

DETERMINATION OF THE CURRENT INFRASTRUCTURE BACKLOGS BASED ON THE REGULATIONS RELATING TO MINIMUM UNIFORM NORMS AND STANDARDS FOR PUBLIC SCHOOL INFRASTRUCTURE

1. METHODOLOGY EMPLOYED TO DETERMINE BACKLOGS AGAINST THE REGULATIONS:

- Survey forms in a simple format, based on the Regulations were developed for schools to complete. [Hyperlink -Schools Infrastructure Information 23Jan14.doc]
- An excel spread sheet to capture the data collected from schools as well as to analyse the data was developed. [Hyperlink - EN 4Feb2014.xlsx]
- Capturing of the information was done at district level.
- Analysis of the data was done by Head Office.
- Although data was collected from both ordinary and special schools only the data for ordinary schools was analysed as the Regulations focus on primary and secondary schools.

2. LIMITATIONS OF THE PROCESS:

- 1 755 of the 2 072 public ordinary schools returned the survey forms (85%), even though schools had to weeks to complete the forms. When the analysis was done the data was extrapolated to 2 072 schools. To reach a return rate of 85% numerous follow ups had to be made and reminders sent to schools
- Some schools completed the survey forms incorrectly, even though Districts held sessions with principals to explain how the forms should be completed. District Physical Planners had to go back to schools to assist principals.
- Districts did not have experienced capturers available to do the capturing of data on the excel spread sheets. Numerous mistakes were made with the capturing of the data and Physical Planners had to verify all the data captured. Some Districts are still busy with the verification process.
- Due to incorrect data not all the data received from schools could be used for the analysis. This is further explained under each of the categories below.

3. ADDRESSING BACKLOGS ACCORDING TO THE TARGETS DETERMINED BY THE REGULATIONS

3.1. THREE (3) YEAR TARGET

3.1.1. Regulation 3(a): Schools built entirely from mud, asbestos, wood and metal

There are no schools built entirely from mud, wood or metal. There are however 26 schools that consists entirely/ predominantly of either asbestos or fibre cement. A process is under way to determine whether these schools consist of asbestos or fibre cement. This can only be determined by a specialist. However, for the purpose of the backlog determination against the Regulations, it will be assumed that all 26 schools are built of asbestos as these schools were built prior to 1980. Once the number of schools that consist entirely/ predominantly of actual asbestos has been determined, these schools will be prioritised for replacement based on condition.

3.1.2. Regulation 3(b): Schools that do not have any access to any form of power supply, water supply and sanitation

All schools have access to some form of water and sanitation. There are 2 schools without electricity. These schools have previously been provided with solar electricity through the ASIDI programme but due the vulnerability of the school resulting from the area in which the schools are situated, the solar systems at both schools were stolen a few weeks after the installation. The schools will now be provided with generators that can be locked up after school. The cost of the generators will not be factored into the norms and standards backlog eradication plan.

3.2. SEVEN (7) YEAR TARGET

Regulation 3(c): Prioritise norms and standards relating to availability of classrooms, electricity, water, sanitation, electronic connectivity and perimeter security

3.2.1. Availability of classrooms: New schools and ordinary classrooms backlogs:

Although only 1 755 schools submitted survey forms, data for 101 of the 317 schools that did not submit survey forms could be found on the NEIMS database. This brought the number of schools for which ordinary classroom data is available to 1 856.

533 of the 1 856 schools have classroom shortages. These schools were grouped into residential suburbs. If the total number of classroom shortages were enough to constitute a full school, the numbers of classroom shortages were translated into full schools. This resulted in a shortage/backlog of 43 primary and 66 secondary schools, a total of 109 schools. If this number is extrapolated to the 2 072 public ordinary schools, 122 new schools are required, i.e. 48 primary schools and 74 secondary schools.

A total of 496 primary school classrooms and 462 secondary school classrooms are required in areas where the total classroom shortage in the area is not enough to constitute a full school building. A grand total of 958 ordinary classrooms, based on the 1 856 schools that returned the

survey forms, are required in these areas. If this is extrapolated to the 2 072 public ordinary schools, an additional 1 069 ordinary classrooms are required at existing schools.

3.2.2. Availability of electricity: Schools partially without electricity

28 schools have a total of 86 facilities without electricity. These units range from classrooms to toilets and stores etc.

3.2.3. Availability of water: Schools without sufficient water

All schools are provided with some form of water supply in various forms. Of the 2 072 schools, 54 schools are reliant on boreholes. The remaining 2 018 all have municipal connections.

