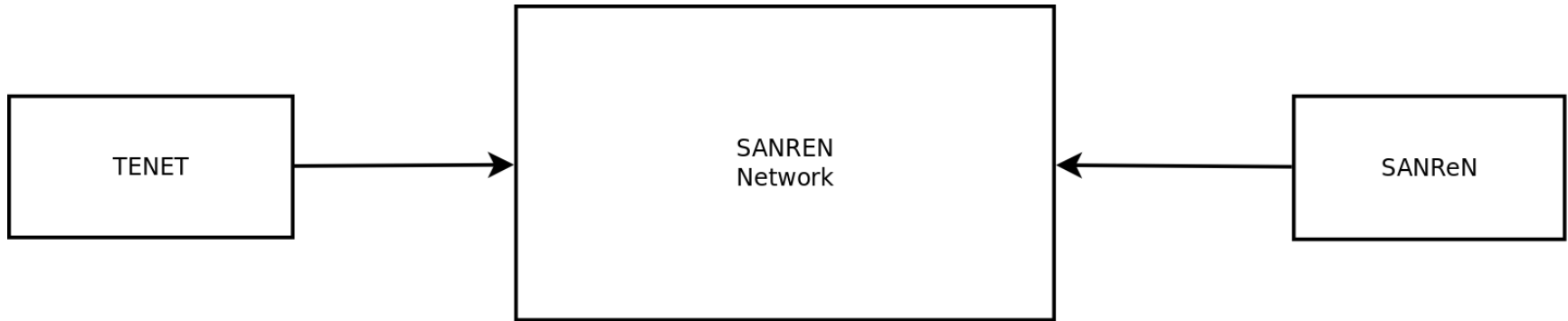
Conclusion: We operate in a complex environment where we need to make a lot of judgement calls

