

# **APPENDIX 3:**

# **STATISTICAL ANALYSIS**



**MPAT**

Management Performance  
Assessment Tool

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# Introduction

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This Statistical Appendix supports the DPME Report “State of management practices in the Public Service 2013” by presenting the results of analyses in the form of graphs, tables, and some brief explanations and implications for public management.

The Appendix is arranged in three sections:

- A. Analysis of the current 2013 scores on MPAT standards and Key Performance Areas in national and provincial departments, and also with departments rearranged into eight sectors;
- B. Extensive comparisons with the previous 2012 scores; and
- C. Advanced analyses of how the KPAs and standards relate to each other and to various independent measures, notably those of the Auditor-General.

Some definitions of the main Report will be recapitulated here, since they refer to the ingredients of all the reporting in this Appendix. There are thirty-three MPAT standards, arranged into five Key Performance Areas:

- KPA 1: Strategic Management
- KPA 2: Governance & Accountability
- KPA 3: Human Resource & Systems Management;
- KPA 4: Financial Management
- KPA 5: The MPAT Process

For example, “Annual Performance Plans” is one of the three MPAT standards under KPA 1; “Policies and systems to ensure professional ethics” is one of eleven standards under KPA2; and so on. There are eleven standards in KPA 3, and seven in KPA 4. The full list of standards in each KPA may be seen across the top of Figure 8, for example. KPA 5 is new, and only contains one standard for the moment.<sup>1</sup> (It is accordingly only displayed in certain tables, when standards are being separately considered.) The original thrust of each standard involves *compliance*, but it will be seen as the analysis proceeds that compliance with some standards is more closely connected than others with departmental *performance*.

Each MPAT standard has four levels of proficiency, represented by a colour throughout this Appendix:

- (1) Non-compliance with legal/regulatory standards (red);
- (2) Partial compliance (orange);
- (3) Full compliance (yellow);
- (4) Full compliance while “doing things smartly” (green).

For every standard, senior managers of each national or provincial department 155 in all - conduct self-assessments, using a checklist. These scores for the standards are then pooled, and externally moderated to yield final scores for the standards. All the scores

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<sup>1</sup> KPA 5: MPAT and its single standard are newly implemented in 2013, as are two standards PAIA ND Health & Wellness in KPA 2: Governance and Accountability.

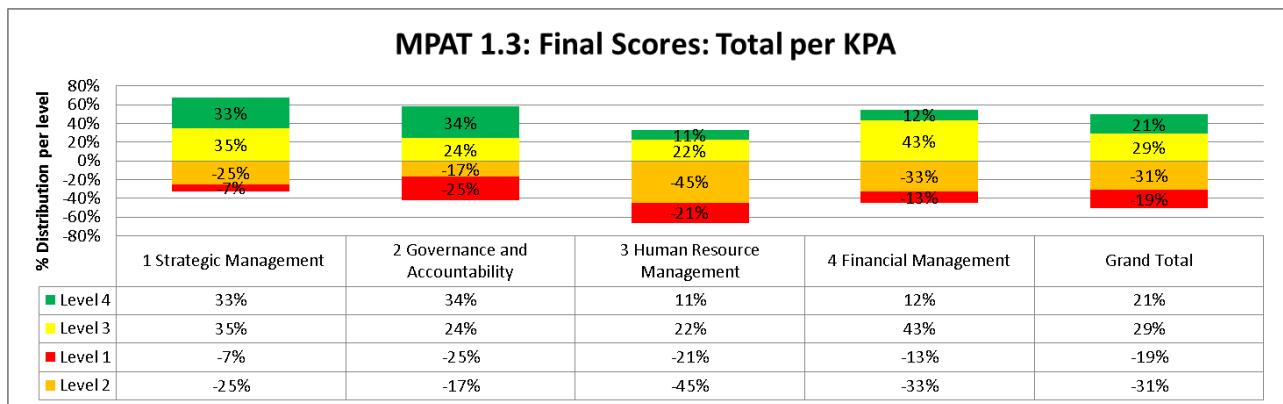
reported in this Appendix are final scores.<sup>2</sup> We may now turn to section A, on the current situation.

## A: Current 2013 scores on MPAT KPAs and standards

In this section the graphs and table all deal with the scores of national and provincial departments, or with the scores rearranged by sector, for the latest period 2013. Within DPME, this is designated as “MPAT 1.3”.

Figure 1 below shows, for 2013 averaged across all 155 departments, the proportions of levels 1 through 4 that emerged when the respective standards were averaged within each KPA. This and succeeding such graphs show levels 3 and 4, i.e. full and full “smart” compliance, above a zero line; and levels 1 and 2, partial- and non-compliance, as beneath the zero line.

**Figure 1: Percentages of all departments at levels 1- 4 within the four KPAs for 2013**



Looking at the second coloured column reflecting KPA 2: Governance and Accountability, this arrangement makes it easy to see that 34% of the 155 departments scored at the top, green-coloured, level 4. Similarly, for KPA 1: Strategic Management some 33% of departments scored 4s. By contrast, compliance with the third KPA, HR Management, is weakest: a total of 45% plus 21%, i.e. 66% of departments scored only a 2 or a 1, orange and red respectively, for this KPA.

The rightmost bar depicts the grand totals across all four of the KPAs. It is cause for concern, in that only half, 50%, of the 155 departments (i.e. 29% plus 21%) achieve either full or “smart” compliance on average across the MPAT standards or KPAs.

Figure 2 below takes that rightmost column, the total score across KPAs, and breaks it down for the nine provinces, as well as for the national departments grouped all together and labelled “National”. Firstly, one sees - at the right-hand end - that Western Cape fares best, with 45% of its thirteen departments scoring 4s for “smart” full compliance and a further 31% scoring 3s. This gives it 76%, or three quarters, of its departments “above

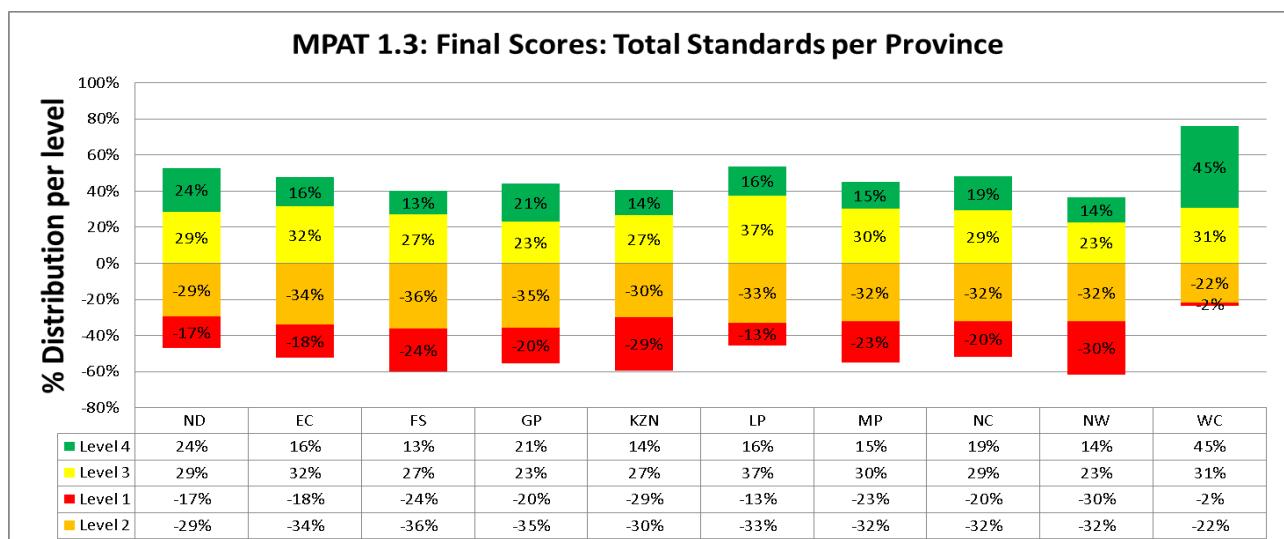
<sup>2</sup> The differences between self-reported and final scores may be relevant: a large difference might suggest that a department is trying to “game” the system, whereas a difference that decreases over time may suggest that a department is becoming more proficient and realistic in its self-appraisal. These differences are not considered in this Appendix.

the line". Conversely, only 24% (22% plus 2%) of its departments score 1s and 2s "below the line", that is for partial- or non-compliance.

By contrast, three provinces are roughly equally worst: North West, Free State and KZN, with totals of 62%, 60% and 59% "below the line", i.e. for partial- or non-compliance.

Between these extremes, National departments taken together and Limpopo do comparatively well coming come behind Western Cape, both with more than half (53%), of their departments scoring 3s or 4s "above the line". The remaining four departments - Eastern Cape, Northern Cape, Gauteng and Mpumalanga - fall midway. It will be seen in section B that variations between the provinces, excepting Western Cape, are decreasing compared to 2012. This may reflect some "bedding down" of the MPAT system; but also some improvements among the weakest departments, spurred by the information (and some slight deterioration among the stronger). Clues become available when change compared to 2012 is considered below.

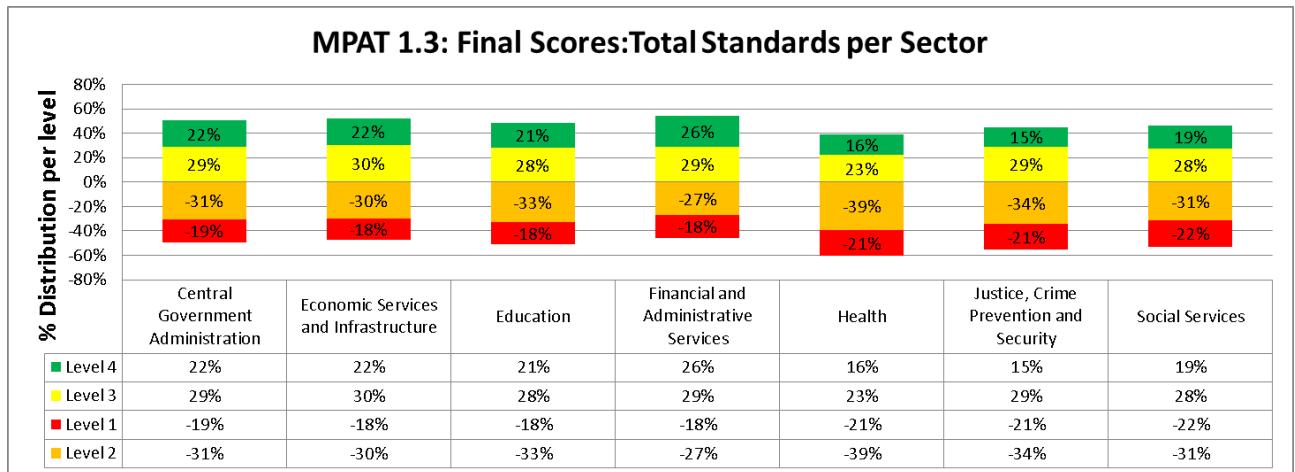
**Figure 2: Percentages of departments at levels 1 - 4 within each province for 2013**



It is also possible to see how the overall average across the four KPAs breaks down by *sectoral* groupings of department, as shown in Figure 3 below. The national and provincial departments grouped in the Health sector fare marginally worst, with 60% of them achieving 1s or 2s, "beneath the line" (39% plus 21%). The Justice, Prevention and Security sector was only marginally better, with 55% of its departments beneath the line.

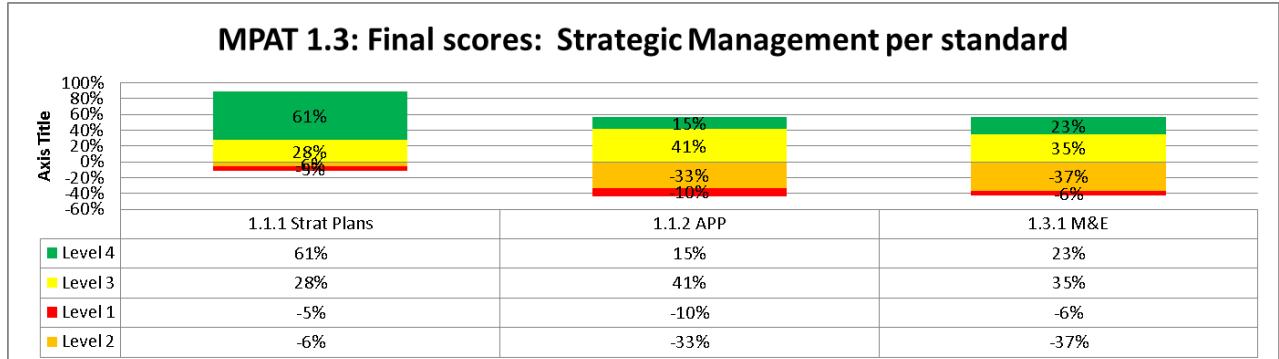
By contrast, departments grouped in the Financial and Administrative Services sector fared best, with 55% above the line (within which 26% are "smart"). However, the variation when departments are grouped into sectors is less substantial than that among provinces/National.

**Figure 3: Percentages of departments at levels 1 - 4 within each sector for 2013**



In the foregoing two graphs, Figures 2 and 3, we considered variations by province/National or by sector for the four averaged KPAs. We now look at the current situation, 2013, in a complementary way: averaging across provinces and National combined in order to examine how the 155 departments together fare for the component standards within each KPA. We start with KPA 1: Strategic Management. Figure 5 below shows its three component standards, viz., Strategic Management, Annual Performance Plans (APP) and Monitoring and Evaluation (M&E).

