
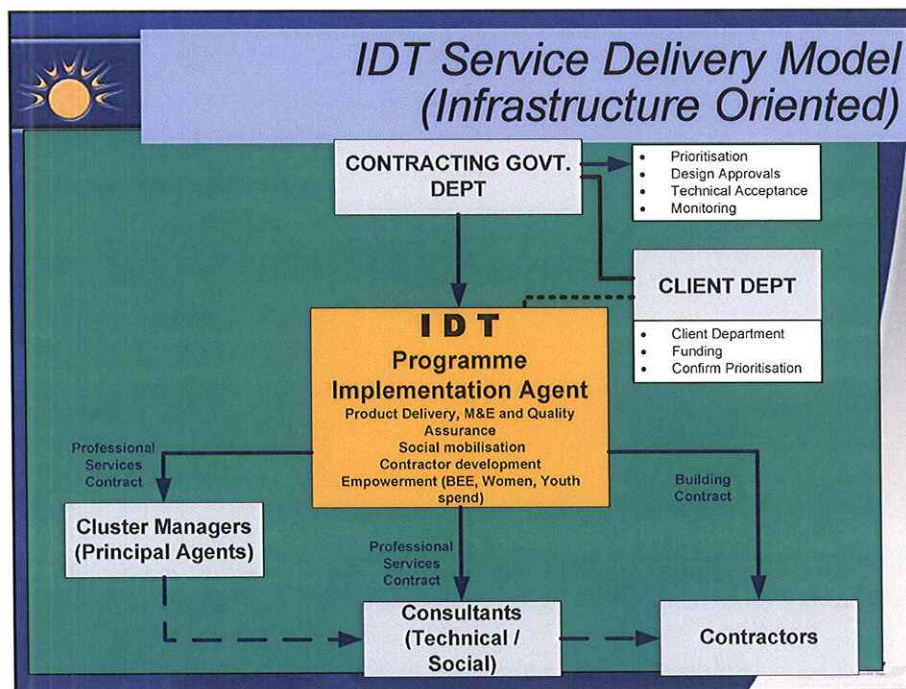


History of IDT's participation in the Delivery of School Infrastructure

- ☀️ Participation in the Public Works funded programme for urgent school construction using alternative construction technologies: 2010-2012
- ☀️ Participation in the National Eradication of Mud Schools and Inappropriate Structures Programme funded by the National Treasury (Provincial Grants): 2009-11 MTEF Period
- ☀️ An IDT funded programme in which IDT contributed Programme Management expertise as well as R150m for actual school infrastructure: 2008 - 2010
- ☀️ Participation in the Provincial school-building programme funded through the Infrastructure Grant to Provinces (IGP): 2000 - 2011

IDT's Expenditure in School Infrastructure over the last 5 years

REGION	EXPENDITURE ON ALL SCHOOLS				
	2008 - 2010	2010/2011	2011/12	2012/13	TOTAL
Eastern Cape	R 795 522 000	R 153 194 598	R 444 857 000	R 341 541 000	R 1 735 114 598
Free State	R 4 626 000	R 25 321	R -	R 48 354 000	R 53 005 321
Gauteng	R 109 472 000	R 26 603 225	R 42 535 000	R 466 373 000	R 644 983 225
KwaZulu Natal	R 422 698 000	R 881 790 768	R 1 065 327 000	R 937 389 000	R 3 307 204 768
Limpopo	R 40 777 000	R 91 076 801	R 120 512 000	R 30 265 000	R 282 630 801
Mpumalanga	R 92 888 000	R 103 908 221	R 115 365 000	R 71 209 000	R 383 370 221
North West	R 65 797 000	R 121 288 424	R 386 338 000	R 218 381 000	R 791 804 424
Northern Cape	R 3 023 000	R 906 585	R 111 618 000	R 155 327 000	R 270 874 585
Western Cape	R 2 587 000	R 19 553 665	R 5 167 000	R 369 000	R 27 676 665
TOTAL	R 1 537 390 000	R 1 398 347 606	R 2 291 719 000	R 2 269 208 000	R 7 496 664 606




New & Replacement Schools Constructed 2012/13

The bulk of the schools projects in 2012/13 were renovations and additions to existing schools, the table below indicates the new and replacement schools only:

Province	No. New / Replacement Schools Completed
Eastern Cape	1
Gauteng	1
KwaZulu Natal	8
North West	2
TOTAL	12


