



CESA Infrastructure indaba

"Engineering the Future Now!"

**Session 4 : Leadership: Delivering Value for Money in
Infrastructure Procurement**

**What does it takes to deliver value for
money?**

SONA 2018 - Now is the time to lend a hand

CESA – Our future is now

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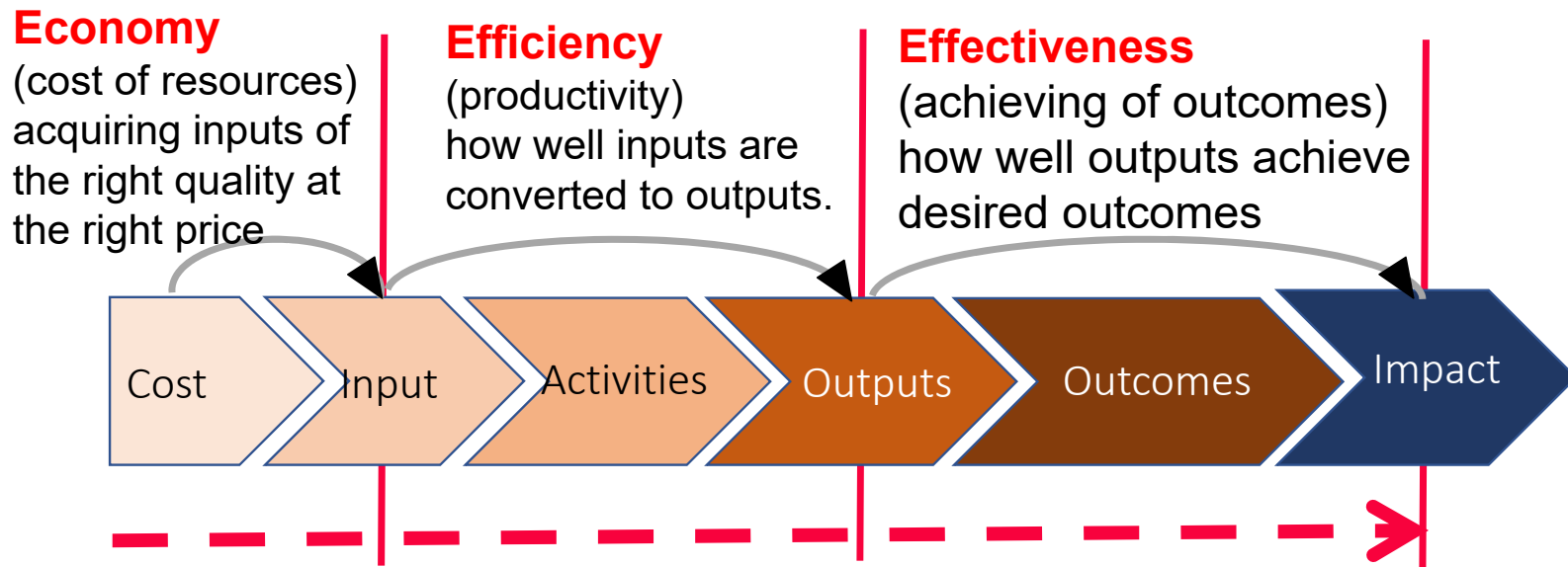
Director Infrastructure Options (Pty)Ltd

Outline

- Provide an understanding of value for money in an infrastructure context
- Offer an insight into the scale and distribution of public sector infrastructure expenditure
- Pose a question relating to significant savings in public sector infrastructure expenditure
- Give a good news storey as to how infrastructure can be effectively delivered within the public sector procurement rules
- Identify some innovations and practices which contribute to successful project outcomes
- Take a quick look at inhibitors and enablers
- Conclude with some pointers as to how a 30% saving in public sector infrastructure expenditure can be achieved

What is value for money in an infrastructure context

Value for money refers to something that is well worth the money spent on it



What equity (promotion of secondary objectives) can be leveraged through a project



Value for money = optimal use of resources to achieve intended outcomes

Budget overruns



Gap between what is planned and what is delivered puts value for money for a project at risk