**Figure 4: KPA 1: Strategic Management - Percentages of departments at levels 1 - 4**

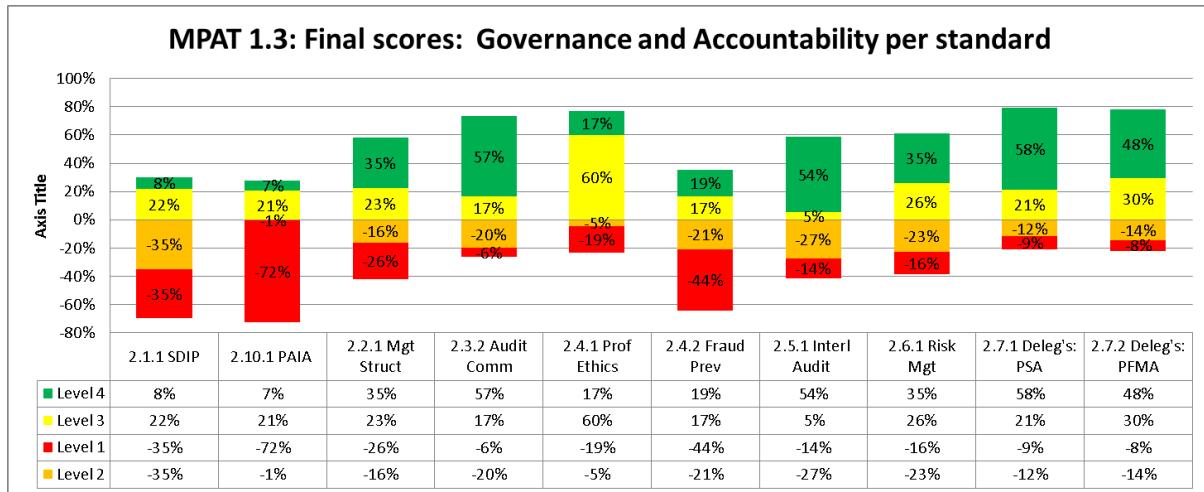


A striking contrast emerges. Across the 155 Departments, they fare much better at making Strategic Plans (only 11% of departments “below the line” with 1s or 2s) than at the instruments for implementing them, the APPs and M&E (both showing 43% of departments “below the line”). This is an important insight, for part of what needs to be tackled at an institutional level across government for improvement in service-delivery.

The graph for KPA 2: Governance and Accountability seems to bring good and bad news, seen in Figure 5. The apparatus for Finance compliance is strong, seen in the striking percentages of the 155 departments at level 4 (green) for Audit Committees and Internal Audit. A similarly striking percentage of 4s is seen for PSA Delegations. But for two reasons the worry arises that this may reflect some “box-ticking.”

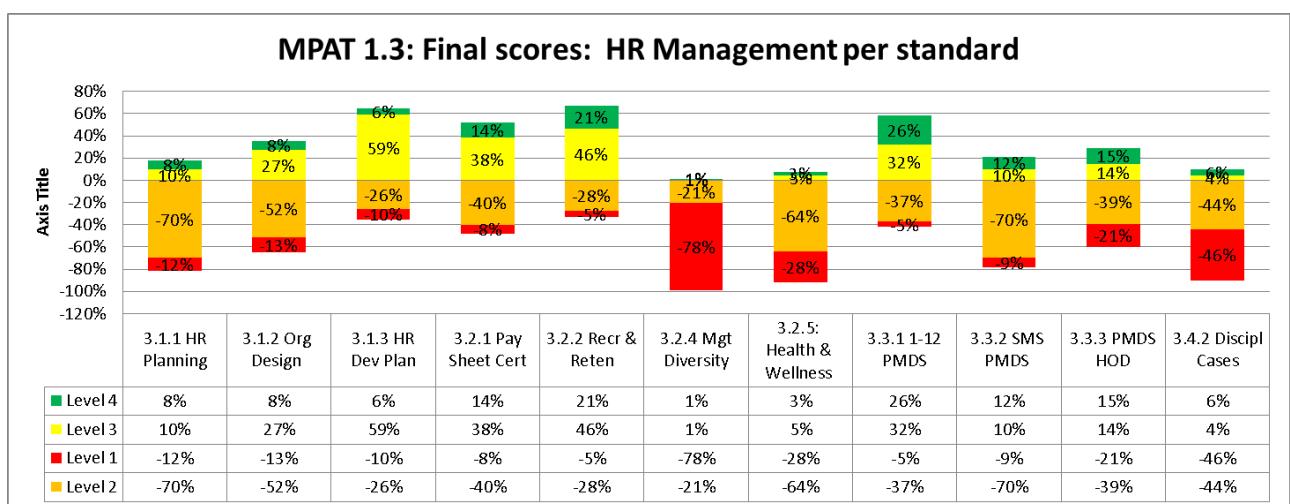
Firstly, the level of 4s drops off a little regarding PFMA Delegations, i.e. entrusting managers with their finances. Secondly, at the other extreme, Service Delivery Improvement Plans (SDIPs) fare worst among this set of standards, with 70% of departments “below the line”; followed by Fraud Prevention at 65% “below the line”, which is where Audit and Internal Audit are put to practical test. This pattern accords worryingly with the insight from Figure 4, that strategy may not be carried through into planning and monitoring. It seems that departments are falling short on those aspects of compliance most related to actually achieving outcomes.

**Figure 5: KPA 2: Governance & Accountability - Percentages of departments at levels 1 - 4**



The HR Management area, KPA 3 (see Figure 6), as seen across all departments, is worryingly uneven. On the one hand 68% of all departments are scoring 3s or 4s for Recruitment and Retention, and 58% for Performance Management: Levels 1-12 (moreover with reassuring proportions with 4s). These are key aspects of getting the right managers onto the job.

**Figure 6: KPA 3: HR Management - Percentages of departments at levels 1 - 4**

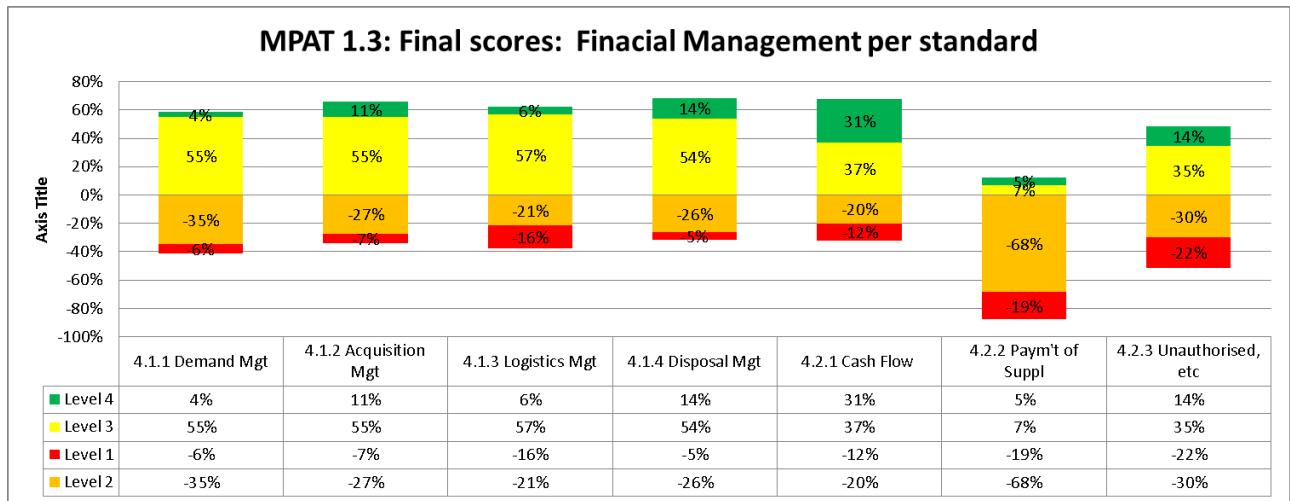


But a large majority of departments only get 1s or 2s for Performance Management of SMS; and the scores are as bad for HR Planning (the “carrot”) and Disciplinary Cases (the

“stick”). It may be said for Health and Wellness that compliance is very poor because it is a new requirement; but Diversity Management is not new, yet compliance is even poorer (more than three quarters of departments report a 1). It is has been a thorny problem that needs a new approach.

In Figure 7, the situation regarding KPA 4: Financial Management seems somewhat more reassuring. In all but one standard, large percentages of departments get 3s (although only for *Cash Flow* do a noticeable proportion get 4s). The exception, however, gives cause for concern.

**Figure 7: KPA 4: Financial Management - Percentages of departments at levels 1 - 4**



A huge 87% of departments get only 1s or 2s on Payment of Suppliers, notwithstanding the long-proclaimed intention for government to pay in thirty days. Yet again, this is an aspect of compliance revealing of the functional adequacy of actual systems, and they are failing dismally.

The graphs and interpretations hitherto have averaged the MPAT standards across KPAs, or across departments and sectors, to allow higher-level insights. However, executives within sectors or provinces also need insight into results for the separate standards at a department-by-department level, and comparisons among them. This is enabled by the matrix shown in Figure 8.

This figure displays the final scores on the 33 MPAT 2013 standards only for the 41 *national* departments in the analysis, using the established colour codes: red=1, orange=2, yellow=3, green=4. To illustrate: in row 3, Basic Education is seen to get a green=4 for Strategic Planning but - in line with the tendency discussed earlier - drops to a yellow=3 for Annual Performance Planning, and only a red=1 for M&E.

At the foot is a summary of the percentage of the 41 departments (only *national* in this display) that fall into the respective standards<sup>3</sup>. Looking across the first row of the summary, for example, from the left, one sees that 41% of national departments achieve a

<sup>3</sup> These figures are analogous to those shown for *all* departments in Figures 5 through 7.

4 for the Strategic Planning standard, but this is achieved by only 5% of departments for their Annual Performance Plans, and only 11% for M&E.

**Figure 8: MPAT 2013 scores for thirty-one standards for all national departments**

			MPAT 2013 STANDARDS FOR NATIONAL DEPARTMENTS (COLOUR CODED BY LEVEL)																																								
National Departments			1.1.1 Strat Plans	1.1.2 APP	1.3.1 M&E	2.1.1 SDIP	2.10.1 PAIA	2.2.1 Mgt Struct	2.3.2 Audit Comm	2.4.1 Prof Ethics	2.4.2 Fraud Prev	2.5.1 Inter Audit	2.6.1 Risk Mgt	2.7.1 Deleg's: PSA	2.7.2 Deleg's: PFMA	3.1.1 HR Planning	3.1.2 Org Design	3.1.3 HR Dev Plan	3.2.1 Pay Sheet Cert	3.2.2 Recr & Reten	3.2.4 Mgt Diversity	3.2.5 Health & Wellness	3.3.1-12 PMDS	3.3.2 PMDS HOD	3.4.2 Discipl Cases	4.1.1 Demand Mgt	4.1.2 Acquisition Mgt	4.1.3 Logistics Mgt	4.1.4 Disposal Mgt	4.2.1 Cash Flow	4.2.2 Paymt of Suppl	4.2.3 Unauthorised, etc											
			ND Trade & Ind	ND Enviro	ND PM&E	ND Tourism	ND GCIS	ND Science and Tech	ND Energy	ND Min Res	ND Justice	ND B Educ	ND Health	ND Treasury	ND Presidency	ND Comm	ND PSC	ND A,F & F	ND Statis SA	ND Transp	ND COG	ND Hig Educ	ND Socl Dev	ND Econ Dev	ND Home Affairs	ND Hum Settl	ND Rural Dev & Land	ND Sports & Recr	ND Police	ND PALAMA	ND PSA	ND Defence	ND Labour	ND A & C	ND Pub Enterp	ND Water Aff	ND Correct	ND Trad Aff	ND IPID	ND IRCO	ND Pub Works	ND WC & D	ND Mil Vet
4	68	5	12	5	2	54	49	20	22	41	41	63	54	7	7	12	15	27	2	0	22	12	12	15	5	20	2	24	44	10	29												
3	17	37	37	10	12	15	27	46	15	5	17	27	32	17	39	61	41	46	0	5	24	10	22	5	66	49	76	51	39	5	37												
2	10	46	44	27	0	10	22	5	17	41	20	7	7	63	44	20	37	24	10	59	49	66	39	39	27	27	17	20	12	76	29												
1	5	12	7	59	83	22	2	29	46	12	22	2	7	12	10	7	7	2	88	37	5	12	20	41	2	5	5	5	5	10	5												
Missing	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												

Figure 8 is a rich source of public management insight. The figure may be used visually for strategic diagnosis. Entire columns mainly of red (SDIP, PAIA, and Diversity Management) indicate critical weakness in these respects across national government, unless there are good reasons such as a newly introduced standard. In contrast, columns mainly of green are reassurance of “smart” full compliance by most departments (PFMA and PSA Delegations as well as Strategic Plans). Mainly yellow columns indicate where “quick wins” may be made by interventions at national level to convert 3s into 4s (e.g. Demand or Acquisitions Management).

In similar vein, horizontal readings are instructive at individual-departmental level. Rows that are appreciably made up of green signal excelling departments, which can serve as compliance exemplars: e.g. Environment, and Trade and Industry. Conversely, in 2013 Agriculture, Forestry and Fisheries and Women, Children, and People with Disabilities were both down to red on the related Governance standards of Ethics, Fraud, Internal Audit and Risk.