A list of schools constructed in 2012/13 is attached to this presentation








Work Opportunities - Schools Infrastructure 2012/13

REGION	Work Opportunities	12/13 Expenditure	
Eastern Cape	1949	R	341 541 000
Free State	198	R	48 354 000
Gauteng	1215	R	466 373 000
KwaZulu-Natal	2286	R	937 389 000
Limpopo	73	R	30 265 000
Mpumalanga	299	R	71 209 000
North West	1491	R	218 381 000
Northern Cape	533	R	155 327 000
Total	8044	R	2 268 839 000





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- ### Women/Youth Contractors 2012/13
- ✦ In all IDT Social Infrastructure programmes the following was achieved*:
 - ✦ R1.737bn contract value was awarded to women contractors/service providers (31% of total programme spend)
 - ✦ R667m expenditure on youth contractors/service providers (11% of total programme spend)
 - ✦ R3.68bn BBBEE expenditure (65% of total programme spend)
 - ✦ A total of 34,534 work opportunities were created by IDT in its social infrastructure programmes
- *Note: Figures are pre 2012/13 Audit
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Current Total IDT Schools Infrastructure Programmes 2013/14


Province	Client	Budget (2013/14) (Rm)	Scope (No. Schools Projects)
Eastern Cape	DBE - ASIDI	R 223	12
	DBE - ASIDI Water & Sanitation	R 209	159
	EC DoE	R 508	200
Free State	DBE - ASIDI	R 465	10
	FS DPW	R 81	6
Gauteng	GDoE	R 110	30
KwaZulu Natal	KZN DoE	R 695	210
	DBE - ASIDI Water & Sanitation	R 138	91
Limpopo	DBE Water & Sanitation	R 49	55
	LDoE	R 696	41
Mpumalanga	MP DPW	R 504	15
North West	NW DoE	R 643	85
Northern Cape	NC DoE	R 389	45
TOTAL		R 4 710	969

Current IDT New/Replacement Schools Programmes – 2013/14


Province	Client	No. Schools	Progress	Completion Date
Eastern Cape	DBE - ASIDI	12	10 projects under construction 1 project at procurement stage 1 project at planning stage	10 projects - Mar '14 2 Projects - May '14
Free State	DBE - ASIDI	10	Site handovers to contractors in progress - to be completed during July '13	April '14 - Oct '14
Gauteng	GDE	3	3 projects under construction	October 2013
KwaZulu-Natal	KZN DoE	5	5 projects under construction	November 2013
Mpumalanga	MP DoE	15	14 projects under construction 1 project at procurement	August '13 - April '14
North West	NW DoE	5	4 projects under construction 1 project at procurement	March 2014
Northern Cape	NC DoE	5	5 projects under construction	March 2014
TOTAL		66		

Note: IDT appointment in progress for an additional 30 schools in Eastern Cape



Current IDT Schools Infrastructure Programmes – Water/Sanitation - 2013/14


Province	Client	No. Schools	Progress	Completion Date
Eastern Cape	DBE - ASIDI	159	Contractor procurement in progress, appointments to be made in August '13	November 2013
Gauteng	GDE	1	Project under construction	July 2013
KwaZulu-Natal	DBE - ASIDI	91	All projects at contractor procurement stage	November 2013
Limpopo	DBE	55	28 projects are under construction 22 projects are at procurement 5 projects are at planning stage	November 2013
North West	DoE (ASIDI)	15	At contractor procurement stage - appointing in July '13	October 2013
TOTAL		321		



Current IDT Schools Infrastructure Programmes – Renovations/ Additions

Province	Client	No. Schools	Progress
Eastern Cape	EC DoE	200	87 projects under construction 50 projects at planning / procurement stage 63 projects on hold
Free State	FS DPW	6	3 projects complete 3 projects under construction
Gauteng	GDE	26	26 projects under construction
KwaZulu-Natal	KZN DoE	205	164 project under construction 41 projects are at planning/procurement
Limpopo	LDoE	41	All projects are at construction stage
North West	NW DoE	65	45 projects under construction 11 projects at procurement 6 projects at planning stage 3 projects on hold
Northern Cape	NC DoE	40	33 projects under construction 5 projects at procurement 2 projects on hold
TOTAL		583	

Note: The commencement dates of these projects vary but most are expected to be completed by March 2014





IDT Participation in SIP 13

- ✦ IDT has been appointed as one of the Implementing Agents by DBE under the ASIDI programme
- ✦ Appointment relates to construction of 22 schools (10 in FS and 12 in EC).
- ✦ IDT appointment for an additional 30 EC schools to be constructed using ACMs is underway
- ✦ Construction work in schools is largely upgrades of existing mud and inappropriate schools entailing additions and replacements
- ✦ IDT also appointed in KZN, EC, LP and NW by DBE to upgrade/install water and sanitation facilities in schools
- ✦ The IDT has been advised of the PICC intention to appoint it as a co-coordinator with DBSA for SIP 13



Alternative Construction Methods (ACMs)





What are ACMs?