Project	Initial Budget (R bil)	Estimated or final Cost (R bil)	% over budget
Gautrain	25.1	30.5	21
Kusile	90	121	34
Medupi	33.6	105	213
Gauteng Toll Roads	6.3	90	1329
NMPP	11.1	23.4	111
OR Tambo	5.2	8.5	64
De Hoop Dam	7.9	20	153
FIFA Stadiums	8.1	18.4	126
N4 toll roads	2	3	50

Source - NERSA

Breakdown of estimated infrastructure expenditure (2017/19, 2018/19 and 2019/20) – National Treasury

Organ of state	%	MTEF (3 year)
State-owned companies	46%	432.8
Provincial departments	21%	198.2b
Local government	19%	179.6b
Public entities	7%	72,3b
National Departments	5%	47.7 b
Public-private partnerships	2%	16.5b
Total	100%	947.2b

Organ of state	%	MTEF (3 year)
Transport and logistics	35%	327.7b
Energy	25%	234.5b
Water and sanitation	13%	125.4
Human settlements	7%	63.4b
Other social services	5%	50.2b
Education	5%	50.1b
Other economic services	4%	38.5b
Health	4%	36.6b
Administration services	2%	21.7b
Total	100%	947.2b

SONA 2018 - Infrastructure investment **is key to our efforts to grow the economy, create jobs, empower small businesses and provide services** to our people

Can we achieve a 30% saving in public infrastructure expenditure?

SONA 2018

- Public **finances have been constrained**, limiting the ability of government to expand its investment in economic and social development

A 30% saving will yield a saving of R 104,2 b per annum

A 15% saving will yield a saving of R 52,1 b per annum which will enable maintenance and backlogs to be funded

Question – what will it take to do this?

SONA 2018

We have learnt some valuable lessons from our experience in building all the new infrastructure, which will inform our way ahead. We will focus on **improvements in our budget and monitoring systems, improve the integration of projects** and build a **broad compact on infrastructure with business and organised labour**

Desired
impact?

Good news storey – new Universities project

September 2011	Final Report on the Establishment of the New Universities in the Northern Cape and Mpumalanga Provinces submitted to the Minister
5 July 2012	President announces the seats of the new universities as the inner-city of Kimberley and the Lowveld College of Agriculture in Nelspruit
August 2013	Minister established the two public universities as per the Act
February 2014	Both universities commenced their first academic year (505 students at UMP and 124 at SPU)
February 2016	Project had delivered 16 new buildings within budget and below cost norms , as well as a range of renovated buildings, providing academic and residence space for the 2016 enrolment of 1255 students at UMP and 700 students at SPU.

Budget

2011/2012	R 50.0 m
2012/2013	R 81.3 m
2013/14	R 117.1 m
2014/15	R 383.0 m
2015/16	R 1.32 b

Wits University implementing agent for DHET
(Piloted the implementation of the National Treasury Standard for Infrastructure Procurement and Delivery Management)

2016/2017 R 1,3 b

New universities take over responsibility for budget execution

Source: Close out report prepared by the New Universities Project Management Team

New Universities project – structure and procurement

DHET (client) – initiate and finance projects, approve or change the project brief or requirements and own the business case

New Universities Project Management Team (NUPMT)

- Wits director Campus Planning and Development
- Client Delivery Manager
- Programme / Project Manager
- Office administrator

Part time advisors

Spatial planning, procurement and delivery, development and stakeholder engineering services, architectural, ICT

Delivery team (project managers, designers, specialists and contractors)

Delivery management (4,5-5%) plus Wits management fee (2,5%)

Over 143 procurements were undertaken, resulting in 219 appointments

Approximately 700 work orders were issued and approximately 2734 payment certificates were authorised for a total certified expenditure of R1,6b

Breakdown of expenditure per procurement procedure

- Quotation procedure (<R 1,0m) – 0.5%
- Negotiation procedure – 5.8% (mostly NUPMT)
- Competitive tenders and competitive negotiations - 90.6%
- Other (Wits system) – 3.1% (furnishings)

