

# Infrastructure Delivery Risk & Municipal Compliance

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Occupation Certificates & Bulk Infrastructure | Capital Programme Governance  
Public-Private Partnership & Student Housing Infrastructure Programme Models & Risk Allocation

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# AGENDA

01

## Context & Strategic Framing

*Infrastructure delivery in the higher education sector*

02

## Occupation Certificates & Bulk Infrastructure

*Compliance failures, municipal dependencies, and risk exposure*

03

## Capital Programme Governance & Cost Escalation

*Department of Higher Education and Training funding, procurement governance, and contract management*

04

## Public-Private Partnership & Student Housing Infrastructure Programme Models

*Risk allocation, financing structures, and delivery mechanisms*

05

## Recommendations & Way Forward

*Systemic interventions for the Chief Operating Officer & Execution Forum*

# CONTEXT & STRATEGIC FRAMING

**R18B+**

Dept. of Higher Education  
IPDP Capital Portfolio (Sector)

**40%+**

Higher Education Institution  
Infrastructure Delivery Backlog

**72%**

Student Housing  
Shortfall Nationally

## The Strategic Imperative

- South African universities manage billions in Department of Higher Education and Training-funded infrastructure under mounting regulatory, municipal and procurement complexity.
- Three interlocking risk domains - Occupation Certificates, capital governance, and student housing financing - demand integrated executive attention.
- HEFMA members across the sector share exposure to the same systemic vulnerabilities; collective intelligence is our strongest mitigant.
- This forum must move from awareness to coordinated execution: governance frameworks, contract strategies, and escalation protocols.

# OCCUPATION CERTIFICATES & BULK INFRASTRUCTURE

## *The Compliance Paradox – Buildings Complete, Occupancy Denied*

### RISK FACTORS

#### **Municipal capacity gaps**

Understaffed building control offices cause chronic Occupation Certificate delays (3–24 month backlogs nationally)

#### **Bulk services non-compliance**

Water, sewer, electrical approvals from municipalities often withheld pending unrelated municipal arrears

#### **Design defect liability**

Architects & engineers sign off incomplete or non-compliant works; liability disputes post-completion

#### **Dept. of Higher Education funding conditions**

Infrastructure and Planning Delivery Plan grant conditions require Occupation Certificate before next tranche; delays cascade into funding freezes

### BULK INFRASTRUCTURE DEPENDENCIES

#### **Electrical reticulation**

Eskom/municipal supply upgrades required for new buildings; lead times of 18–36 months not planned for

#### **Sewer & stormwater**

Civil bulk upgrades conditional on municipality's own capital budgets — external dependency uncontrolled

#### **Water supply capacity**

South African National Standard (SANS) 10400 compliance linked to municipal infrastructure performance outside institutional control

#### **Fire services sign-off**

Local authority fire brigade inspections a prerequisite for Occupation Certificate; resourcing and scheduling major bottleneck

# OCCUPATION CERTIFICATE COMPLIANCE — MITIGATION & INSTITUTIONAL RESPONSE

## PRE-DESIGN

- Commission bulk infrastructure pre-feasibility studies
- Formal municipal engagement prior to project approval
- Include Occupation Certificate timelines in DHET Infrastructure and Planning Delivery Plan submissions

## DESIGN STAGE

- Build Occupation Certificate checklist into professional team briefs
- Contractual obligation for phased sign-off
- South African National Standard 10400 compliance verification at 30/60/90% design

## CONSTRUCTION

- Monthly building control inspections scheduled
- Bulk service upgrade contracts run parallel
- Occupation Certificate tracker integrated into project dashboard

## HANDOVER

- Dedicated Occupation Certificate coordinator appointed
- Retention linked to Occupation Certificate achievement
- Escalation protocol to Chief Operating Officer where certificate withheld over 60 days

**⚡ Chief Operating Officer Action: Mandate Occupation Certificate as a Key Performance Indicator on all capital projects above R5M - tracked monthly at project steering committee level**

# CAPITAL PROGRAMME GOVERNANCE & COST ESCALATION

## GOVERNANCE FAILURE MODES

### **Late contract variation approvals**

PG8D approvals delayed by governance cycles while contractors claim interest and Extension of Time — Rand-value impact compounding

### **Scope creep without re-baselining**

Additions approved informally; contract sum grows without budget reallocation or Department of Higher Education and Training notification

### **Professional fee misalignment**

Consultant mandates not updated as scope grows; liability gaps emerge during dispute resolution