**Figure 9: 2013 provincial and national KPA ratings**

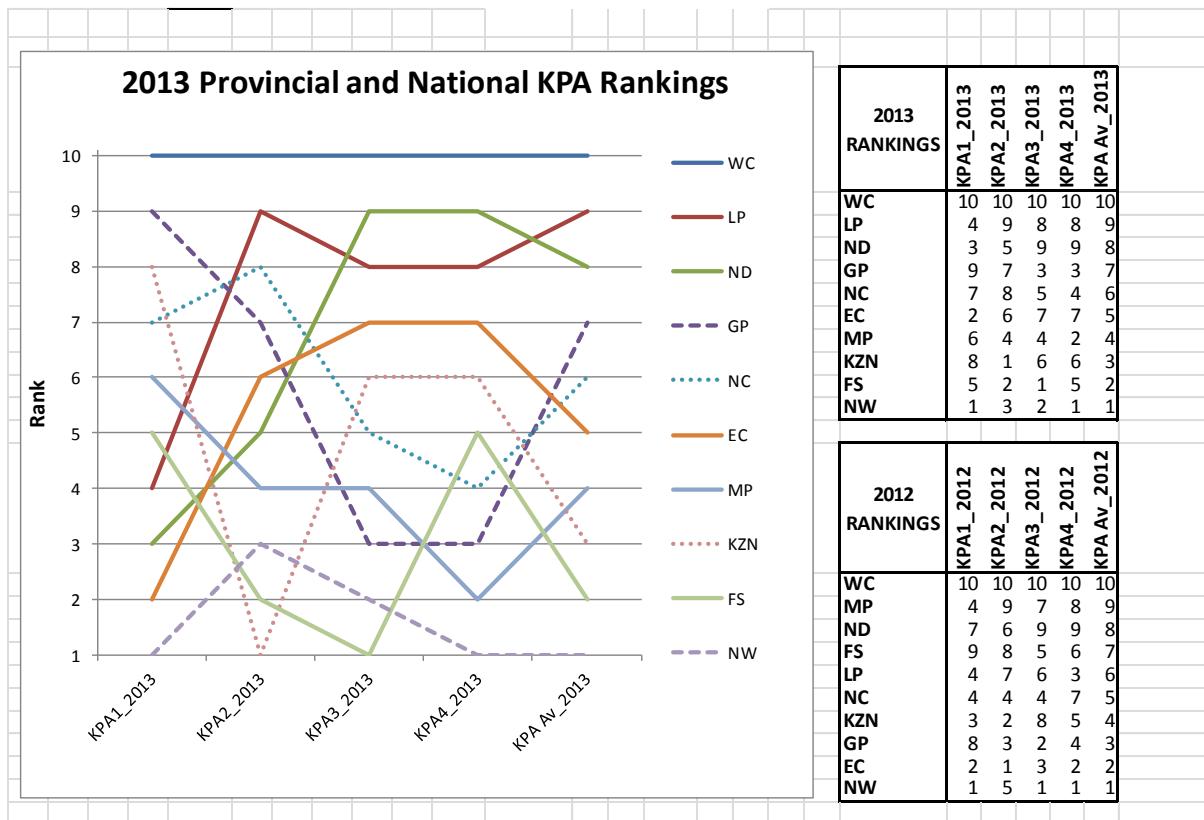
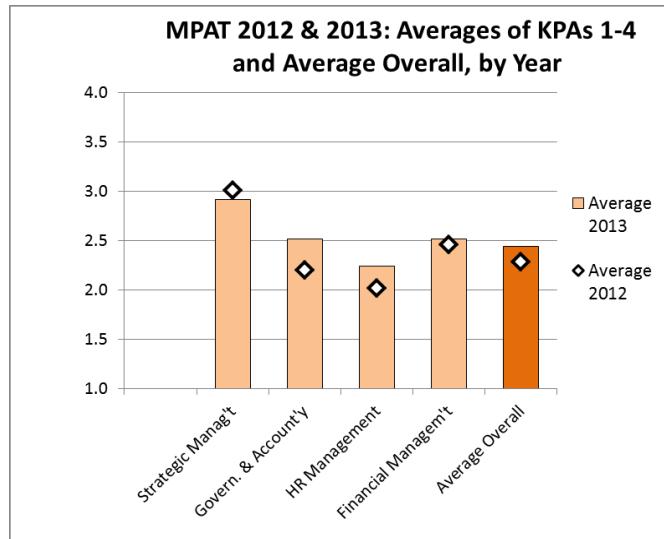


Figure 9 above repeats an analysis from 2012 showing for each province, its ranking among all provinces and national departments, for each of the four KPAs in turn. The numerical rankings for 2012 and 2013 are shown in the adjacent tables. Some features are unchanged: Western Cape remains at the top, national departments remain third from the top and North West is again bottom of the rankings. Notable changes are that Eastern Cape has improved three ranks, and Gauteng improved by four, whereas Mpumalanga and Free State deteriorated markedly by five ranks. Changes in particular KPAs can be read from the tables for any province or national department.

## B: Changes for KPAs and MPAT standards from 2012 to 2013

Given the plethora of information as digested above for a single year, 2013 (MPAT cycle 1.3), it is a challenge to identify and display relevant contrasts and trends from among the enormous range of possible comparisons with the previous year, 2012 (MPAT cycle 1.2). The notation we introduce in Figure 10 will be helpful.

**Figure 10: Changes in KPA averages across all departments, from 2012 to 2013**



The diamonds show the MPAT score in the earlier period, and the shaded bars in the later period. The scale runs, as we saw in the Introduction, from 1 to 4. For instance, for HR Management in 2012 the average MPAT score across all 155 departments was 2.0 (shown by the diamond); and by 2013 it had improved to 2.25 (shown by the bar). But it is also seen that HR remained the poorest performer of the four KPAs.

Governance and Accountability across departments also improved noticeably, and from a higher base,

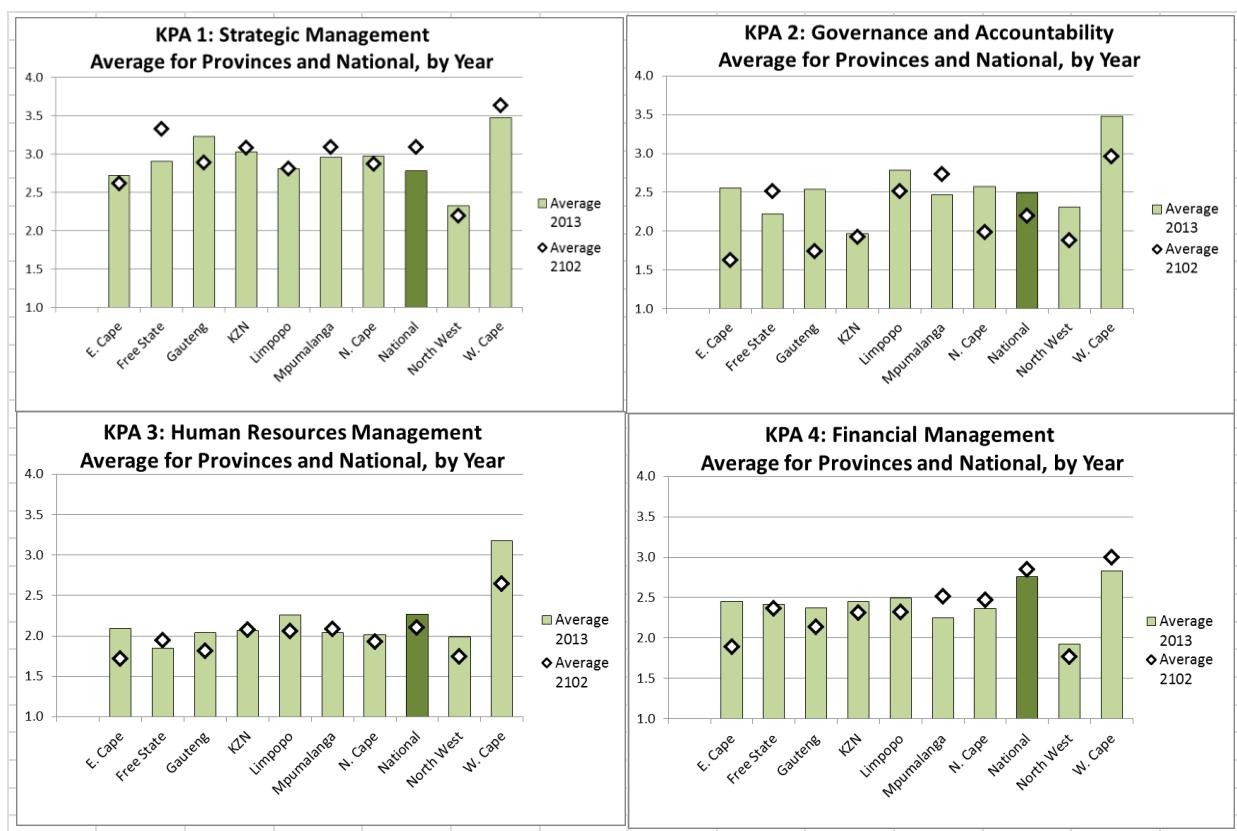
from 2.2 to 2.5 (the bar indicating 2013 is higher than the diamond indicating 2012). Financial Management stayed the same, and Strategic Management deteriorated slightly (the bar is beneath the diamond).

Equipped with this notation, we may in compact fashion discern changes for the four KPAs, first broken down by province (plus the national departments as a group, called “National” and identified with darker shading). The four change-graphs are presented overleaf as a panel, Figure 11, to facilitate comparison. We abbreviate the KPA titles for convenience. The following may be noted.

- Western Cape has improved appreciably in KPA2: Governance and KPA3: HR, since the green bars are substantially higher than the diamonds representing the previous year’s scores. It is also best-scoring on the other two KPAs, Strategy and Finance, although it has deteriorated slightly in these two respects.
- At the other extreme, although NW has improved on all KPAs, notably Governance, it remains the worst province in three KPAs and second-worst in the remaining KPA.
- Mpumalanga deteriorated somewhat on all four KPAs, and Free State on three.
- The average MPAT score across provinces is lowest for KPA 3: HR, at around 2. With just two exceptions, there has been improvement in all provinces and National, but it slight. Together, these signal a need for intervention towards a countrywide improvement in the HR function.

- KPA 4: Finance presents a similar picture of mainly even performance, but off a somewhat higher base: several provinces have improved somewhat, to between 2 and 2.5, Only Mpumalanga deteriorated markedly.
- In KPA 2: Governance the changes have been more marked. Five provinces have improved markedly (E. Cape, Gauteng, N. Cape and North West and W. Cape), and there have been two slighter improvements (Limpopo and National). There were only two deteriorations but they were appreciable (Free State and Mpumalanga).
- The baseline for KPA 1: Strategy is highest, at around 3. There were improvements, mainly slight, in four instances; and deteriorations in four, some appreciable (Free State and National). Limpopo stayed unchanged.

**Figure 11: Changes in averaged KPA scores broken down by province, for the four KPAs**

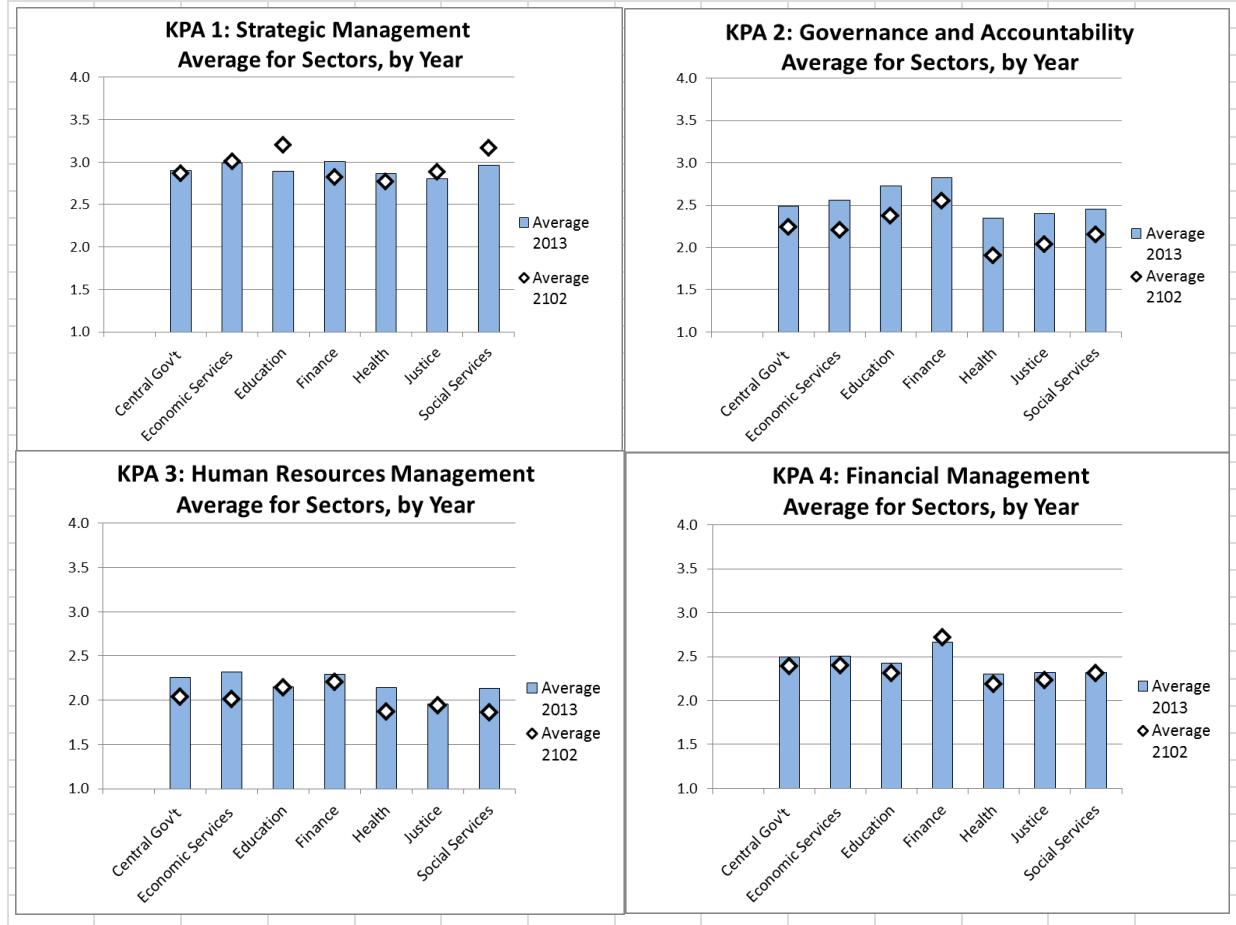


Having examined the averages for the four KPAs when broken down by province, we may now do the same for the breakdown by the eight sectors. The panel of change-graphs is shown in Figure 12 overleaf. The following may be noted.

- By contrast with the previous panel of graphs, the patterns by sector are less variable. This is because each sector is an average across the variations by province and National.
- The differences among baseline scores per KPA are again evident: HR lowest around 2, Finance between 2 and 2.5, then Governance around 2.5, and Strategy highest near 3.
- There are improvements in *all* sectors to be seen in three of the KPAs, with Strategy as the exception. These all-sectoral improvements are slight in Finance, mixed in HR, and appreciable in Governance.

- Only in the Strategy sector are there any deteriorations: appreciable in Education and Social Services, and slight in Justice. The other sectors were unchanged for Strategy or slightly improved.