SA NREN context



Clients can opt to become a member of TENET

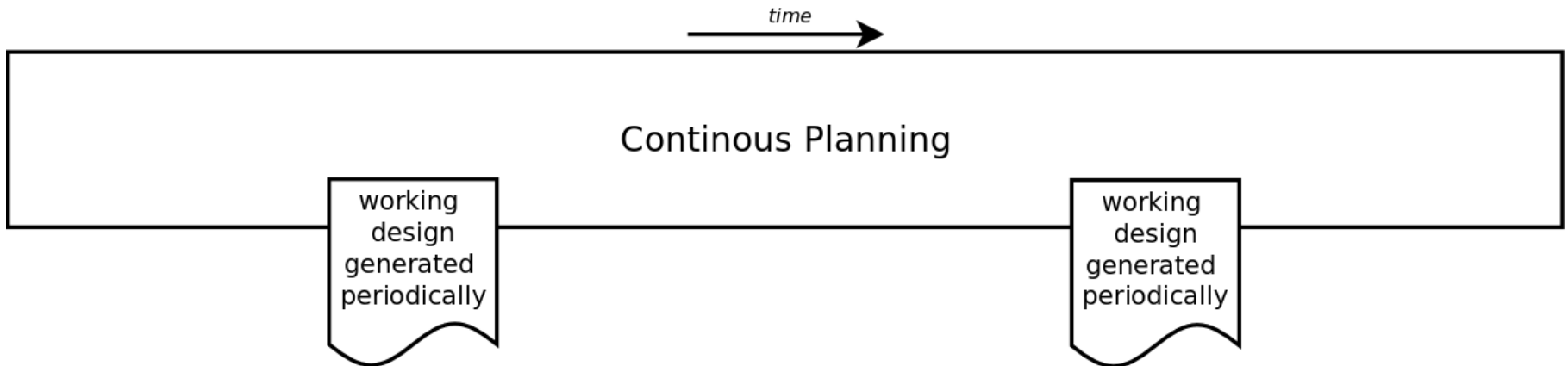
SA NREN Commons Model



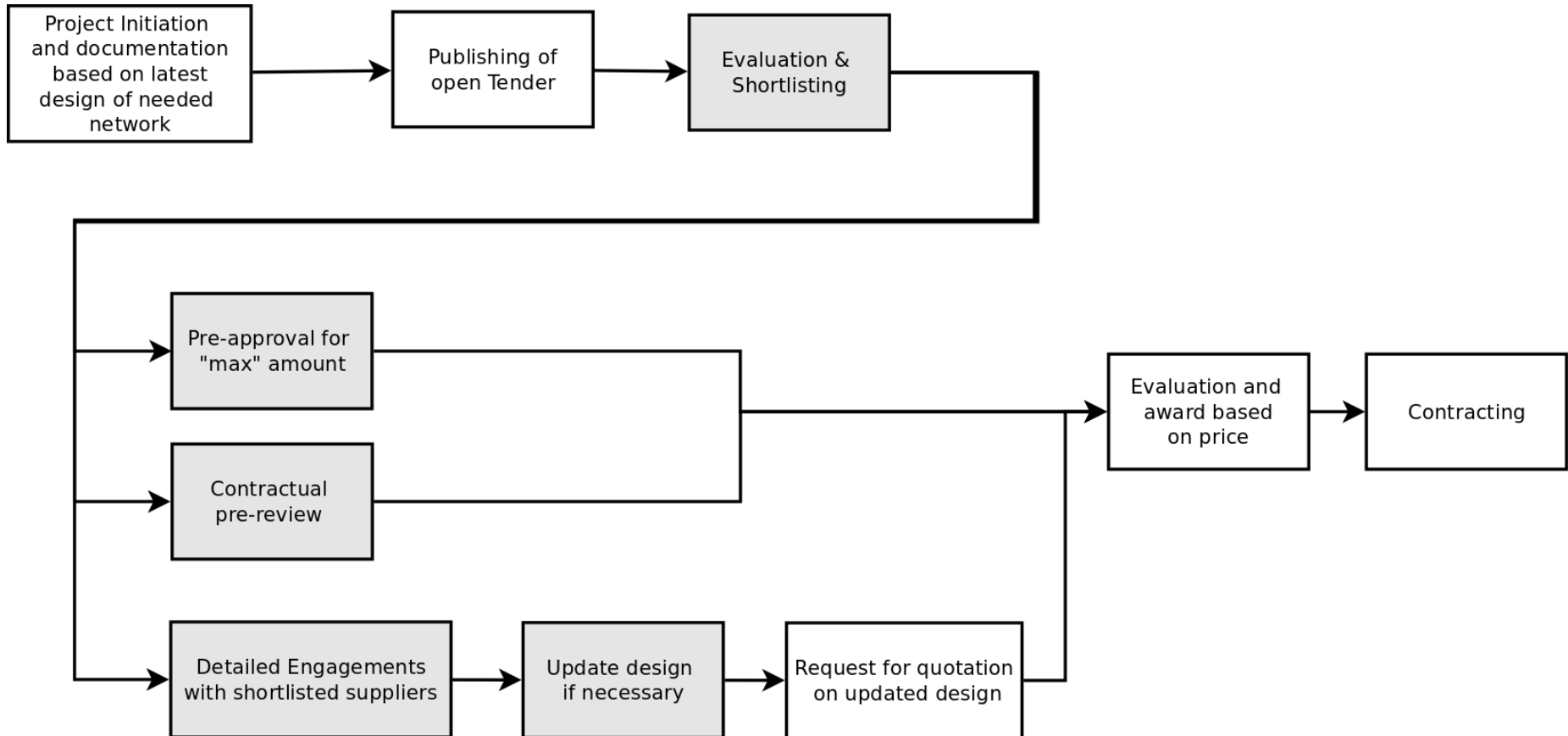
Network Deployment in the SA NREN

TENET	SANReN
<ul style="list-style-type: none"> i. Case by case network planning ii. Negotiations with select suppliers iii. Solution based on what supplier can provide iv. Flexibility to incorporate changes in requirement v. Simple Approval Process vi. Simple procurement tied to approval 	<ul style="list-style-type: none"> i. Holistic Network Planning ii. RFP issued that is open to all suppliers iii. Solution pushes supplier to provide the best solution for the NREN iv. Rigid tendering process prevents changes to scope of project v. Complex approval process vi. Very rigid procurement process

An example “optimised” process (1):



An example “optimised” process (2):



To summarise

- One size does **NOT** fit all
- Bureaucracy will only work well when the function that it performs can be well mechanised.
- Tasks requiring complex decision making needs to be, as far as possible, in independent processes.
- As far as possible do work in parallel.
- Any process needs to be long lasting (preferably in the order of years)