Pilot project for implementation of SIPDM

Major contracts

Professional services:

Architectural – two stage architectural competition linked to a procurement process
Others – open procedure, stringent eligibility criteria, evaluation based on financial offer, preference and quality, **framework contract** based on (NEC3 PSC – option G (term contract))

Refurbishments

Open tender, stringent eligibility criteria, evaluation based on financial offer, preference and quality, **framework contract** based on NEC3 ECC – Option F (**management contract**)

New build

Restricted competitive negotiations, stringent eligibility criteria, evaluated financial offer, preference and quality, **framework contract** based on NEC3 ECC – Option C (**target contract with activity schedule**) **early contractor involvement**

Framework contracts enable early contractor involvement

At SPU approximately 19 000 furniture items were procured from 200 unique items. At UMP approximately 7 000 furniture items were procured from 250 unique items.



Sol Plaatje University – Central Campus

C001 - Finalist Higher Education & Research– World Architectural Festival (2017) Received a commendation

Required approximately 36 000 m²

Building	Start	Completion	Start cost	Final Cost
C001	13 Oct 2014	2 Mar 2016	R 185 m	R 183 m
C002	13 Oct 2014	5 Jul 2016	R 200 m	R 203 m
C003	13 Oct 2014	8 Apr 2016	R 145 m	R 152 m

Completed 5,3% below DHET cost norm
Professional fees 14,1% for buildings

Empowerment

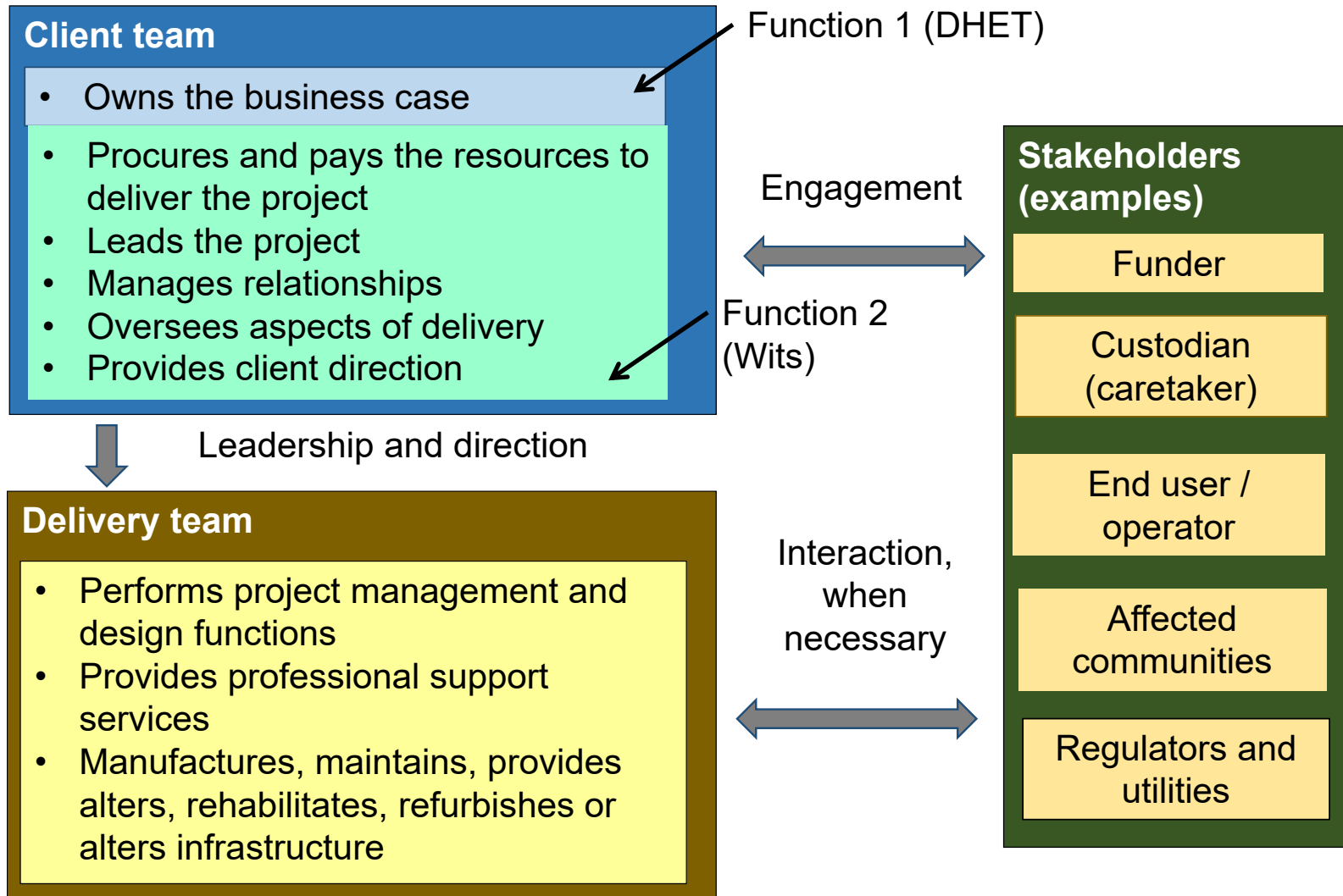
70% of expenditure went to B-BBEE levels 1 and 2 at SPU and 67% of expenditure went to BBEE levels 1 and 2 at UMP