### **Incomplete procurement planning**

Annual frameworks not aligned to Department of Higher Education Infrastructure and Planning Delivery Plan; reactive rather than proactive procurement cycles

### **Contract administration gaps**

Site instructions not formalised; daywork not certified; dispute exposure accumulates silently

## GOVERNANCE BEST PRACTICE FRAMEWORK

### **✓ Project Governance Committee**

Standing monthly committee with Vice-Chancellor/Chief Operating Officer oversight; PG8D pre-approval tracker integrated into agenda

### **✓ Baseline Change Control Protocol**

No scope addition without formal variation order, budget reallocation, and Department of Higher Education and Training notification memo

### **✓ Integrated Cost Report**

Monthly report consolidating contract sum, approved variations, pending claims, and cash-flow forecast

### **✓ Procurement Pipeline Alignment**

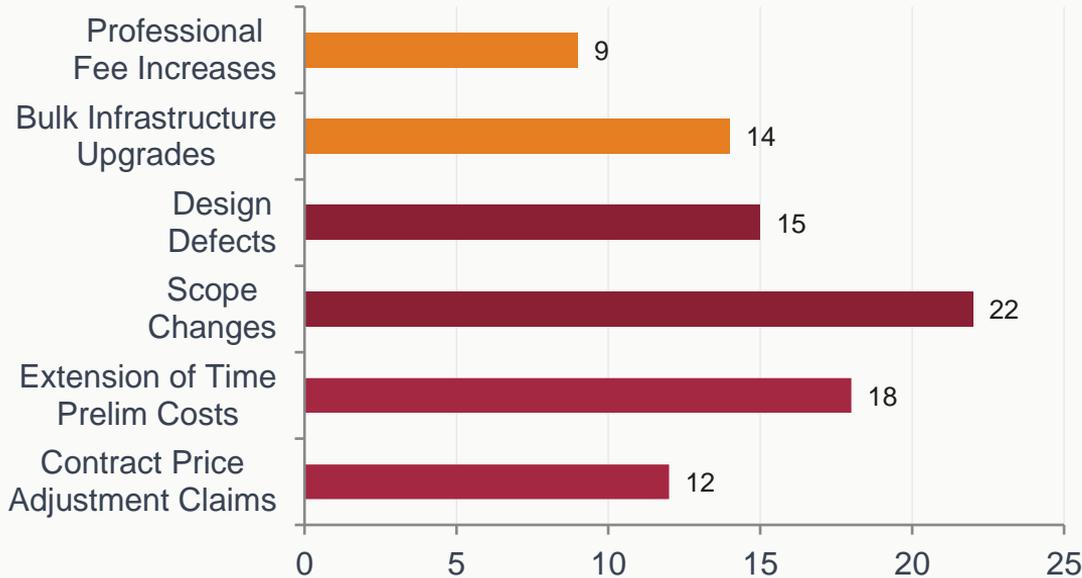
3-year procurement plan aligned to Infrastructure and Planning Delivery Plan — reviewed quarterly at Finance, Planning, Infrastructure and IT Committee level

### **✓ Contract Administration Audit**

Biannual internal audit of site instruction logs, payment certificates, and Extension of Time records

# COST ESCALATION — DRIVERS & RISK EXPOSURE

Typical Capital Cost Escalation Drivers (%)



## Sector Risk Register

Risk Factor	Rating
Occupation Cert. Delays	HIGH
Extension of Time Claims	HIGH
Dept. Higher Education Funding Lapse	HIGH
Design Liability	MEDIUM
Bulk Infrastructure Dependency	MEDIUM
Procurement Non-compliance	HIGH
Public-Private Partnership Default	MEDIUM
Municipal Relations	LOW

# PPP & SHIP STUDENT HOUSING — MODELS & RISK ALLOCATION

## PUBLIC-PRIVATE PARTNERSHIP (PPP)

### Financing Structure

Private developer funds construction; institution pays rental/lease over 20–30 year Design, Build, Finance, Operate and Maintain concession

### Land Ownership

Higher Education Institution retains land; building reverts to institution at concession end — ensure contract clarity

### Risk Transfer

Demand risk typically retained by institution; construction & maintenance risk to private party

### Governance Requirement

National Treasury Public-Private Partnership Unit approval (Section 16 agreement) — 18–24 month approval timeline

### Key Risk

Affordability gap if rental yield insufficient; institution obligated regardless of occupancy