**Figure 12: Changes in averaged KPA scores broken down by sector, for the four KPAs**



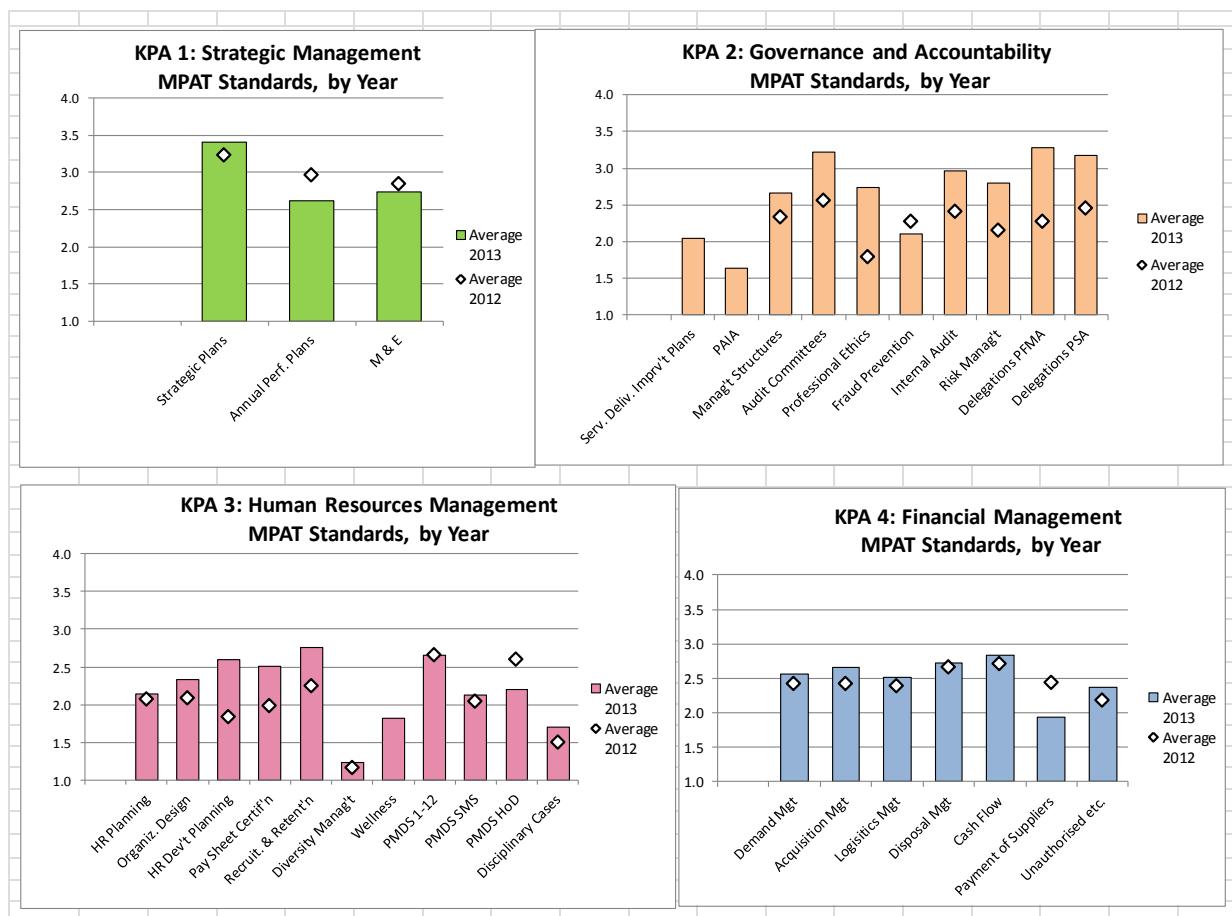
Having worked with KPA averages to examine the time-changes broken down by provinces and sectors, we now reverse the emphasis to notice time-changes in the *component MPA standards* of each KPA, thirty-three in all, while averaging over provinces and sectors (for the moment). Once again it is convenient to present the four KPA change-graphs as a panel, to allow assessment within and across KPAs. They are depicted as a pair of diptychs in Figure 13.

- Given Figure 10 earlier, we may expect overall improvements between 2012 and 2013 in KPA 2: Governance and KPA 3: HR (but off the lowest base), no change in KPA 4: Finance, and slight deterioration in KPA 1: Strategy.
- The overall improvement in Governance results from marked improvements in most standards, with somewhat of a deterioration in Fraud Prevention. (Two standards are new in 2013.)
- The overall improvement in HR (of its low base) likewise resulted from marked improvements in all standards with the exception of performance management (PMDS) for HoDs.
- In KPA 4: Finance, the very slight improvements in six of the standards were offset by some deterioration in Payment of Supplies. The latter partly arose from

government's commitment to address this issue by raising the bar for this standard which now requires payment of all suppliers within 30 days to be confirmed for level 2

- That the overwhelming majority of changes in MPAT standards are improvements is welcome. At the same time, reading across the few deteriorations across the KPAs, it would appear that with HoDs overall not being adequately performance managed, there are apparent fall-offs in implementation-related standards such as Annual Performance Plans (where the standard also changed), Payment of Suppliers, and Fraud Prevention.

**Figure 13: Changes in MPAT standards comprising each KPA scores, across all departments**



The final, most detailed dissection of change in MPAT standards is presented in the change-analysis matrix of Figure 14 overleaf. It takes a dynamic orientation, showing the *changes* in standards (improvements or deteriorations) between 2012 and 2013, by which departments have *arrived at* the current situation displayed earlier in Figure 8. It shows this for thirty of the KPAs (the remaining three are new to the current year). For reasons of space, these changes are displayed for the forty-one national departments.

Dark brown cells represent improvements of two or more levels in a standard, i.e. from 1->3 or 2->4 or 1->4. The numeral in the cell shows the destination reached by the change. Light brown shows an improvement of one level, i.e. 1->2, 2->3, or 3->4; yellow shows no

change; and deteriorations of one or two levels are shown by light blue and dark blue. For instance, looking at the fifth row, the Department of Communications, one sees in the first cell under Strategic Plans that there has been an improvement of one level (light brown) up to level 4 (numeral), i.e. from 3->4; in the second cell for APP a deterioration of two levels (dark blue) down to 2 (numeral), i.e. from 4->2; and in the third cell for M&E, that it has stayed the same (yellow) on level 3 (numeral).

**Figure 14 Changes in MPAT for standards for all national departments from 2012 - 2013**

		MPAT 2013 STANDARDS (NUMERIC) AND EXTENT OF CHANGES FROM MPAT 2012 (COLOURED) FOR NATIONAL DEPARTMENTS																													
		1.1.1 Strat Plans	1.1.2 APP	1.3.1 M&E	2.1.1 SfIP	2.2.1 Mgt Struct	2.3.2 Audit Comm	2.4.1 Prof Ethics	2.4.2 Fraud Prev	2.5.1 Inter Audit	2.6.1 Risk Mgt	2.7.1 Deleg's: PSA	2.7.2 Deleg's: PFMA	2.8.1 Corp Gov of ICT	3.1.1 HR Planning	3.1.2 Org Design	3.1.3 HR Dev Plan	3.2.1 Pay Sheet Cert	3.2.2 Recr & Reten	3.2.4 Mgt Diversity	3.3.1.1-12 PMDS	3.3.2 5MIS PMDS	3.3.3 PMDS HOD	3.4.2 Discipl Cases	4.1.1 Demand Mgt	4.1.2 Acquisition Mgt	4.1.3 Logistics Mgt	4.1.4 Disposal Mgt	4.2.1 Cash Flow	4.2.2 Paym't of Suppl	4.2.3 Unauthorised, etc
National Department																															
ND Health	4	2	2	3	4	4	1	2	4	4	4	4	4	1	2	3	4	2	3	1	4	4	3	2	2	2	2	2			
ND Trad Aff	4	2	1	3	4	3	3	3	2	3	3	1	1	1	2	2	2	2	1	3	2	2	3	3	2	1	2	3			
ND B Educ	4	3	1	2	4	4	4	4	2	4	4	3	1	3	3	3	2	2	1	4	4	2	2	3	3	3	4	2	3		
ND Hig Educ	2	1	2	1	4	4	3	1	4	1	4	4	1	2	2	3	2	2	1	2	2	3	1	3	3	3	4	2	3		
ND Pub Works	1	2	2	1	4	3	3	2	2	3	4	4	1	2	2	2	2	3	1	2	2	2	2	1	2	2	2	2			
ND A & C	3	3	2	1	4	4	3	3	2	4	2	3	1	2	2	3	2	2	1	2	2	1	1	3	3	3	2	2			
ND COG	3	2	2	1	3	2	3	1	4	4	4	3	1	2	3	2	3	4	1	2	1	2	1	3	3	4	4	2	2		
ND Hum Settl	2	2	2	1	4	4	1	1	3	3	4	4	1	2	2	3	2	2	1	2	3	3	4	3	3	3	3	1	2	2	
ND Tourism	4	2	4	1	4	4	4	1	2	4	3	4	1	4	3	3	4	3	1	4	2	2	2	3	4	4	2	3			
ND Water Aff	3	2	2	1	4	3	1	3	4	2	4	2	1	2	3	3	3	3	1	2	2	2	2	2	3	2	2				
ND Energy	3	3	3	1	4	3	2	4	4	2	4	4	1	2	4	3	4	1	3	2	4	2	3	2	3	4	4	2			
ND Rural Dev & Land	4	2	2	2	3	4	2	1	2	2	4	3	1	2	3	2	2	4	1	2	2	3	3	3	4	3	2	3			
ND Econ Dev	4	2	3	2	4	4	4	1	2	1	4	3	1	2	2	3	4	3	1	1	1	1	1	3	1	1	3	2	2		
ND Statis SA	2	1	3	1	2	3	3	4	4	3	4	4	1	2	3	3	3	3	1	3	2	1	2	2	3	4	4	2	3		
ND Police	4	3	3	2	4	3	3	2	2	3	4	3	1	3	1	3	3	1	1	2	2	1	1	2	2	3	4	2	3		
ND Justice	4	2	3	4	4	3	3	3	4	1	4	4	2	4	2	4	2	4	1	2	2	2	1	3	4	3	2	4			
ND Mil Vet	4	1	3	1	2	3	1	1	2	2	1	4	1	1	2	1	2	2	1	2	2	1	2	1	1	3	1	1			
ND IPID	4	3	2	2	3	2	3	1	2	2	3	3	1	2	3	2	1	3	1	2	2	2	1	2	4	3	2	2			
ND A,F & F	4	2	2	2	1	2	1	1	1	4	4	4	1	2	3	4	4	3	1	3	2	2	4	3	3	4	3	2			
ND Min Res	4	2	3	1	4	1	3	4	1	4	4	4	1	3	3	4	3	3	1	3	3	3	4	3	4	2	4	2			
ND Comm	4	2	3	1	1	4	1	1	4	2	3	4	1	1	3	3	3	3	1	4	2	1	1	3	3	4	4	2			
ND GCIS	1	1	2	1	4	4	4	2	4	4	4	4	1	3	3	3	4	4	4	2	4	3	2	3	4	4	2	2			
ND PM&E	4	2	4	1	2	4	3	1	4	4	4	4	1	4	4	4	3	4	4	1	4	4	4	3	3	4	2	2			
ND Treasury	4	3	3	1	1	2	4	4	4	4	4	4	1	2	3	3	4	1	2	2	2	4	2	4	4	2	3				
ND Presidency	4	4	4	2	4	4	3	2	4	2	3	4	1	3	3	3	3	3	2	2	2	4	1	3	2	3	1	4			
ND Sports & Recr	4	2	2	4	1	4	3	1	1	4	3	4	1	1	2	2	3	3	1	2	1	1	2	3	2	3	3	2			
ND Enviro	4	4	3	2	4	4	3	4	2	1	4	4	1	2	4	3	4	4	1	4	4	4	2	3	4	4	4	4			
ND Transp	3	3	1	2	4	3	3	3	2	4	3	2	1	2	2	3	3	4	1	3	2	4	2	2	4	1	4				
ND Correct	4	2	2	2	3	3	1	1	2	1	3	4	1	2	2	3	2	3	1	3	3	2	1	3	3	3	2	2			
ND Defence	4	3	2	1	3	2	1	2	1	4	2	3	1	2	3	3	2	2	2	3	2	1	3	3	3	4	3	3			
ND Trade & Ind	4	3	4	3	4	4	4	4	4	4	4	4	1	3	1	3	4	2	4	4	3	4	3	3	4	4	4	4			
ND Home Affairs	2	3	2	1	4	2	4	1	2	4	4	4	1	3	2	2	3	3	1	2	1	3	2	3	3	3	2	2			
ND Labour	4	3	3	1	1	4	1	1	4	2	4	1	1	2	3	1	3	3	1	2	2	2	1	2	3	3	2	1			
ND PALAMA	4	2	3	1	1	3	3	3	3	4	3	1	2	1	3	1	3	2	1	2	3	3	3	3	3	2	4				
ND WC & D	4	2	3	2	1	4	1	1	1	4	3	1	1	2	2	1	2	2	1	2	2	2	1	3	2	2	2	1			
ND Socl Dev	3	1	4	1	2	2	3	2	2	4	4	4	1	2	2	3	2	3	1	3	3	4	3	3	3	3	3	2			
ND PSC	4	3	3	1	4	2	4	4	2	4	3	1	1	2	2	3	3	4	1	2	2	2	3	3	3	4	2	4			
ND Pub Enterp	4	3	2	1	1	4	1	1	2	2	1	1	2	1	2	2	1	2	1	1	1	1	2	3	2	1	3	3			
ND Science and Tech	3	3	2	1	4	4	3	4	4	4	4	3	1	1	1	4	3	2	1	4	2	2	2	4	4	3	3	4			
ND PSA	4	2	2	1	3	4	1	1	4	3	3	3	1	2	2	3	2	3	2	2	2	2	1	3	3	3	2	4			
ND IRCO	4	3	3	3	1	2	1	1	2	1	3	3	1	2	2	3	3	3	1	2	2	2	3	3	3	3	2	2			

Colour codes (Changes from MPAT 1.2 to 1.3)	
Increased by 2 or more	
Increased by 1	
Stayed the same	
Decreased by 1	
Decreased by 2 or more	
Missing	

NB New standards 2.10.1, 3.2.5 and 5.1.1 omitted from this diagram	
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As with Figure 8 earlier, which dealt with the *current* 2013 MPAT situation, now with respect to the *change* since 2012 one may read the matrix downwards for changes in a particular standard, or across for changes in a department. De

- For example, reading downwards, one sees from the many light and dark browns beneath PSA and PFMA Delegations that there has been improvement in these MPAT standards across national departments, perhaps due to a concerted intervention.
- Conversely, the many light and dark blues beneath Annual Performance Plans and Payment of Suppliers apparently show a general deterioration in national departments in these respects. However some of is due to a change in standards , as noted earlier.
- Similarly, reading crosswise, one may see departments with a preponderance of dark or light browns, some yellows, and few blues, that are generally improving their compliance since 2012, such as Health or Public Works.
- Conversely, departments with a preponderance of blues and yellows and few browns are comparatively deteriorating in compliance compared to 2012, such as Agriculture, Forestry and Fisheries or Public Enterprises.
- The same interpretations can be conducted for departments within each province, and across the nine provinces
- In all, as MPAT data has been accumulated over time, Figures 8 and 13 in conjunction provide a detailed and dynamic diagnostic overview of departmental compliance in the public service.