At supply chain level

contract local participation goal	30% minimum
broad-based black economic empowerment spend goal	60% minimum
contract local direct employment goal	30% minimum
contract skills development goal	250 hours per Rm spend

Option	SPU		UMP	
	Days	Learners	Days	Learners
Method 1 (occupational qualification)	8 774	176	10 194	99
Method 2 (trade qualification)	5 585	57	7 473	160
Method 3 (national diploma)	3 329	16	2 636	18
Method 4 (professional registration)	2 165	5	1 381	14
TOTAL	19 853	254	21 684	291

The principal role players in the delivery of infrastructure



Innovations and practices which contribute to successful project outcomes

CIDB in 2003 identified delivery challenges as a lack of delivery management skills and resources, **inefficient or inappropriate systems and processes and inconsistent procurement procedures**

The root causes of failure of 8 common causes of project failure identified by the OGC in the UK (2005) can be ascribed to **lack of governance**, and to **poor procurement and delivery management practices**, all of which are under the control of the client

Executive course participants at the recent UPE / NT IDMS course identified the solutions to the current challenges facing the public sector in delivering infrastructure **as build skills, improve systems and improve governance and leadership**. Participants following exposure to the new universities project identified the top three innovations and practices which contribute to successful project outcomes as:

- **Governance**
- **Procurement strategy**
- **Putting in place the “super” client team**

Inhibitors and enablers

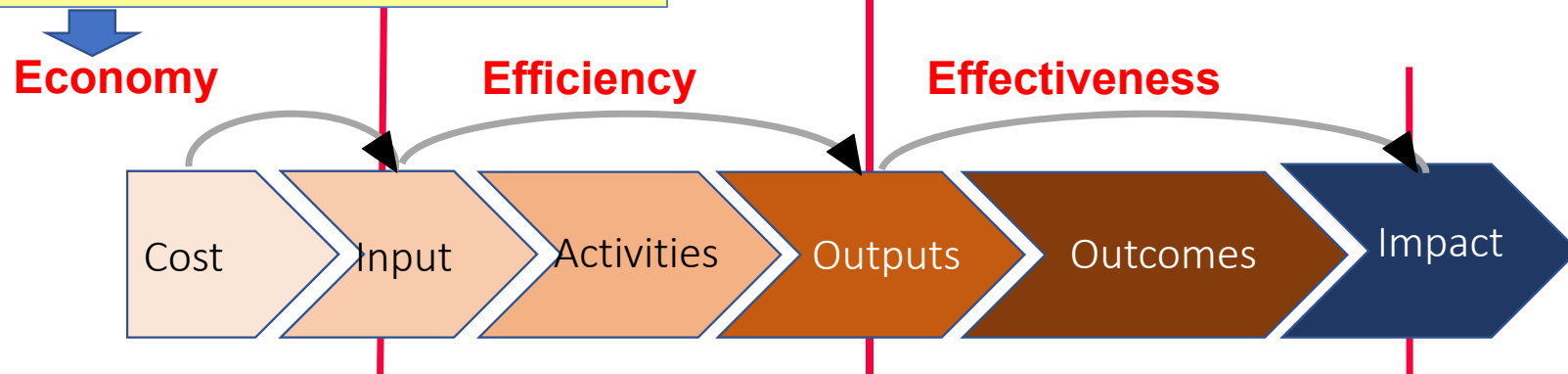
Negatively impacted on by:

- **optimism bias** - the human mind's cognitive bias in presenting the future in a positive light; and
- **strategic misrepresentation** – behaviour that deliberately underestimates costs and overestimates benefits for strategic advantage usually in response to incentives during the budget process.

Positively impacted upon by procurement strategy and tactics

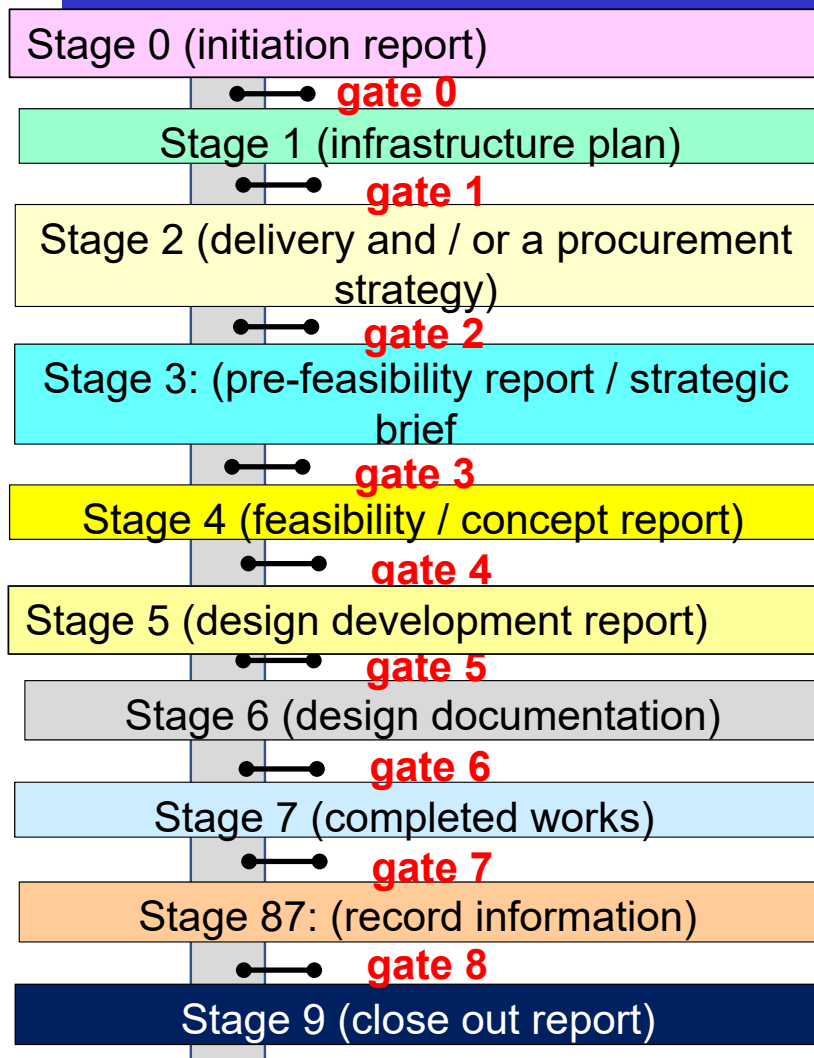
Negatively impacted on by an inability

- procure competent contractors
- manage risk, multiple projects against an annual budget, interference and scope creep
- create an enabling environment within which delivery is to take place



