



Optimising Deployments to build Technical Capacity in the Water Sector

Presentation to WISA Conference

DWAF Integrated Water Sector Support

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water & forestry

Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA

WATERSECTOR
support co-ordinating unit



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WHAT IS THE WSSCU

- ❑ The WSSCU is a unit of DWAF founded in partnership with the DBSA and the dplg.
- ❑ The WSSCU was born out of a **common commitment** to concentrate attention and resources on the realization of the objectives of AsgiSA and JIPSA and the 5 year LG Strategic Agenda.
- ❑ The WSSCU is **accountable** to a Steering Committee comprising representatives from DWAF, dplg, SALGA, DBSA and National Treasury.
- ❑ The **vision** of the WSSCU is to be a *core resource facilitation and optimisation centre for water sector support to ensure water service delivery acceleration and sustainability.*



WSSCU : OBJECTIVES

- Facilitate access to a resource pool of skilled experts and advisors for the short and medium term.
- Contribute to sector initiatives for long-term skills development.
- Assist DWAF Regions to plan and implement co-ordinated water sector support (create support plans, structures, capacity and relationships).
- Facilitate acceleration of service delivery through the provision and co-ordination of support to DWAF Regions.

THE WSSCU FACILITATES SUPPORT SUPPLY MEETING SUPPORT DEMAND FOR THE WATER SERVICES SECTOR

SUPPLY

DBSA

ENERGYS

WISA

SAICE

IMFO/
SAICA

OTHER

WATER
BOARDS

WATERSECTOR
support co-ordinating unit

WSSCU facilitates the supply of expertise and skills to meet water services sector demands

DEMAND

Identified by *regional offices* through *direct municipal engagement* and *regulatory performance* measurement

Identified in *sector planning*

Water Sector Strategic Plan

Provincial Water Sector Plan

WSDP

Support Element of Plan

Provincial Support Plan

Municipal Support Plan

Identified by *sector players*

GOV –e.g dplg, nat'l treasury, prov depts

PARTNERS – e.g dbsa, water boards, CSOs

RESEARCH bodies – e.g WRC

DONORS – e.g EU, USAID etc.

Identified on *toll-free line*



THE CURRENT REALITY OF TECHNICAL SKILLS IN LOCAL GOVERNMENT

- The shortage of technical skills in South Africa is felt acutely in the local government sector.
- Recent research conducted by SAICE revealed the following about technical staffing in municipalities.

	Local	District	Totals
Only young staff	43	6	49
Only one civil technician	45	4	49
No civil engineering staff	79	4	83
Totals	167	14	181
Number of municipalities	231	47	278
% with none, one or inexperienced staff	72%	30%	65%



THE CURRENT REALITY OF TECHNICAL SKILLS IN THE WATER SECTOR

- The shortage of technical skills in the water sector has been exacerbated by the significant loss of individuals from municipalities and DWAF (national and regional offices).
- Anecdotal evidence suggests that this has escalated in the past 3 years to the point that there is now a severe skills crunch.
- This impacts on DWAF's capacity to support local government from within its own ranks.
- It also impacts the capacity of municipalities to manage their water services authority and provider functions effectively.



CURRENT CONTEXT IN THE WATER SECTOR

- The water sector is in the midst of a massive drive to **eradicate** water supply and sanitation **backlogs**.
- The water sector is championing “**Water for Growth & Development**” to support the AsgiSA target of 6% growth in GDP
- Many initiatives are “bridging the skills gap” in DWAF and municipalities by deploying technical resources into municipalities and provincial and regional offices of government departments.
- Initiatives inside DWAF include the **DWAF Learning Academy** and programmes to support the **HRD 2025 Vision** of the Department.
- Bridging the skills gap is being done within the framework of **JIPSA and the Setas**.