### HEFMA Watch-out

Ensure Special Purpose Vehicle governance, step-in rights, and performance bonds are non-negotiable inclusions

## STUDENT HOUSING INFRASTRUCTURE PROGRAMME (SHIP)

### Financing Structure

Department of Higher Education and Training / National Student Financial Aid Scheme blended funding model; institutions apply for capital grants with co-contribution requirement

### Ownership Model

Higher Education Institution owns and operates; no concession — full institutional control but also full maintenance liability

### Accreditation Risk

Private accredited units eligible for National Student Financial Aid Scheme payments; quality compliance is ongoing monitoring risk

### Governance Requirement

Institutional council approval; Department of Higher Education Student Housing Infrastructure Programme committee sign-off; annual performance reporting

### Key Risk

Capital grant insufficient for full construction cost; top-up financing creates balance sheet exposure

### HEFMA Watch-out

Facilities management contract must begin Day 1 of occupancy; reactive maintenance = reputational risk

# COMPARATIVE RISK ALLOCATION – PUBLIC-PRIVATE PARTNERSHIP vs STUDENT HOUSING INFRASTRUCTURE PROGRAMME vs TRADITIONAL

RISK CATEGORY	PUBLIC-PRIVATE PARTNERSHIP	STUDENT HOUSING INFRASTRUCTURE PROGRAMME	TRADITIONAL CAPEX
Construction Risk	Private Party	Institution / Contractor	Institution / Contractor
Design Risk	Private Party	Institution	Institution
Demand / Occupancy	Shared (Nat. Student Financial Aid Scheme-linked)	Institution	Institution
Financing Risk	Private (Special Purpose Vehicle)	Shared (grant + Institution)	Dept. Higher Education / Institution
Maintenance (LT)	Private Party	Institution	Institution
Regulatory / Occupation Cert.	Shared	Institution	Institution
National Student Financial Aid Scheme Affordability	High Exposure	Moderate	Low (capital grant)
Municipal Bulk Infrastructure	Shared / Private	Institution	Institution
Concession/Contract Term	20–30 years	Perpetual ownership	N/A
Exit / Reversionary Risk	Mitigated at term end	Low	Low

 Private/Mitigated

 Shared Risk

 Institution Bears Risk

# RECOMMENDATIONS & WAY FORWARD

## *Systemic Interventions for the Chief Operating Officer & Executive Forum*

### **01 Establish a Sector-Wide Occupation Certificate Intelligence Network**

HEFMA members to share municipal engagement intelligence, Occupation Certificate timelines, and building control contacts. Quarterly reporting into a HEFMA shared dashboard — reduce each institution's learning curve.

### **02 Develop a Standardised Contract Administration Protocol**

HEFMA to develop a minimum standard contract administration framework for Joint Building Contracts Committee, New Engineering Contract and General Conditions of Contract projects at Higher Education Institutions — site instruction logs, variation registers, Extension of Time tracking — reducing dispute exposure across the sector.

### **03 Advocate for Municipal Pre-Approval Agreements with the Department of Higher Education**

Formalise engagement between the Department of Higher Education, South African Local Government Association and Higher Education Institutions to create protocol for bulk infrastructure pre-approval before Infrastructure and Planning Delivery Plan projects are approved — decoupling construction from municipal capacity.

### **04 Produce a HEFMA Student Housing Risk Framework**

Advisory committee to produce a fit-for-purpose risk allocation guideline for Public-Private Partnership and Student Housing Infrastructure Programme models — contractual templates, deal term benchmarks, and lessons learned from existing Higher Education Institution concessions.

### **05 Chief Operating Officer Governance: Standardise Capital Project Key Performance Indicators**

Chief Operating Officer forum to adopt a standard Key Performance Indicator scorecard: Occupation Certificate status, variation approval lead time, Extension of Time claim exposure, Department of Higher Education funding absorption rate — reported quarterly to Council Infrastructure Committee.

*"Infrastructure that serves students, communities and institutions starts with governance that holds."*

**Key Takeaways for the Chief Operating Officer Forum:**

- Occupation Certificate and bulk infrastructure risk must be designed out — not managed at handover
- Capital governance is only as strong as its enforcement — Project Governance Committee oversight is non-negotiable
- Public-Private Partnership and Student Housing Infrastructure Programme models need institutional expertise before signing — not after
- HEFMA's collective intelligence is our sector's competitive governance advantage