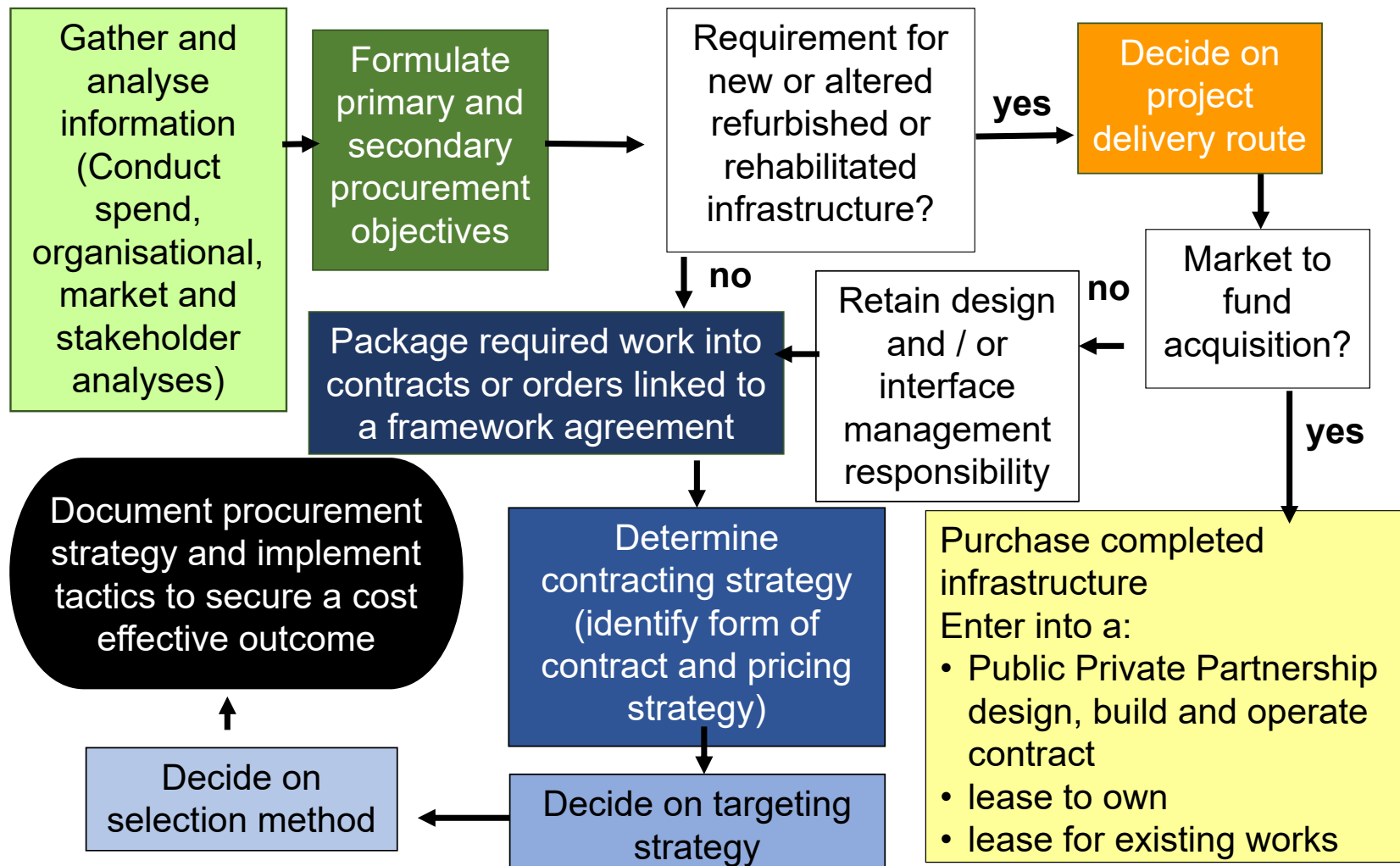
ICE (2009) "The role of the client is the single most important factor in determining the success of infrastructure projects regardless of their size, complexity and location"

Innovations and practices which contribute to successful project outcomes - governance