- ☀ Alternative Construction Methods (ACM) use materials and methods that are not conventional, i.e. not brick and mortar.
- ☀ ACMs are Agrément SA certified complete building systems (from sub-structure to roof)
- ☀ ACMs are generally panelised systems



Use of ACMs



- ☀ For an ACM to be used in the public sector it must be certified by Agrément SA
- ☀ The Certificate refers to a Quality Control Manual that ensures the system is installed according to the standards
- ☀ Departure from the conditions of the Certificate could invalidate the Certificate, and make the system non-compliant with Agrément SA, in which case an Occupation Certificate may be refused by the Local Authority
- ☀ ACM contractors need to be licensed by the certificate holder






Design


- ☀️ ACM methods can be applied to any design.
- ☀️ However, to achieve design flexibility using manufactured systems require that maximum use of the kit is made, i.e., the design must follow the kit, not the kit following the design. This requires a new design approach, one that is very disciplined with regard to dimensional co-ordination, modularity, size and shape, and jointing, if the kit is to be maximised and wastage reduced.



Energy efficiency



- ☀️ Manufactured systems will generally out-perform conventional brick and mortar systems when it comes to energy efficiency. Most panelised systems make use of insulated cores that offer higher thermal resistance values than conventional construction.
- ☀️ Furthermore it is possible to achieve improved airtightness which improves the energy efficiency of the building.






Environmental Considerations


- ✦ ACMs are generally more environmentally friendly because the materials are:
 - ✦ Inert (no off-gassing or flaking)
 - ✦ Safe (no toxins)
 - ✦ Recyclable (steel)
 - ✦ Resource efficient (minimum waste)
 - ✦ Environmentally friendly (less cement, aggregates and water used)



Local Economic Contribution



- ✦ Materials – the local economic contribution is dependent on the type of ACM but typically the majority of building materials (by value) are conventional and can be sourced locally
- ✦ Labour – the construction method is labour-intensive and the larger portion of labour cost can be spent on local labour in the erection of the ACM as well as in conventional skilled labour such as plastering and painting
- ✦ The choice of ACM should be influenced by the availability of local materials and labour to maximise local economic contribution
- ✦ ACMs promote local job creation but with differentiated distribution (in factory and on site). Site job opportunities are however for shorter periods
- ✦ ACMs promote industrialisation and hence contribute to decent job creation






Benefits arising from the use of ACMs


- ☀ Quality is generally higher but at least equivalent to conventional methods
- ☀ Facilities can be delivered more quickly than with conventional methods
- ☀ Construction costs are lower than with conventional methods
- ☀ Thermal efficiency is often better but is at least equivalent to conventional methods
- ☀ Delivery of materials is made easier with panelised systems (less and lighter) than conventional methods



Benefits arising from the use of ACMs - cont



- ☀ Performs technically (weatherproofing,) as well if not better than conventional methods
- ☀ Environmentally more sustainable (water, energy, material efficiency) than conventional methods
- ☀ Contributes towards local economic growth through labour and material acquisition
- ☀ Up-skills construction industry
- ☀ Local skills transfer (site fabrication and assembly)






Limitations of ACMs


- ☀ Long-term durability and life cycle cost of the ACMs under local conditions has not been tested
- ☀ Design must take into consideration the specific nature of the ACM (e.g. panelised system)
- ☀ Once-off use of ACM in an area limits the benefits of skills transfer and the opportunity of utilisation of acquired skills
- ☀ More advocacy work is still required to promote social acceptance, but the initial response has been positive



Recommendations - ACMs



- ☀ ACM offers distinct advantages over conventional construction in relation to speed, cost and quality
- ☀ Considering the maintenance intensive nature of ACMs it seems likely that conventional method would outperform ACMs in life cycle cost and life span
- ☀ It is recommended that ACMs be a considered as a feasible alternative to enhance delivery of school infrastructure, where urgency is a primary factor





Conclusion

- ☀ This presentation has highlighted the significant contribution that IDT has made and continues to make to the implementation of the full range of school infrastructure
- ☀ The IDT is not the driver/ responsible government structure for the programme. DBE & Provincial Departments of Education are responsible
- ☀ As outlined in the IDT Service Delivery Model, the IDT's work and products are dependent on the programmes it has been contracted to implement by the client department



Thank You