## C: Advanced analyses of relations among standards, KPAs and external outcomes

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This section takes up the additional tests that were conducted in the previous analysis of the MPAT 1.2 of 2012. These were improved in the analysis of the new MPAT 1.3 data of 2013.

### Factor analysis

During the analysis of the MPAT 1.2 data from 2012, a check was made whether the standards loaded strongly onto the KPAs to which they had been assigned during the design, and not onto other KPAs. This was found to be so, using factor analysis; with only the possibility that the Pay Sheet standard could nearly equally well be moved from KPA 3: HR into KPA 4: Finance. This analysis was revisited using the MPAT 1.3 data of 2013, and the results are in Figure 15<sup>4</sup>.

The shaded standards in the second column<sup>5</sup> of Figure 15 indicate that four standards were “moved” by the analysis from their assignments in the original KPAs into other KPAs, on which - given the new data - they also had a loading, which was slightly higher. As found previously in MPAT 1.2, the difference between the two loadings was not great for any of these four standards; and the existing locations could plausibly be retained. However,

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<sup>4</sup> Four, five and six factor solutions were examined by means of factor analysis with geomin rotation.

<sup>5</sup> The three shaded items in the first column mark standards new to MPAT 1.3, in 2013/14.

some of the alternative loadings are plausible and can be contemplated for the next round<sup>6</sup>.

An exploratory five-factor solution yielded some interesting results which may be relevant to possible changes in KPA standard allocations in the next version of MPAT. These results are presented in Annexure D.

**Figure 15: Factor analysis of the extent of fit of MPAT 2013 standards into KPAs**

VAR		F1	F2	F3	F4
V2	1.1.2 APP	0.61	0.00	0.09	0.12
V1	1.1.1 Strat Plans	0.50	-0.02	-0.05	0.31
V4	2.1.1 SDIP	0.36	0.28	0.11	-0.04
V7	2.3.2 Audit Comm	-0.01	0.95	-0.29	0.00
V10	2.5.1 Interl Audit	-0.02	0.79	0.01	-0.18
V6	2.2.1 Mgt Struct	-0.10	0.58	0.12	0.10
V11	2.6.1 Risk Mgt	0.03	0.46	0.10	0.08
V19	3.2.4 Mgt Diversity	0.16	0.45	0.36	0.00
V8	2.4.1 Prof Ethics	0.25	0.43	0.02	0.03
V9	2.4.2 Fraud Prev	-0.06	0.41	0.28	0.12
V5	2.10.1 PAIA	0.34	0.40	0.06	0.02
V13	2.7.2 Deleg's: PFMA	0.08	0.34	0.13	0.32
V24	3.4.2 Discipl Cases	-0.13	0.21	0.19	0.12
V22	3.3.2 SMS PMDS	-0.11	0.06	0.79	0.04
V18	3.2.2 Recr & Reten	0.08	-0.08	0.78	0.02
V21	3.3.1 1-12 PMDS	0.12	-0.03	0.73	0.03
V15	3.1.2 Org Design	0.02	-0.27	0.68	0.01
V14	3.1.1 HR Planning	0.04	0.08	0.65	-0.18
V23	3.3.3 PMDS HOD	0.21	0.27	0.48	-0.03
V17	3.2.1 Pay Sheet Cert	-0.06	0.12	0.46	0.06
V3	1.3.1 M&E	0.32	0.04	0.36	-0.01
V12	2.7.1 Deleg's: PSA	-0.09	0.22	0.36	0.26
V16	3.1.3 HR Dev Plan	-0.27	0.09	0.29	0.20
V20	3.2.5: Health & Wellness	-0.25	0.21	0.29	-0.07
V26	4.1.2 Acquisition Mgt	0.07	-0.01	-0.07	0.66
V28	4.1.4 Disposal Mgt	-0.06	-0.14	0.08	0.63
V31	4.2.3 Unauthorised, etc	0.01	0.06	0.10	0.55
V30	4.2.2 Paym't of Suppl	0.05	0.13	-0.05	0.55
V27	4.1.3 Logistics Mgt	0.13	0.13	0.03	0.50
V25	4.1.1 Demand Mgt	0.10	0.27	-0.05	0.49
V29	4.2.1 Cash Flow	-0.11	-0.13	0.21	0.49

Legend	
<span style="background-color: #ff9999;"></span>	Not used in previous analysis
<span style="background-color: #cccccc;"></span>	Secondary loadings over .3
<span style="background-color: #ff99cc;"></span>	Moved from expected factor

Correlations among Factors/KPAs				
	F1	F2	F3	F4
<b>F1</b>	1	0.07	0.13	0.10
<b>F2</b>	0.07	1	0.5	0.3
<b>F3</b>	0.13	0.5	1	0.40
<b>F4</b>	0.10	0.3	0.40	1

<sup>6</sup> For instance, Service Delivery Improvement Plans (SDIP) was potentially moved from in KPA 2: Governance into KPA 1: Strategy. Given that SDIPS are, alongside APPS, the planning vehicles for the implementation of strategy, this is conceivable. Likewise, Disciplinary Cases could sit well in Governance rather than HR, the former reflecting the purpose rather than the process of discipline. And PSA Delegations (as against PFMA Delegations) could well belong in HR rather than Governance. The other two possible moves are less intelligible conceptually.

## Inter-standard correlations

Correlations among MPAT standards allow one to check the internal consistency of the MPAT standards, in that one would expect strong correlations among many items *within* each KPA; and, if there is integration among management processes, one would expect such correlations *across KPAs* - e.g. whether the standards in the Strategy KPA correlate with those of other KPAs. One might also ask whether the pattern of correlations obtained was similar in MPAT 1.2. The resulting vast matrix is reproduced as Figure 16.<sup>7</sup>

**Figure 16: Cross-correlation of MPAT standards for 2012 and 2013**

		SPEARMAN CORRELATIONS BETWEEN STANDARDS FOR MPAT 2013 (UPPER VALUE IN CELL) AND MPAT 2012 (LOWER VALUE)	
1.1.1 Strat Plans			
1.1.1.2 APP	0.27	0.23	0.21
1.1.1.3 M&E	0.54	0.28	0.29
2.1.1 SDIP	0.05	0.05	0.07
2.1.0.1 PAIA	0.11	0.18	0.24
2.2.1 Mgt Struct	0.21	0.15	0.15
2.3.2 Audit Comm.	0.07	0.05	0.07
2.4.1 Prof Ethics	0.05	0.10	0.17
2.4.2 Fraud Prev	0.08	0.10	0.17
2.5.1 Interf Audit	0.02	0.02	0.04
2.6.1 Risk Mgt	0.12	0.23	0.25
2.7.2 Deleg's. PSA	0.20	0.18	0.16
2.7.2 Deleg's. PFMA	0.19	0.19	0.05
3.1.1 HR Planning	0.00	0.00	0.00
3.1.2 Org Design	0.11	0.13	0.08
3.1.3 HR Dev Plan	0.11	0.13	0.04
3.2.1 Pay Sheet Cert	0.02	0.02	0.02
3.2.2 Mgt Diversity	0.11	0.13	0.08
3.2.3 Health & Wellness	0.11	0.13	0.08
3.3.1-1-12 PMDS	0.08	0.08	0.08
3.3.2 SMS PMDS	0.18	0.18	0.11
3.3.3 PMDS HOD	0.19	0.19	0.11
3.4.2 Discipl Cases	0.18	0.18	0.11
4.1.1 Demand Mgt	0.05	0.05	0.05
4.1.2 Acquisition Mgt	0.14	0.14	0.10
4.1.3 Logistics Mgt	0.10	0.10	0.05
4.1.4 Disposal Mgt	0.06	0.06	0.06
4.2.1 Cash Flow	0.11	0.11	0.19
4.2.2 Paym't of Suppl	0.34	0.31	0.34
4.2.3 Unauthorised, etc	0.19	0.19	0.15
Colour Codes			
Correlation cut-off 0.5 (Strong effect)			
Correlation cut-off 0.3 (Medium effect)			
Correlation cut-off 0.2 (Slight effect)			

<sup>7</sup> Spearman correlations are employed, since they are appropriate for the ordinal scale of four MPAT levels.

The strength of correlations is conveyed by the colouring, as seen in the legend: yellow, orange and red. For detailed reading of entries, the matrix has been split into three pages, Annexures A through C of this Statistical Appendix. But the version above is revealing at a macro level.

- Looking at patches on each side of the diagonal, one sees that the constituents of each KPA do generally correlate well among themselves. This is expected from the factor analysis.
- Three adjacent columns towards the right within KPA 3: HR - Performance Management (PMDS) for 1-12, SMS and HoD - correlate with many standards in KPA 1: Strategy and KPA 2: Governance, albeit less evidently with KPA 4: Finance. This signals the lateral importance of performance management, and is corroborated in the path analysis below.
- The three columns of KPA 1: Finance correlate with other standards less prominently in 2013, suggesting worsening integration of strategy and operations.

## Correlations between MPAT standards and external criteria

It may be that departments that are well-managed enough to meet compliance requirements also meet external requirements. This is explored for an available range of external variables, in Figure 17.

**Figure 17: Spearman Correlation of 2013 standards with external criteria**

SPEARMAN CORRELATIONS BETWEEN MPAT 2013 STANDARDS AND EXTERNAL CRITERIA															
	Pct_Female	Pct_Disabled	Pct_Employ_rec_bonus	Pct_bonus_of_comp	PctFilled_Additional	PctFilled_Out_of_Adjustment	Pct_Training_of_budget	Pct_proj_spend_on_comp	Comp_as_of_total	Vacancy_Rate	Avg_months_to_fill_posts	AG_Targets_met	NACH_Feedback_received	NACH_cases_closed	
1.1.1 Strat Plans	.02	.11	-.05	-.03	.06	.04	.00	-.04	.05	-.03	-.10	.15	.08	.11	
1.1.2 APP	-.12	.06	.04	.19	.07	.15	.19	-.11	.10	-.08	-.09	.19	.11	.06	
1.3.1 M&E	.05	.12	-.06	-.03	.09	.00	.15	-.09	.00	.06	-.19	.35	.16	.10	
2.1.1 SDIP	-.10	.01	-.11	.17	.04	.13	.33	.05	.14	-.06	.03	.16	.12	.10	
2.10.1 PAIA	-.08	.22	-.09	.10	.03	-.06	.11	-.08	.10	-.06	-.03	.13	.35	.11	
2.2.1 Mgt Struct	-.01	-.02	-.10	-.26	.04	.09	-.05	-.04	-.09	.03	.14	.06	.04	.03	
2.3.2 Audit Comm	-.04	.09	-.10	-.07	-.16	.02	.08	-.05	.09	-.01	-.04	.07	.19	.04	
2.4.1 Prof Ethics	.05	.15	.13	.12	.00	-.06	.09	-.04	.01	.03	-.01	.32	.32	.28	
2.4.2 Fraud Prev	.02	.06	.16	.09	.07	.00	-.01	.04	-.03	-.05	.02	.09	.30	.02	
2.5.1 Interl Audit	.03	.07	-.01	.04	-.07	-.06	.12	-.01	.11	.01	.01	.10	.24	.06	
2.6.1 Risk Mgt	.04	.07	.06	.03	.07	.06	.05	.02	-.02	.04	.15	.18	.10	-.03	
2.7.1 Deleg's: PSA	.07	.02	-.06	-.17	.23	.00	-.09	-.08	-.06	-.03	.02	.12	.16	-.05	
2.7.2 Deleg's: PFMA	-.03	.09	.00	-.09	.12	.02	-.10	-.04	-.02	.01	.07	.15	.10	-.01	
3.1.1 HR Planning	.08	.12	-.05	-.03	.13	-.18	.02	-.05	-.03	-.07	-.07	.16	.27	.13	
3.1.2 Org Design	.02	.14	.17	-.01	.31	-.24	-.09	-.14	-.13	-.09	-.23	.17	.03	-.13	
3.1.3 HR Dev Plan	.07	.03	.03	-.12	-.03	.11	-.15	-.02	-.05	-.05	.04	.21	.22	.12	
3.2.1 Pay Sheet Cert	.03	.03	-.06	-.15	.03	-.01	-.09	-.12	-.04	.03	-.13	.15	.14	-.06	
3.2.2 Recr & Reten	.02	.22	.09	-.06	.33	-.12	-.07	-.20	-.25	.18	-.02	.06	.26	.17	
3.2.4 Mgt Diversity	-.11	.03	-.14	.03	.22	-.02	.17	.02	.06	.01	.02	.18	.18	-.07	
3.2.5 Health & Wellness	.11	.10	.06	.03	-.19	-.04	-.03	-.07	-.02	-.08	-.04	-.04	.12	.06	
3.3.1 1-12 PMDS	-.04	.08	.05	.03	.20	-.01	.10	.02	-.01	-.05	-.13	.17	.12	-.05	
3.3.2 SMS PMDS	.00	.02	.06	-.04	.21	.08	-.08	.09	-.06	.03	-.09	.10	.12	-.11	
3.3.3 PMDS HOD	.01	.13	.02	-.08	.04	-.06	-.10	-.07	.01	.01	-.04	.14	.23	.02	
3.4.2 Discipl Cases	-.04	.15	.22	-.03	.09	-.11	-.03	-.10	-.21	.02	-.03	.09	.07	-.01	
4.1.1 Demand Mgt	-.06	.18	.13	-.10	-.01	-.04	-.07	-.10	-.05	.06	-.03	.13	.20	.14	
4.1.2 Acquisition Mgt	-.08	.16	.01	-.10	.00	-.05	-.19	-.01	-.13	.00	-.01	.01	-.07	-.02	
4.1.3 Logistics Mgt	.07	.16	-.04	-.12	.13	-.02	-.08	-.04	-.06	.00	-.01	.06	.08	.08	
4.1.4 Disposal Mgt	.12	-.07	.03	-.13	.09	-.09	-.17	.06	-.06	-.07	.02	.12	-.03	-.11	
4.2.1 Cash Flow	.21	.13	.09	-.17	.04	-.10	-.11	.06	-.18	.00	.03	.14	.18	.16	
4.2.2 Paym't of Suppl	.08	.06	-.06	-.20	.07	-.03	-.10	.03	-.05	.02	-.05	.09	.10	-.02	
4.2.3 Unauthorised, etc	.07	.16	-.01	-.23	.09	-.05	-.19	-.02	-.06	.02	-.01	.18	.18	.15	
5.1.1: MPAT	-.09	-.24	-.16	-.02	.07	.18	-.04	.03	.11	.14	.10	-.03	.13	.08	

Colour Codes	
10%	.32 -.5
5%	.22 -.32
2.50%	.16 -.22
< 2.5%	-.16 -.16
2.5% neg	-.22 -.16
5% neg	< -.22

As was discovered in the 2012 analysis, there are indeed significant indications that compliance and performance do, in certain respects, go together. (This is of course not to contend that compliance leads to performance; one may surmise that both are the outcome of sound leadership, management, and systems.) There are some interesting surprises:

- The external criterion that correlates most extensively with MPAT standards, at second from the right, is whether departments give feedback on NACH (Corruption Hotline) instances.
- One column to the left, the next most-extensive correlations are with the percentage of performance objectives achieved, as now measured by the Auditor-General. This is critical, and it is worth recording that the standards concerned tend to be related to delivery, namely:
  - Planning and monitoring under Strategy;
  - Integrity and risk management under Governance;
  - Good organisational design and planning under HR, plus administrative-level performance management;
  - Control of unauthorised expenditure under Finance.
- Unexpectedly, the percentage of staff filled additional to establishment in a department correlates strongly with a clutch of good-HR items: Recruitment and Retention, 1-12 and SMS PMDS, even Management Diversity... but negatively with Health and Wellness. Are such contract staff high performers, at the expense of departmental morale?
- A remarkable finding is that the “Percentage that Bonus forms of Comp” correlates negatively very strongly with measures of financial probity: Cash Flow, Payments of Suppliers, extent of Unauthorised Expenditure. Are departments that are lavish with bonuses the least well-run financially?