3.2.4. Availability of sanitation: Schools with pit latrines and schools with insufficient toilets Of the 1 7 55 schools some do not have a sufficient number of toilets for learners whilst others have an insufficient number of toilets for educators. The breakdown of these shortages is as follow:

- 264 schools have a shortage of 1 093 girls' toilet seats. 650 chemical toilets are used by girls to alleviate the shortage of toilets. This brings the total shortage of girls' toilet seats to 1 743. If this is extrapolated to 2 072 schools the shortage is 2 058.
- 262 schools have a shortage of 1 056 boys' toilet seats. 554 chemical toilets are used by boys to alleviate the shortage of toilets. This brings the total shortage of boys' toilet seats to 1 610.
 Extrapolated to 2 072 schools the shortage becomes 1 901.
- 351 schools have a shortage of 1 422 urinals for boys. Extrapolated to 2 072 schools the shortage becomes 1 679.
- 156 schools have a shortage of 251 toilet seats for grade R learners. Extrapolated to 2 072 schools the shortage becomes 296.
- 1 263 schools have a shortage of 2 080 toilets for people with disabilities. Extrapolated to 2 072 schools the shortage becomes 2 456.
- 432 schools have of shortage of 662 toilet seats for female staff. Extrapolated to 2 072 schools the shortage becomes 734.
- 205 schools have a shortage of 210 toilet seats for male staff. Extrapolated to 2 072 schools the shortage becomes 248.
- 303 schools have a shortage of 458 urinals for male staff. Extrapolated to 2 072 schools the shortage becomes 541.
- 7 schools have a total of 92 pit toilet seats that must be replaced with waterborne systems, including conservancy and water tanks. Extrapolated to 2 072 schools the shortage becomes 109.

3.2.5. Availability of electronic connectivity

1 419 of the 1 755 schools have electronic connectivity for administration purposes, 1 065 have connectivity for learning and teaching whilst 764 have a wireless network. If the 1 419 schools with electronic connectivity is extrapolated to the 2 071 schools then 1 675 schools have connectivity which means that 397 schools must be provided with connectivity.

3.2.6. Availability of perimeter security:

In terms of Regulation 17 each school site must be surrounded by appropriate fencing to a minimum height of at least 1.8m in height.

283 of the 1 755 schools that returned the survey forms do not have appropriate fencing, i.e. the school is not completely surrounded by fencing of a minimum height of 1.8m or the fence is dilapidated. If this is extrapolated to the 2 072 the number of schools with inappropriate fencing is 334. 174 of the 283 fences are in a poor condition.

3.3. TEN (10) YEAR TARGET

3.3.1.SPECIALIST CLASSROOMS/ FACILITIES BACKLOGS:

3.3.1.1. Grade R classrooms

The number of grade R classrooms required per school is calculated based on the existing number of grade R learners enrolled at each school, at a ratio of 30 learners per classroom. Of the 1 755 schools that submitted survey forms, 1 253 have grade R learners. Of the 1 253 schools, 953 have standard grade R classrooms. The remaining 300 use ordinary classrooms or other type of structures to accommodate their grade R learners. These 300 schools have a total shortage of 651 grade R classrooms. Of the 953 schools that have grade R classrooms, 138 have a shortage of 243 classrooms.

The total number of grade R learners enrolled in the 1 253 schools is 93 186. The total number of grade R learners enrolled in the province is 98 137. The total shortage of grade R classrooms in the 1 253 schools with 93 186 grade R learners is 894. If this number is extrapolated to the 98 137 learners enrolled in grade R in the province, the total shortage of grade R classrooms in the province is 939.

3.3.1.2. Libraries

520 of the 1 755 schools do not have libraries. If this is extrapolated to 2 072 schools, the shortage becomes 613.

3.3.1.3. Multimedia centre

336 schools should have multi media centres. Of these 336 schools, 147 have libraries. Of the 147 that have libraries, 124 schools have both a library and a computer centre. Therefore, 23 schools have libraries that can be converted into a multimedia centre and 189 schools require newly built multimedia centres. Extrapolated to 2 072 schools it becomes 27 and 223 schools respectively.

3.3.1.4. Physical Sciences laboratories

1 311 schools do not have laboratories for Physical Sciences. Extrapolated to 2 072 schools it becomes 1 548

3.3.1.5. Life Sciences Laboratories

284 secondary schools do not have Life Sciences laboratories. Extrapolated to 2 072 schools it becomes 335.

3.3.1.6. Technology rooms:

1 544 schools do not have technology rooms. Extrapolated to 2 072 schools it becomes 1 823.

3.4. 2030 TARGET

3.4.1.SPECIALIST CLASSROOMS/ FACILITIES BACKLOGS:

- 3.4.1.1. Multipurpose classrooms
- 3.4.1.2. Computer rooms

3.4.2.ADMINISTRATION AREAS

- 3.4.2.1. Principal's office
- 3.4.2.2. Deputy principal's office
- 3.4.2.3. Admin office
- 3.4.2.4. Reception area
- 3.4.2.5. Storage for admin
- 3.4.2.6. Strong room
- 3.4.2.7. Counseling room
- 3.4.2.8. Staff kitchenette
- 3.4.2.9. Sick room
- 3.4.2.10. HOD's offices
- 3.4.2.11. Printing room

3.4.3. PARKING BAYS

3.4.4.TOILETS

- 3.4.5.STORAGE AREAS PER CLASSROOM
- 3.4.6.NUTRITION CENTRE (WHERE NSNP IS IMPLEMENTED)
- 3.4.7.AREA FOR PHYSICAL EDUCATION, SPORT AND RECREATION