WATER SECTOR DEPLOYMENT PROGRAMMES

- There is a major drive to deploy technical resources into municipalities and provincial and regional offices of government departments.
- These include Project Consolidate, Siyenza Manje, Bucket Sanitation Eradication programme and other national and regional/provincial support programmes such as the Mpumalanga Water for All programme.
- Between these programmes there are +/- 200 deployees in the field .
- These programmes are priorities and are showing progress in terms of unblocking bottlenecks and increasing the pace of infrastructure delivery BUT



It is critical that deployments are optimised and risks of unintended consequences of deployments are managed



UNINTENDED CONSEQUENCES OF THE CURRENT CONTEXT

- As sector leader DWAF must anticipate possible long-term risks and impacts.
- While the backlog and acceleration deployment programmes are having a positive impact there is a risk of unintended consequences.
- Government institutions may become dependant upon deployments for their line functions.
- Institutional memory will reside outside the institutions.
- Young technicians deployed into municipalities may not have have access to seniors for mentoring and professional development.



UNLESS ACTIVELY MITIGATED THESE PROGRAMMES RISK INHIBITING THE LONG TERM GROWTH OF SKILLS IN THE WATER SECTOR



HOW DO WE MITIGATE AGAINST THE RISK OF THESE UNINTENDED CONSEQUENCES?

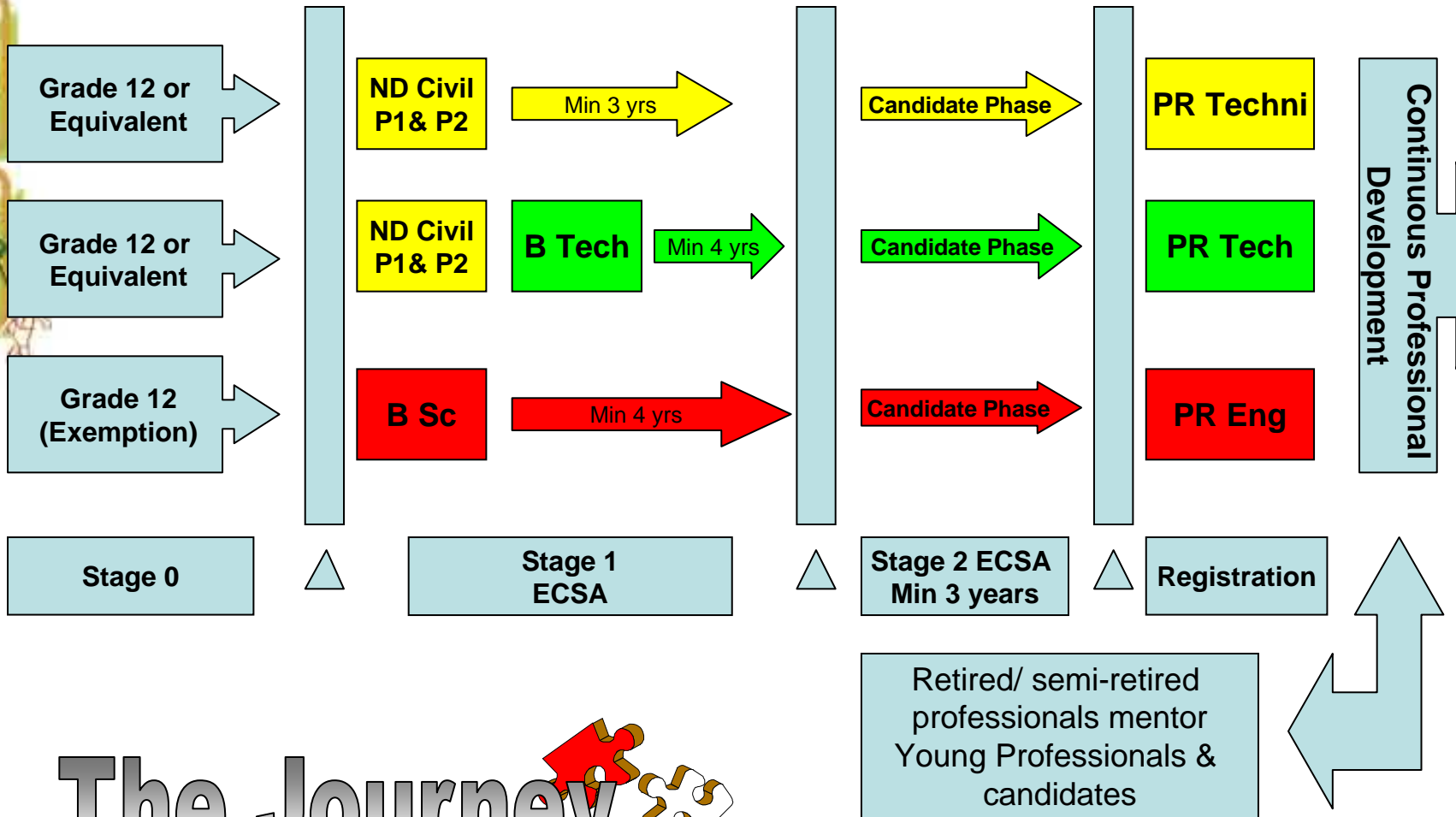
- Take an *active* approach towards the mitigation of these risks - they will not manage themselves.
- Develop solutions that take cognisance of the fact that short-medium term deployments will still be required in the sector for some time.
- Optimise deployments as learning opportunities.
- Draw upon the experience of successful programmes.