## The strength of MPAT standards and the structure of KPAs related to performance

Among scores for thirty-three MPAT standards, some will be more salient than others in relation to departments tending to do well on important external criteria.

This was considered on a piecemeal basis apropos Figure 17 above. But considering the MPATs separately does not account for how they are related and may overlap. A particular statistical technique called Path Analysis<sup>8</sup> yields both an indication of the relative strength of the MPAT standards within the KPAs to which they belong and the relationship among the KPAs, in relation to two chosen external criteria; which we have taken to be (a) the percentage of specified objectives achieved as adjudicated by the Auditor General and (b) the audit rankings applied by the Auditor General (from a clear audit, through emphases of matter, to qualification or even disclaimer).

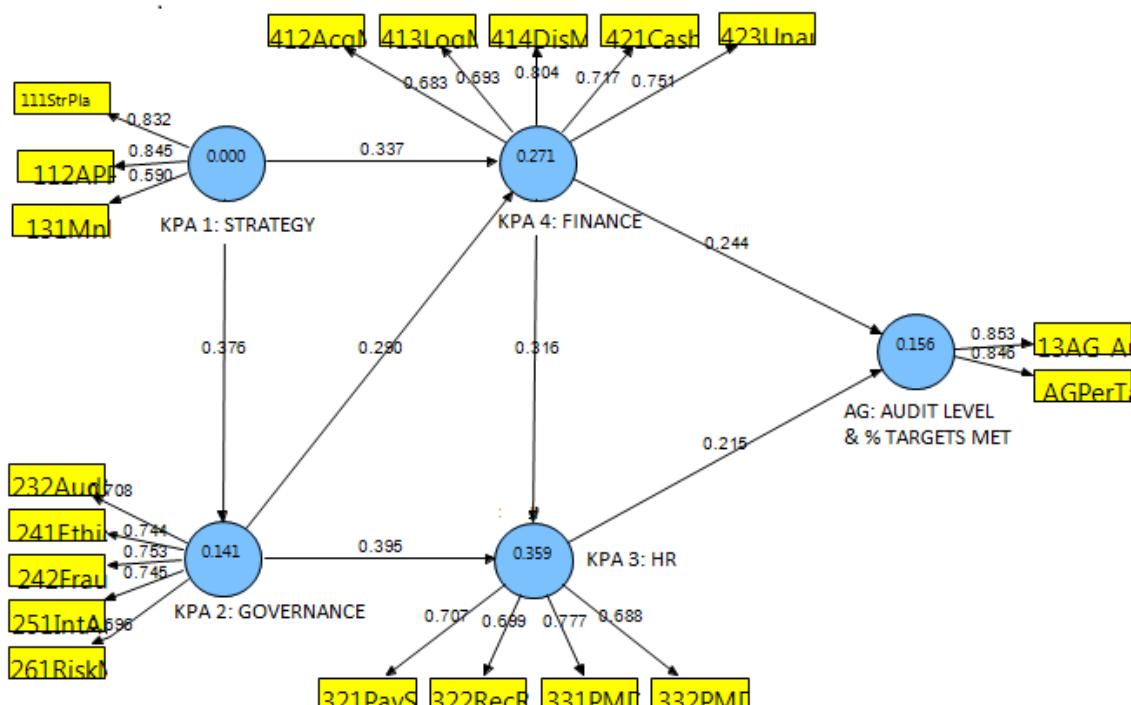
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<sup>8</sup> The technique is the partial least squares version of structural equation modelling. See Christian M. Ringle, Sven Wende and Alexander Will, *SmartPLS 2.0 (M3) Beta*. Hamburg: <http://www.smartpls.de> (2005). It is advantageous when the available number of cases is limited (as in this instance, with 155 departments), and likely multi-collinearity among the measurable indicators.

Figure 18 overleaf shows the outcome, after discarding of statistically insignificant linkages as well as of MPAT standards that contribute relatively weakly to “their” KPA. Note the following:

- The two outcome variables, the AG’s performance measure and the AG’s audit-quality measure, are equally salient for the model.
- The Strategy and Governance KPAs relate quite strongly to each other, but neither bears directly on the outcomes.
- Rather, Governance informs HR, and Strategy informs Finance (which is assisted in this by Governance as well, but less strongly).
- And then it is the operation of Finance and HR that, with equally strength, conduce to the two performance outcomes.
- In the 2012 analysis, when only a crude AG measure was available alongside audit quality, only HR conducted directly to outcomes. With the AG’s better measure of performance now included in the model, it is perhaps not surprising that Finance should play an equal role alongside HR as the proximate operational predictors.
- The figures within the blue KPA-circles reflect the proportion of variance explained by the paths leading into the circles.

**Figure 18: Path Analysis of 2013 standards with external criteria**



There is a whole next layer of information in Figure 18, in the yellow rectangles.

- Among 33 standards, approximately half, 17, correlate relatively strongly with “their” KPAs (as listed in the factor analysis of Figure 15 above), and may be prioritised in analysis and discussion, for their contribution to performance as well as compliance.

- In KPA 4: Finance, the Management of Acquisitions, Logistics and Disposal are important, together with control of Cash and of Unauthorised Expenditure.
- In KPA 3: HR, particularly, the few standards that are strong are noteworthy for their performance-orientation: notably Recruitment and Retention, Performance Management for 1-12s and SMS.<sup>9</sup>
- In KPA 2: Governance, Audit and Internal Audit are emphasised, together with Ethics and Fraud Prevention. These jointly constitute a coherent nexus of financial controls.
- In KPA 1: Strategy, Strategic and Annual Performance Plans are important, supported by M&E.

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<sup>9</sup> Oddly, Pay Sheet also survives as a strong HR standard in this context. Perhaps it is indexing efficacious control of the staff complement.

## Annexure A

SPEARMAN CORRELATIONS BETWEEN STANDARDS FOR MPAT 2013 (UPPER VALUE IN CELL) AND MPAT 2012 (LOWER VALUE) - PART 1

	1.1.1 Strat Plans	1.1.2 APP	1.3.1 M&E	2.1.1 SDIP	2.10.1 PAIA	2.2.1 Mgt Struct	2.3.2 Audit Comm	2.4.1 Prof Ethics	2.4.2 Fraud Prev	2.5.1 Interl Audit	2.6.1 Risk Mgt	2.7.1 Deleg's: PSA	2.7.2 Deleg's: PFMA	3.1.1 HR Planning	3.1.2 Org Design	3.1.3 HR Dev Plan	3.2.1 Pay Sheet Cert	3.2.2 Mgt Diversity	3.2.5 Health & Wellness	3.3.1-12 PMDS	3.3.2 SMS PMDS	3.3.3 PMDS HOD	3.4.2 Discipl Cases	4.1.1 Demand Mgt	4.1.2 Acquisition Mgt	4.1.3 Logistics Mgt	4.1.4 Disposal Mgt	4.2.1 Cash Flow	4.2.2 Paymt of Suppl	4.2.3 Unauthorised, etc		
1.1.1 Strat Plans_2013	1.00	0.27	0.23	0.21	0.05	0.05	0.07	0.05	0.07	0.02	0.08	0.10	0.17	0.00	0.02	-0.04	0.07	0.11	0.13	-0.08	0.17	0.04	-0.07	0.05	0.28	0.15	0.00	0.11	0.19	0.27		
1.1.1_Sтрат_Plans_2012		0.54	0.28	0.29		0.11	0.18	0.24	0.23	0.15	0.12	0.23	0.25	0.20	0.16	0.18	0.14	0.22	0.04	0.18	0.18	0.29	0.11	0.19	0.14	0.20	0.31	0.34	0.28	0.32		
1.1.2 APP_2013	0.27	0.22	0.19	0.17	0.11	0.03	0.20	0.14	0.07	0.11	0.00	0.05	0.18	0.10	0.00	0.05	0.16	0.20	-0.14	0.26	0.07	0.27	-0.06	0.17	0.19	0.10	0.15	0.01	0.07	0.15		
1.1.2_APP_2012	0.54	1.00	0.26	0.15		0.16	0.27	0.28	0.27	0.18	0.13	0.07	0.21	0.19	0.05	0.06	0.21	0.16	0.11	0.29	0.24	0.39	0.18	0.22	0.16	0.20	0.32	0.26	0.35	0.32		
1.3.1 M&E_2013	0.23	0.22	1.00	0.21	0.19	0.11	0.03	0.27	0.09	0.18	0.16	0.21	0.22	0.18	0.12	0.04	0.34	0.32	0.20	0.13	0.27	0.21	0.20	0.12	0.18	0.05	0.15	0.01	0.11	-0.01	0.10	
1.3.1_M&E_2012	0.28	0.26	1.00	0.07		0.20	0.19	0.28	0.18	0.19	0.18	0.19	0.21	0.19	0.23	0.13	0.12	0.17	0.08	0.19	0.16	0.18	0.33	0.06	0.22	0.28	0.13	0.19	0.15	0.21		
2.1.1 SDIP_2013	0.21	0.19	0.21	1.00	0.27	0.19	0.24	0.22	0.20	0.15	0.06	0.15	0.16	0.17	0.05	-0.04	0.06	0.17	0.28	0.12	0.18	0.24	0.25	-0.05	0.08	0.03	0.07	0.01	0.18	0.15	-0.01	
2.1.1_SDIP_2012	0.29	0.15	0.07	1.00		0.31	0.16	0.25	0.19	0.09	0.25	0.24	0.35	0.11	0.16	0.20	0.14	0.06	-0.03	0.15	0.23	0.18	0.09	0.11	0.04	-0.01	0.19	0.23	0.21	0.16		
2.10.1 PAIA_2013	0.05	0.17	0.19	0.27	1.00	0.08	0.21	0.23	0.29	0.17	0.20	0.06	0.22	0.14	0.18	0.08	0.26	0.07	0.24	0.02	0.19	0.18	0.30	0.11	0.19	0.00	0.22	0.00	0.02	0.20	0.10	
2.2.1 Mgt Struct_2013	0.05	0.11	0.11	0.19	0.08	1.00	0.38	0.27	0.41	0.29	0.37	0.37	0.33	0.28	0.01	0.23	0.27	0.23	0.29	0.14	0.20	0.29	0.34	0.17	0.21	0.08	0.15	0.07	0.20	0.15	0.20	
2.2.1_Mgt_Struct_2012	0.11	0.16	0.20		0.27	0.24	0.32	0.28	0.34	0.26	0.23	0.18	0.15	0.05	0.11	-0.04	-0.02			0.19	0.14	0.10	0.16	0.02	0.12	0.10	0.04	0.17	0.09	0.18		
2.3.2 Audit Comm_2013	0.07	0.03	0.03	0.24	0.21	0.38	1.00	0.15	0.24	0.54	0.18	0.17	0.23	0.14	-0.02	0.04	0.15	0.05	0.27	0.25	0.16	0.22	0.25	0.08	0.28	0.04	0.10	0.06	-0.06	0.21	0.25	
2.3.2_Audit_Comm_2012	0.18	0.27	0.19	0.16		0.27	0.40	0.35	0.52	0.37	0.38	0.30	0.20	0.28	0.12	0.17	0.17	-0.05		0.28	0.10	0.18	0.21	0.22	0.18	0.26	0.31	0.22	0.18	0.26		
2.4.1 Prof Ethics_2013	0.05	0.20	0.27	0.22	0.23	0.27	0.15	1.00	0.20	0.18	0.37	0.22	0.28	0.18	0.04	0.01	0.14	0.24	0.16	0.04	0.14	0.09	0.20	0.20	0.16	0.12	0.06	0.01	0.10	0.07	0.09	
2.4.1_Prof_Ethics_2012	0.24	0.28	0.28	0.25		0.24	0.40	0.38	0.41	0.42	0.47	0.37	0.18	0.29	0.26	0.25	0.26	0.02		0.35	0.24	0.27	0.17	0.15	0.14	0.24	0.29	0.15	0.26	0.26		
2.4.2 Fraud Prev_2013	0.07	0.14	0.09	0.20	0.29	0.41	0.24	0.20	1.00	0.27	0.34	0.34	0.19	0.21	0.14	0.20	0.25	0.20	0.32	0.13	0.31	0.44	0.28	0.18	0.20	0.02	0.12	0.09	0.26	0.18	0.26	
2.4.2_Fraud_Prev_2012	0.23	0.27	0.18	0.19		0.32	0.35	0.38	1.00	0.40	0.43	0.31	0.34	0.32	0.30	0.23	0.31	0.30	0.08		0.45	0.32	0.31	0.28	0.19	0.15	0.26	0.23	0.25	0.30		
2.5.1 Interl Audit_2013	0.02	0.07	0.18	0.15	0.17	0.29	0.54	0.18	0.27	1.00	0.32	0.20	0.21	0.23	0.02	0.19	0.24	0.29	0.30	0.20	0.19	0.18	0.25	0.06	0.14	0.01	0.12	0.01	0.04	0.07	0.09	
2.5.1_Interl_Audit_2012	0.15	0.18	0.19	0.09		0.28	0.52	0.41	0.40	1.00	0.44	0.24	0.26	0.16	0.18	0.12	0.22	0.18	-0.01		0.20	0.30	0.26	0.10	0.12	0.10	0.15	0.24	0.21	0.20	0.22	
2.6.1 Risk Mgt_2013	0.08	0.11	0.16	0.06	0.20	0.37	0.18	0.37	0.34	0.32	1.00	0.23	0.33	0.20	0.03	0.13	0.19	0.26	0.23	0.10	0.33	0.25	0.20	0.21	0.18	0.18	0.14	0.16	0.14	0.05	0.14	
2.6.1_Risk_Mgt_2012	0.12	0.13	0.18	0.25		0.34	0.37	0.42	0.43	0.44	1.00	0.44	0.35	0.16	0.15	0.24	0.30	0.19	-0.02		0.30	0.18	0.16	0.20	0.21	0.21	0.16	0.18	0.25	0.23	0.20	
2.7.1 Deleg's: PSA_2013	0.10	0.00	0.21	0.15	0.06	0.37	0.17	0.22	0.34	0.20	0.23	1.00	0.38	0.24	0.14	0.17	0.26	0.33	0.29	0.15	0.24	0.37	0.38	0.19	0.20	0.19	0.28	0.13	0.19	0.16	0.26	
2.7.1_Deleg's:_PSA_2012	0.23	0.07	0.19	0.24		0.26	0.38	0.47	0.31	0.24	0.44	1.00	0.45	0.17	0.18	0.18	0.20	0.28	0.01		0.22	0.15	0.11	0.17	0.07	0.16	0.23	0.24	0.14	0.05	0.09	
2.7.2 Deleg's: PFMA_2013	0.17	0.05	0.22	0.16	0.22	0.33	0.23	0.28	0.19	0.21	0.33	0.38	1.00	0.17	0.12	0.14	0.21	0.26	0.29	0.15	0.29	0.28	0.29	0.20	0.20	0.22	0.33	0.24	0.14	0.22	0.19	
2.7.2_Deleg's:_PFMA_2012	0.25	0.21	0.21	0.35		0.23	0.30	0.37	0.34	0.26	0.35	0.45	1.00	0.21	0.21	0.16	0.32	0.24	0.10		0.29	0.31	0.25	0.15	0.20	0.29	0.25	0.26	0.34	0.36	0.24	
2.8.1 Corp Gov of ICT_2013	0.17	0.15	0.22	0.24	0.35	0.17	0.15	0.15	0.36	0.24	0.15	0.21	0.26	0.33	0.29	0.04	0.13	0.33	0.39	0.12	0.28	0.36	0.33	0.02	0.10	0.08	0.20	-0.01	0.08	0.19	0.09	
2.8.1_Corp_Gov_of_ICT_2012	0.24	0.21	0.15	0.21		0.12	0.16	0.16	0.15	0.07	0.18	0.25	0.35	0.35	0.17	0.10	0.11	0.22	0.20	0.10		0.24	0.11	0.27	0.16	0.19	0.18	0.25	0.23	0.20	0.36	0.28