Management is about getting the work done whereas governance **is about ensuring that the right purpose is pursued in the right way.**

Innovations and practices which contribute to successful project outcomes – procurement strategy



Putting in place the super client team

The client delivery manager's primary function should be to:

- own the business case of a project on behalf of the client so that there is no ambiguity about who is acting in the client role
- perform an oversight and governance role, providing effective and **strategic leadership**, within the client team
- set the team up for successful delivery and **remove obstacles or blockages to progress;**
- direct the project in such a manner that the value proposition that is expected at the end of the project is realised as far as is possible
- **intervene and take corrective action** when necessary
- develop a strategy to approach the market

A client delivery manager usually needs to be supported by both a technical team and an administrative team

The **technical team** provides advice, manages activities associated with the initiation of projects, formulate, shape and document the client's specific requirements and monitors and evaluates the outputs of the delivery team, establishes reporting systems and procures the necessary resources

The **administrative team** develops and maintains a procurement plan a contract register, a purchase order register etc.

National Planning Commission

National Planning Commission (NPC) identified a number of shortcomings in the SCM system, namely:

- the “**emphasis on compliance by box-ticking makes the system costly, burdensome, ineffective and prone to fraud**”, and
- “procurement systems tend to focus **on procedural compliance rather than value for money**, and place **an excessive burden on weak support functions.**”

National Treasury Standard for Infrastructure Procurement and Delivery Management designed around these principles

The National Planning Commission’s National Development Plan 2030: *Our future – make it work* suggests that the design of a procurement system that is better able to **deliver value for money, while minimising the scope for corruption** needs:

- **differentiate between the different types of procurement** which pose different challenges and require different skills sets
- **adopt a strategic approach to procurement above the project level** to balance competing objectives and priorities rather than viewing each project in isolation
- **build relationships of trust and understanding** with the private sector
- **develop professional supply chain management capacity** through training and accreditation
- **incorporate oversight functions** to assess value for money

Inhibitors

Tick box approach to procurement with the wrong skills set

- 9 to 12 months to conduct a tender process
- inappropriate contractors appointed due to simplistic approach taken to identifying a suitable contractor