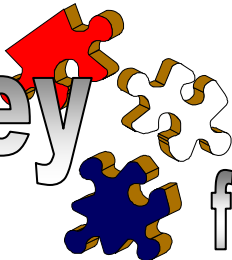


LESSONS FROM EXISTING PROGRAMMES OPTIMISING DEPLOYMENTS: CAPACITY DEVELOPMENT

- Successful deployment programmes have concentrated on both skills development and impact on delivery from the outset.
- Expertise should be harnessed to grow engineers, technologists and technicians in the process of supporting local government.
- Support should be designed to offer relevant practical experience to graduates (ECSA candidate work place training) and to assist students to graduate (ND practical semesters) and to measure itself on this outcome.
- This involves supporting them especially through the candidate phase of their professional development.
- The following diagram shows the life-cycle of engineers, technologists and technicians.

Professional Life Cycle of Engineers, Technologists and Technicians



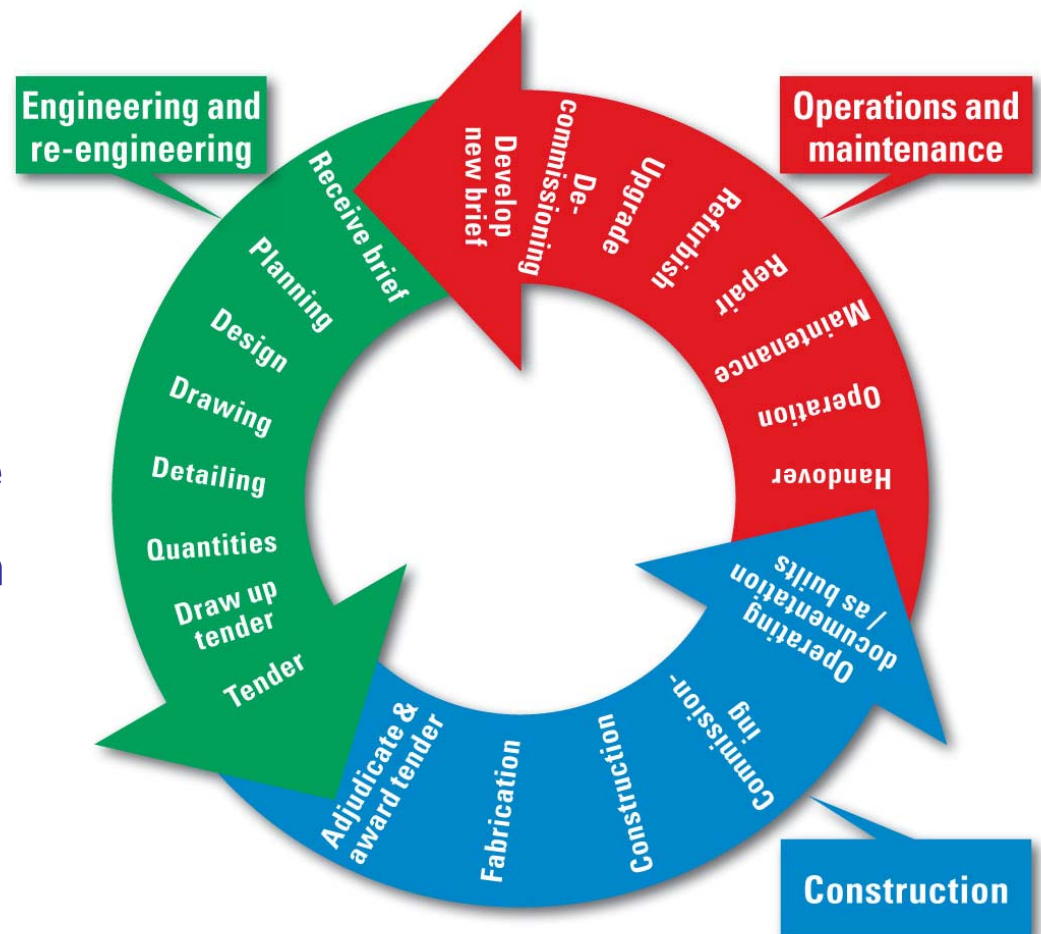
The Journey  from tertiary to registration