Colour Codes	
Correlation cut-off 0.5 (Strong effect)	
Correlation cut-off 0.3 (Medium effect)	
Correlation cut-off 0.2 (Slight effect)	

## Annexure B

### SPEARMAN CORRELATIONS BETWEEN STANDARDS FOR MPAT 2013 (UPPER VALUE IN CELL) AND MPAT 2012 (LOWER VALUE) - PART 2

	1.1.1 Strat Plans	1.1.2 APP	1.3.1 M&E	2.1.1 SDIP	2.10.1 PAIA	2.2.1 Mgt Struct	2.3.2 Audit Comm	2.4.1 Prof Ethics	2.4.2 Fraud Prev	2.5.1 Interl Audit	2.6.1 Risk Mgt	2.7.1 Deleg's: PSA	2.7.2 Deleg's: PFMA	3.1.1 HR Planning	3.1.2 Org Design	3.1.3 HR Dev Plan	3.2.1 Pay Sheet Cert	3.2.2 amp; Reten	3.2.4 Mgt Diversity	3.3.1-1-12 PMDS	3.3.2 SMS PMDS	3.3.3 PMDS HOD	3.4.2 Discipl Cases	4.1.1 Demand Mgt	4.1.2 Acquisition Mgt	4.1.3 Logistics Mgt	4.1.4 Disposal Mgt	4.2.1 Cash Flow	4.2.2 Paymt of Suppl	4.2.3 Unauthorised, etc		
3.1.1 HR Planning_2013	0.00	0.18	0.18	0.17	0.14	0.28	0.14	0.18	0.21	0.23	0.20	0.24	0.17	1.00	0.25	0.25	0.15	0.41	0.29	0.16	0.37	0.37	0.06	0.10	-0.01	0.12	0.06	0.12	0.07	0.12		
3.1.1_HR_Planning_2012	<b>0.20</b>	0.19	0.19	0.11		0.18	<b>0.20</b>	0.18	0.32	0.16	0.16	0.17	<b>0.21</b>		0.18	0.23	0.05	0.23	0.10	0.32	0.34	0.31	0.33	0.13	0.17	0.12	<b>0.27</b>	0.17	<b>0.24</b>	0.15		
3.1.2 Org Design _2013	0.02	0.10	0.12	0.05	0.18	0.01	-0.02	0.04	0.14	0.02	0.03	0.14	0.12	<b>0.25</b>		-0.01	0.32	0.39	<b>0.21</b>	0.18	0.31	0.38	0.27	0.07	0.11	0.08	0.15	0.16	0.20	0.17	0.17	
3.1.2_Org_Design_2012	0.16	0.05	<b>0.23</b>	0.16		0.15	<b>0.28</b>	<b>0.29</b>	<b>0.30</b>	0.18	0.15	0.18	<b>0.21</b>	0.18	1.00	<b>0.28</b>	<b>0.21</b>	<b>0.32</b>	0.12	0.37	0.35	0.27	0.27	0.16	<b>0.24</b>	<b>0.31</b>	<b>0.22</b>	<b>0.25</b>	0.20	0.19		
3.1.3 HR Dev Plan_2013	-0.04	0.00	0.04	-0.04	0.08	<b>0.23</b>	0.04	0.01	0.20	0.19	0.13	0.17	0.14	<b>0.25</b>	-0.01	0.30	0.16	0.10	0.17	<b>0.22</b>	<b>0.21</b>	0.15	0.12	0.12	0.19	0.10	0.08	0.19	0.10	0.19		
3.1.3_HR_Dev_Plan_2012	0.18	0.06	0.13	<b>0.20</b>		0.05	0.12	<b>0.26</b>	<b>0.23</b>	0.12	<b>0.24</b>	0.18	0.16	<b>0.23</b>	0.28	1.00	0.19	<b>0.24</b>	0.14		0.40	0.35	0.21	<b>0.24</b>	<b>0.20</b>	0.20	0.11	<b>0.21</b>	<b>0.29</b>	0.04	<b>0.24</b>	
3.2.1 Pay Sheet Cert_2013	0.07	0.05	<b>0.34</b>	0.06	<b>0.26</b>	<b>0.27</b>	0.15	0.14	0.25	0.24	0.19	0.26	<b>0.21</b>	0.15	<b>0.32</b>	<b>0.30</b>		0.39	0.15	<b>0.20</b>	0.27	0.29	0.34	0.22	0.28	0.14	0.11	0.04	0.14	0.11	0.21	
3.2.1_Pay_Sheet_Cert_2012	0.14	<b>0.21</b>	0.12	0.14		0.11	0.17	<b>0.25</b>	<b>0.31</b>	0.22	<b>0.30</b>	0.20	0.32	0.05	<b>0.21</b>	0.19		1.00	0.34	0.08		0.38	0.25	0.18	<b>0.21</b>	<b>0.28</b>	<b>0.30</b>	0.32	<b>0.30</b>	<b>0.33</b>	0.33	
3.2.2 Recr & Reten_2013	0.11	0.16	<b>0.32</b>	0.17	0.07	<b>0.23</b>	0.05	<b>0.24</b>	0.20	0.29	0.26	<b>0.33</b>	0.26	<b>0.41</b>	<b>0.39</b>	0.16	<b>0.39</b>	1.00	<b>0.28</b>	<b>0.20</b>	0.45	<b>0.41</b>	<b>0.38</b>	0.20	0.20	<b>0.22</b>	0.17	0.12	0.23	0.11	<b>0.30</b>	
3.2.2_Recr_&_Reten_2012	<b>0.22</b>	0.16	0.17	0.06		-0.04	0.17	<b>0.26</b>	<b>0.30</b>	0.18	0.19	<b>0.28</b>	0.24	<b>0.23</b>	<b>0.32</b>	<b>0.24</b>	0.34	0.13		0.39	<b>0.26</b>	<b>0.28</b>	0.16	0.16	<b>0.21</b>	<b>0.32</b>	<b>0.42</b>	0.15	<b>0.21</b>	0.22		
3.2.4 Mgt Diversity_2013	0.13	<b>0.20</b>	0.20	<b>0.28</b>	<b>0.24</b>	<b>0.29</b>	0.27	0.16	<b>0.32</b>	<b>0.30</b>	<b>0.23</b>	<b>0.29</b>	<b>0.29</b>	0.29	<b>0.21</b>	0.10	0.15	<b>0.28</b>	0.19	0.34	<b>0.32</b>	<b>0.32</b>	0.13	0.18	0.06	<b>0.27</b>	0.11	0.07	0.16	0.19		
3.2.4_Mgt_Diversity_2012	0.04	0.11	0.08	-0.03		-0.02	-0.05	0.02	0.08	-0.01	-0.02	0.01	0.10	0.10	0.12	0.14	0.08	0.13	1.00	0.15	0.19	0.08	0.07	-0.07	0.01	0.09	0.16	0.01	-0.02	0.05		
3.2.5: Health & Wellness _2013	-0.08	-0.14	0.13	0.12	0.02	0.14	<b>0.25</b>	0.04	0.13	<b>0.20</b>	0.10	0.15	0.15	0.16	0.18	0.17	<b>0.20</b>	<b>0.20</b>	0.19	1.00	0.13	0.18	0.15	0.12	0.00	0.03	0.12	0.05	0.10	0.02	0.01	
3.3.1 1-12 PMDS_2013	0.17	<b>0.26</b>	<b>0.27</b>	0.18	0.19	0.20	0.16	0.14	<b>0.31</b>	0.19	<b>0.33</b>	0.24	0.29	0.37	<b>0.31</b>	0.22	<b>0.27</b>	<b>0.45</b>	<b>0.34</b>	0.13	1.00	<b>0.51</b>	<b>0.32</b>	<b>0.22</b>	0.16	0.13	0.20	0.20	<b>0.20</b>	0.10	<b>0.20</b>	
3.3.1_1-12_PMDS_2012	0.18	<b>0.29</b>	0.19	0.15		0.19	<b>0.28</b>	0.35	<b>0.45</b>	0.20	0.30	0.22	0.29	0.32	0.37	0.40	0.38	0.39	0.15	1.00	<b>0.41</b>	<b>0.36</b>	0.31	0.14	0.16	<b>0.21</b>	0.19	0.15	0.22	0.22		
3.3.2 SMS PMDS _2013	0.04	0.07	<b>0.21</b>	<b>0.24</b>	0.18	<b>0.29</b>	0.22	0.09	0.44	0.18	<b>0.25</b>	<b>0.37</b>	<b>0.28</b>	0.37	0.38	0.21	0.29	<b>0.41</b>	<b>0.32</b>	0.18	<b>0.51</b>	1.00	0.45	0.20	<b>0.21</b>	0.18	0.16	0.20	0.17	<b>0.25</b>		
3.3.2_SMS_PMDS_2012	0.18	<b>0.24</b>	0.16	<b>0.23</b>		0.14	0.10	<b>0.24</b>	<b>0.32</b>	0.30	0.18	0.15	0.31	0.34	0.35	0.35	0.25	0.26	0.19	0.41	1.00	0.35	0.24	0.20	0.20	0.13	<b>0.21</b>	<b>0.28</b>	0.23	0.20		
3.3.3 PMDS HOD_2013	0.12	<b>0.27</b>	0.20	<b>0.25</b>	<b>0.30</b>	<b>0.34</b>	0.25	0.20	0.28	0.25	0.20	<b>0.38</b>	0.29	0.37	0.27	0.15	<b>0.34</b>	<b>0.38</b>	<b>0.32</b>	0.15	1.00	<b>0.32</b>	<b>0.45</b>	1.00	0.25	<b>0.31</b>	0.07	0.24	0.02	0.02	0.12	<b>0.21</b>
3.3.3_PMDS_HOD_2012	<b>0.29</b>	0.39	0.18	0.18		0.10	0.18	0.27	<b>0.31</b>	0.26	0.16	0.11	0.25	0.31	0.27	0.21	0.18	<b>0.28</b>	0.08		0.36	0.35	1.00	0.24	0.13	0.16	0.11	0.14	0.19	0.22	<b>0.31</b>	
3.4.2 Discipl Cases_2013	-0.07	-0.06	0.12	-0.05	0.11	0.17	0.08	0.20	0.18	0.06	<b>0.21</b>	0.19	0.20	0.06	0.07	0.12	<b>0.22</b>	0.20	0.13	0.12	<b>0.22</b>	0.20	<b>0.25</b>	1.00	<b>0.26</b>	0.17	0.16	-0.02	-0.03	0.05	0.10	
3.4.2_Discipl_Cases_2012	0.11	0.18	<b>0.33</b>	0.09		0.16	<b>0.21</b>	0.17	<b>0.28</b>	0.10	0.20	0.17	0.15	<b>0.33</b>	<b>0.27</b>	0.24	0.21	0.16	0.07		<b>0.31</b>	<b>0.24</b>	0.24	0.09	0.09	<b>0.24</b>	0.24	0.18	0.19	0.08	<b>0.24</b>	
4.1.1 Demand Mgt_2013	0.05	0.17	0.18	0.08	0.19	<b>0.21</b>	<b>0.28</b>	0.16	0.20	0.14	0.18	<b>0.20</b>	<b>0.20</b>	0.10	0.11	0.12	0.28	0.20	0.18	0.00	0.16	<b>0.21</b>	<b>0.31</b>	<b>0.26</b>	1.00	<b>0.29</b>	<b>0.29</b>	<b>0.23</b>	<b>0.25</b>	0.20	<b>0.33</b>	
4.1.1_Demand_Mgt_2012	0.19	<b>0.22</b>	0.06	0.11		0.02	<b>0.22</b>	0.15	0.19	0.12	<b>0.21</b>	0.07	0.20	0.13	0.16	0.20	0.28	0.16	-0.07		0.14	0.20	0.13	0.09	1.00	<b>0.52</b>	0.22	0.36	0.45	0.34	0.42	