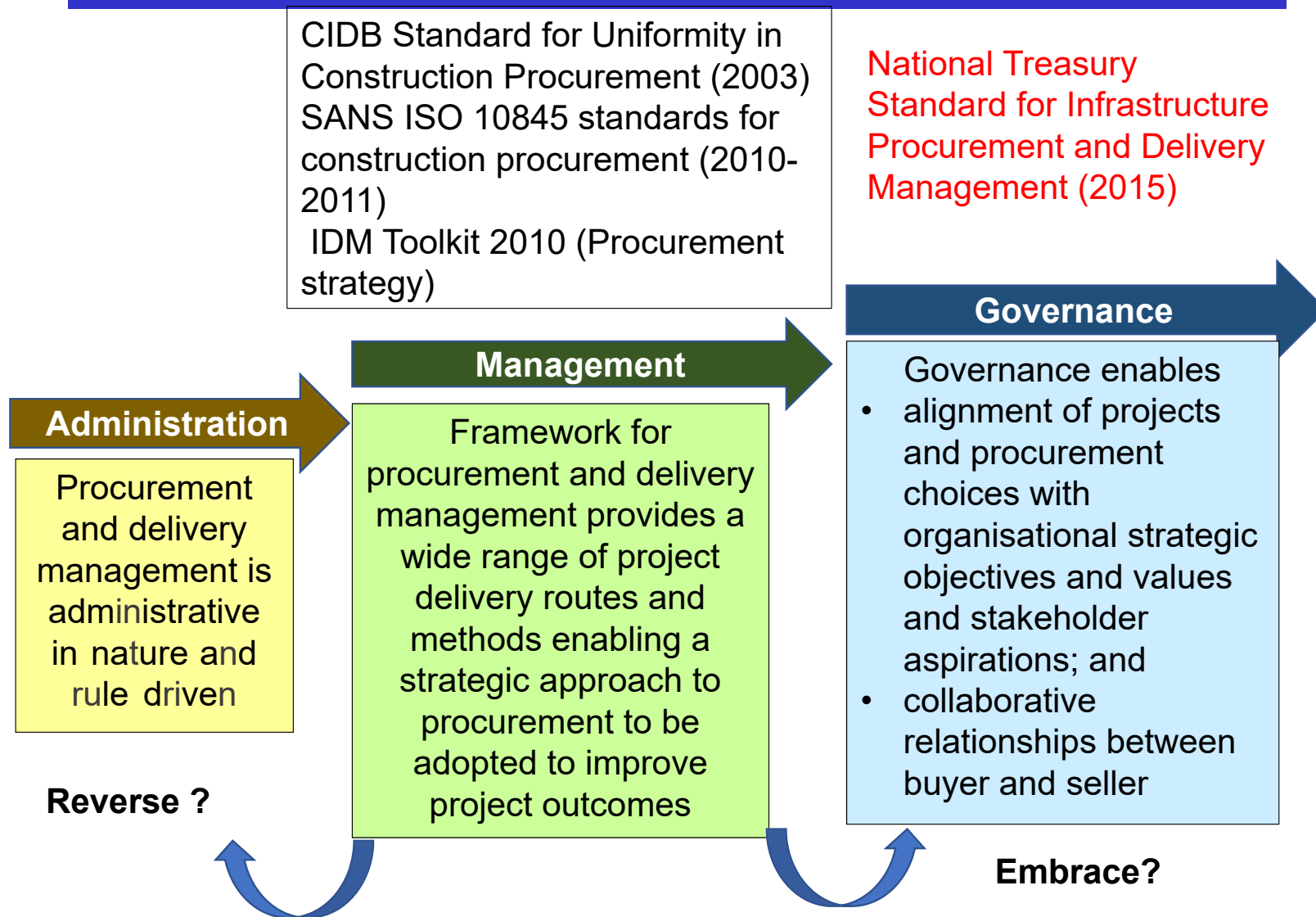
Lowest price for a tender who ticks some boxes vaguely related to a particular contract and not selection based on cost effectiveness

Value for Money has been introduced as a core procurement principle in all procurements financed by the World Bank. **This means a shift in focus from the lowest evaluated compliant bid to bids that provide the best overall value for money, taking into account quality, cost, and other factors as needed.**

Lack of client leadership

- require effective governance **to enable the delivery team to function effectively**
- require client delivery managers which unblock obstacles to delivery
- require effective technical and administrative support to delivery managers

Where are we in the process?



Can we achieve a 30% saving?

Infrastructure project outcomes can be improved by clients by embracing the following in the design of a delivery management system

- adopt a **strategic and tactical approach to procurement**;
- establish **trust-based engagement of stakeholders**;
- put in place **governance systems** which incorporate oversight functions to assess aspects of value for money;
- put in place **rigorous project selection processes**;
- **differentiate between the different types of procurement** which pose different challenges and **require different skills sets**;
- **standardise delivery** in a manner which enables risks to be proactively managed and responsibilities to be clearly established;
- **build relationships of trust and understanding** with suppliers, service providers and contractors;
- put in place **reliable data gathering systems**
- develop strong capabilities across the value chain of planning, delivery and operations

**Implement
the NDP**

Implement the SIPDM

CESA President in “**Our future is now address**”, called upon National Treasury to put in place an Infrastructure Directorate to take accountability for **implementation** and monitoring of the **SIPDM** and capacitate the Auditor General’s office to effectively review and audit compliance

Value for money refers to something that is well worth the money spent on it

Project value is the outcome of client decision making to achieve an optimal balance of the project benefits, risks and costs

Thank you

John Ruskin (1819-1900)

“It's unwise to pay too much, but it's worse to pay too little. When you pay too much, you lose a little money - that's all. When you pay too little, you sometimes lose everything, because the thing you bought was incapable of doing the thing it was bought to do. The common law of business balance prohibits paying a little and getting a lot - it can't be done. If you deal with the lowest bidder, it is well to add something for the risk you run, and if you do that you will have enough to pay for something better.”