STUDENTS AND GRADUATES MUST BE OFFERED EXPOSURE TO THE FULL PROJECT CYCLE

It is important to:

- Plan comprehensive workplans including rotation if necessary
- Ensure protégés keep a record of their experience
- Register their efforts with the appropriate bodies (ECSA or the Tertiary Institution)





UTILIZE A COMBINATION OF LEARNING METHODS

A variety of learning methods is important from passive receptive learning to active learning by doing - this increases the cultivation of wisdom not just the accumulation of knowledge or information.

Active learning

Passive reception

Increasing cultivation of wisdom

Learning by doing through guided experience

- guided practice
- guided observation
- guided problem solving
- guided experimentation

Socratic questioning

Stories with a moral

Rules of thumb

Directives/presentations/lectures



KEY SUCCESS FACTORS: CAPACITY DEVELOPMENT

- **Rigorous** evaluation and testing of interns.
- **Pairing** seniors and graduates/interns on deployments.
- Assurance of **suitably qualified** work place engineering supervisors and development of work place activities.
- Development of comprehensive **Work Place Training Programmes** and **Portfolio of evidence** guides for deployees.
- Assigning mentors and developing mentorship guidelines
- Developing and implementing **monitoring and evaluation** processes.



LESSONS FROM EXISTING PROGRAMMES THAT ARE OPTIMISING DEPLOYMENTS: SERVICE DELIVERY

•DEPLOYMENTS SHOULD LOOK AT THE RANGE OF SERVICE DELIVERY ISSUES INCLUDING:

- Unblocking MIG projects
- Fast tracking MIG projects and addressing backlogs
- Assisting with capital projects in terms of design, contract management and construction oversight
- Assisting with crises as a result of the lack of O&M, developing the required systems and contributing towards rebuilding the O&M skills base
- Considering strategic and master-planning in order to get funds for expansion of bulk services and future developments



LESSONS FROM EXISTING PROGRAMMES THAT ARE OPTIMISING DEPLOYMENTS: INSTITUTIONAL DEVELOPMENT

DEPLOYMENTS SHOULD LOOK AT THE RANGE OF INSTITUTIONAL SUPPORT REQUIRED INCLUDING:

- Cost recovery and revenue enhancement
- Development of systems and procedures
- Assessment of organograms, job specs, appointments etc to ensure adequate capacity engaged
- Establishment of frameworks within which sustainable development and management can succeed



HOW WILL THE WSSCU BE TAKING FORWARD THE LEARNINGS FROM DEPLOYMENT PROGRAMMES (1)?

- The WSSCU will support the **DWAF Learning Academy** and other DWAF HRD programmes to optimise deployments as learning opportunities for DWAF staff.
- The WSSCU will incorporate a mentoring approach as a principle of the **national resource pool** being developed by the unit.
- The WSSCU will ensure that all **partnership agreements** for deployment programmes adopt a mentoring approach for professional development.



HOW WILL THE WSSCU BE TAKING FORWARD THE LEARNINGS FROM DEPLOYMENT PROGRAMMES (2)?

- The WSSCU will **lobby** and **advocate** for the adoption of mentoring principles by other deployment programmes and corporate responsibility towards mentoring and professional development by the sector.
- The WSSCU will encourage deployees to look at more than immediate service delivery, but to apply their knowledge to build sustainable structures, systems and procedures



If you are interested in knowing more about
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