Colour Codes	
Correlation cut-off 0.5 (Strong effect)	
Correlation cut-off 0.3 (Medium effect)	
Correlation cut-off 0.2 (Slight effect)	

## Annexure C

### SPEARMAN CORRELATIONS BETWEEN STANDARDS FOR MPAT 2013(UPPER VALUE IN CELL) AND MPAT 2012 (LOWER VALUE) - PART 3

	1.1.1 Strat Plans	1.1.2 APP	1.3.1 M&E	2.1.1 SDIP	2.10.1 PAIA	2.2.1 Mgt Struct	2.3.2 Audit Comm	2.4.1 Prof Ethics	2.4.2 Fraud Prev	2.5.1 Interl Audit	2.6.1 Risk Mgt	2.7.1 Deleg's: PSA	2.7.2 Deleg's: PFMA	3.1.1 HR Planning	3.1.2 Org Design	3.1.3 HR Dev Plan	3.2.1 Pay Sheet Cert	amp; Reten	3.2.4 Mgt Diversity	3.2.5; Health & Wellness	3.3.1 1-12 PMDS	3.3.2 SMS PMDS	3.3.3 PMDS HOD	3.4.2 Discipl Cases	4.1.1 Demand Mgt	4.1.2 Acquisition Mgt	4.1.3 Logistics Mgt	4.1.4 Disposal Mgt	4.2.1 Cash Flow	4.2.2 Paym't of Suppl	4.2.3 Unauthorised, etc
4.1.1 Demand Mgt_2013	0.05	0.17	0.18	0.08	0.19	0.21	0.28	0.16	0.20	0.14	0.18	0.20	0.20	0.10	0.11	0.12	0.28	0.20	0.18	0.00	0.16	0.21	0.31	0.26	1.00	0.29	0.29	0.23	0.25	0.20	0.33
4.1.1_Demand_Mgt_2012	0.19	0.22	0.06	0.11		0.02	0.22	0.15	0.19	0.12	0.21	0.07	0.20	0.13	0.16	0.20	0.28	0.16	-0.07		0.14	0.20	0.13	0.09	0.52	0.22	0.36	0.45	0.34	0.42	
4.1.2 Acquisition Mgt_2013	0.28	0.19	0.05	0.03	0.00	0.08	0.04	0.12	0.02	0.01	0.18	0.19	0.22	-0.01	0.08	0.19	0.14	0.22	0.06	0.03	0.13	0.18	0.07	0.17	0.29	1.00	0.28	0.26	0.20	0.25	0.30
4.1.2_Acquisition_Mgt_2012	0.14	0.16	0.22	0.04		0.12	0.18	0.14	0.15	0.10	0.21	0.16	0.29	0.17	0.24	0.20	0.30	0.21	0.01		0.16	0.20	0.16	0.24	0.52	0.44	0.46	0.42	0.31	0.39	
4.1.3 Logistics Mgt_2013	0.15	0.10	0.15	0.07	0.22	0.15	0.10	0.06	0.12	0.12	0.14	0.28	0.33	0.12	0.15	0.10	0.11	0.17	0.27	0.12	0.20	0.16	0.24	0.16	0.29	0.28	1.00	0.29	0.18	0.35	0.19
4.1.3_Logistics_Mgt_2012	0.20	0.20	0.28	-0.01		0.10	0.26	0.24	0.26	0.15	0.16	0.23	0.25	0.12	0.31	0.11	0.31	0.32	0.09		0.21	0.13	0.11	0.24	0.22	0.44	0.49	0.32	0.22	0.36	
4.1.4 Disposal Mgt_2013	0.00	0.15	0.01	0.01	0.00	0.07	0.06	0.01	0.09	0.01	0.16	0.13	0.24	0.06	0.16	0.08	0.04	0.12	0.11	0.05	0.20	0.20	0.02	-0.02	0.23	0.26	0.29	1.00	0.33	0.23	0.35
4.1.4_Disposal_Mgt_2012	0.31	0.32	0.13	0.19		0.04	0.31	0.29	0.23	0.24	0.18	0.24	0.26	0.27	0.22	0.21	0.32	0.42	0.16		0.19	0.21	0.14	0.18	0.36	0.46	0.49	0.43	0.36	0.49	
4.2.1 Cash Flow_2013	0.11	0.01	0.11	0.18	0.02	0.20	-0.06	0.10	0.26	0.04	0.14	0.19	0.14	0.12	0.20	0.19	0.14	0.23	0.07	0.10	0.20	0.20	0.02	-0.03	0.25	0.20	0.18	0.33	1.00	0.34	0.28
4.2.1_Cash_Flow_2012	0.34	0.26	0.19	0.23		0.17	0.22	0.15	0.25	0.21	0.25	0.14	0.34	0.17	0.25	0.29	0.30	0.15	0.01		0.15	0.28	0.19	0.19	0.45	0.42	0.32	0.43	1.00	0.29	0.46
4.2.2 Paym't of Suppl_2013	0.19	0.07	-0.01	0.15	0.20	0.15	0.21	0.07	0.18	0.07	0.05	0.16	0.22	0.07	0.17	0.10	0.11	0.11	0.16	0.02	0.10	0.17	0.12	0.05	0.20	0.25	0.35	0.23	0.34	0.25	
4.2.2_Paym't_of_Suppl_2012	0.28	0.35	0.15	0.21		0.09	0.18	0.26	0.25	0.20	0.23	0.05	0.36	0.24	0.20	0.04	0.33	0.21	-0.02		0.22	0.23	0.22	0.08	0.34	0.31	0.22	0.36	0.29	1.00	0.43
4.2.3 Unauthorised, etc_2013	0.27	0.15	0.10	-0.01	0.10	0.20	0.25	0.09	0.26	0.09	0.14	0.26	0.19	0.12	0.17	0.19	0.21	0.30	0.19	0.01	0.20	0.25	0.21	0.10	0.33	0.30	0.19	0.35	0.28	0.25	
4.2.3_Unauthorised,_etc_2012	0.32	0.32	0.21	0.16		0.18	0.26	0.26	0.30	0.22	0.20	0.09	0.24	0.15	0.19	0.24	0.33	0.22	0.05		0.22	0.20	0.31	0.24	0.42	0.39	0.36	0.49	0.46	0.43	1.00

Colour Codes		
Correlation cut-off 0.5 (Strong effect)		
Correlation cut-off 0.3 (Medium effect)		
Correlation cut-off 0.2 (Slight effect)		

## Annexure D

### LOADING OF MPAT 2013 STANDARDS ON KPAs: 5-FACTOR GEOMIN ROTATION

VAR		F1	F2	F3	F4	F5
V2	1.1.2 APP	0.59	0.02	-0.07	0.07	0.18
V1	1.1.1 Strat Plans	0.49	-0.04	0.02	-0.05	0.34
V4	2.1.1 SDIP	0.38	0.32	-0.07	0.10	0.01
V3	1.3.1 M&E	0.37	-0.13	0.22	0.31	-0.03
V7	2.3.2 Audit Comm	-0.01	1.11	0.01	-0.34	0.02
V10	2.5.1 Interl Audit	0.02	0.59	0.25	0.02	-0.20
V19	3.2.4 Mgt Diversity	0.18	0.43	0.08	0.35	0.01
V5	2.10.1 PAIA	0.35	0.37	0.03	0.05	0.04
V9	2.4.2 Fraud Prev	-0.04	0.31	0.22	0.28	0.07
V11	2.6.1 Risk Mgt	0.06	0.10	0.57	0.05	-0.01
V8	2.4.1 Prof Ethics	0.31	0.05	0.53	-0.05	-0.02
V6	2.2.1 Mgt Struct	-0.07	0.32	0.46	0.09	0.02
V24	3.4.2 Discipl Cases	-0.12	-0.05	0.43	0.16	0.04
V13	2.7.2 Deleg's: PFMA	0.09	0.13	0.36	0.12	0.26
V12	2.7.1 Deleg's: PSA	-0.07	0.05	0.34	0.34	0.18
V22	3.3.2 SMS PMDS	-0.10	0.19	-0.07	0.79	0.03
V18	3.2.2 Recr & Reten	0.11	-0.12	0.10	0.75	0.00
V15	3.1.2 Org Design	0.01	-0.02	-0.33	0.70	0.04
V21	3.3.1 1-12 PMDS	0.13	0.03	-0.01	0.69	0.03
V14	3.1.1 HR Planning	0.07	0.12	-0.01	0.61	-0.18
V23	3.3.3 PMDS HOD	0.23	0.23	0.09	0.46	-0.03
V17	3.2.1 Pay Sheet Cert	-0.03	0.01	0.22	0.44	0.01
V20	3.2.5: Health & Wellness	-0.23	0.22	0.04	0.30	-0.10
V16	3.1.3 HR Dev Plan	-0.26	0.00	0.23	0.29	0.12
V28	4.1.4 Disposal Mgt	-0.10	0.00	-0.07	0.13	0.62
V26	4.1.2 Acquisition Mgt	0.04	-0.15	0.29	-0.06	0.62
V30	4.2.2 Paym't of Suppl	0.00	0.31	-0.14	0.00	0.58
V31	4.2.3 Unauthorised, etc	-0.02	0.10	0.05	0.13	0.52
V27	4.1.3 Logistics Mgt	0.10	0.13	0.08	0.06	0.48
V25	4.1.1 Demand Mgt	0.08	0.19	0.20	-0.03	0.45
V29	4.2.1 Cash Flow	-0.13	-0.06	-0.01	0.25	0.45

Legend	
Not used in previous analysis	
Secondary loadings over .3	
Moved from expected factor	

This exploratory analysis suggests some changes that may be considered in the definition of KPAs for the next MPAT version. The main change is that the previous Governance factor has been split into two factors (F2 and F3). This splits Governance standards more related to compliance from more operational issues. The remaining factors are more tightly defined in terms of the original standard allocation with M&E moving into the Strategy factor (F1) and Deleg's: PSA moving from the HR factor(F4) back into a Governance factor (F3) as originally conceptualised.

## Annexure E

**TABLE OF SHORT AND LONG DEPARTMENT NAMES**

Short Dept. Name	Full Department Name	Short Dept. Name	Full Department Name
EC EDEA&T	EC Economic Development, Environmental Affairs & Tourism	MP SD	MP Social Development
EC EDU	EC Education	NC ALR&RD	NC Agriculture, Land Reform and Rural Dev
EC DOH	EC Health	NC COGSTA	NC Coop Governance, Human Settlement, Trad Aff
EC HS	EC Human Settlements	NC FED&T	NC Economic Development and Tourism
EC LG&TA	EC Local Government and Traditional Affairs	NC Edu	NC Education
EC OTP	EC Office of the Premier	NC E&NC	NC Environment and Nature Conservation
EC TREASURY	EC Provincial Planning and Treasury	NC DOH	NC Health
EC R&PW	EC Roads and Public Works	NC OTP	NC Office of the Premier
EC RD&AR	EC Rural Development and Agrarian Reform	NC Treasury	NC Provincial Treasury
EC S&L	EC Safety and Liaison	NC R&PW	NC Roads and Public Works
EC SD	EC Social Development and Special Programmes	NC SD	NC Social Development
EC SRA&C	EC Sport, Recreation, Arts and Culture	NC SA&C	NC Sport, Arts and Culture
EC DOT	EC Transport	NCTS&L	NC Transport, Safety and Liaison
FS AGRIC	FS Agriculture and Rural Development	ND A, F & F	ND Agriculture, Forestry and Fisheries
FS COGTA	FS Cooperative Governance and Traditional Affairs	ND A & C	ND Arts and Culture
FS EDT&EA	FS Economic Dev, Tourism, Environmental Affairs	ND B Educ	ND Basic Education
FS EDU	FS Education	ND Comm	ND Communications
FS DOH	FS Health	ND COG	ND Cooperative Governance and Traditional Affairs
FS HS	FS Human Settlements	ND Correct	ND Correctional Services
FS OTP	FS Office of the Premier	ND Defence	ND Defense
FS PR&T	FS Police, Roads and Transport	ND Econ Dev	ND Economic Development
FS TREASURY	FS Provincial Treasury	ND Energy	ND Energy
FS PW	FS Public Works	ND Enviro	ND Environmental Affairs
FS SD	FS Social Development	ND GCIS	ND Government Communication and Information Systems
FS SAC&R	FS Sport, Arts, Culture and Recreation	ND Health	ND Health
GP A&RD	GP Agriculture and Rural Development	ND Hig Educ	ND Higher Education and Training
GP CS	GP Community Safety	ND Home Affairs	ND Home Affairs
GP ED	GP Economic Development	ND Hum Settl	ND Human Settlements
GP Edu	GP Education	ND IPID	ND Independent Police Investigative Directorate
GP Fin	GP Finance	ND IRCO	ND International Relations and Cooperation
GP DOH	GP Health	ND Justice	ND Justice and Constitutional Development
GP ID	GP Infrastructure Development	ND Labour	ND Labour
GP LG&TA	GP Local Government & Housing	ND Min Res	ND Mineral Resources
GP OTP	GP Office of the Premier	ND Treasury	ND National Treasury
GP R&T	GP Roads and Transport	ND PM&E	ND Performance Monitoring and Evaluation
GP SD	GP Social Development	ND Presidency	ND Presidency
GP SAC&R	GP Sport, Arts, Culture and Recreation	ND PALAMA	ND Public Admin Leadership and Management Academy
GP Treasury	GP Treasury	ND Pub Enterp	ND Public Enterprises
KZN AEA&RD	KZN Agriculture, Environmental Aff and Rural Dev	ND PSA	ND Public Service and Administration
KZN A&C	KZN Arts and Culture	ND PSC	ND Public Service Commission
KZN CS&L	KZN Community Safety and Liaison	ND Pub Works	ND Public Works
KZN COGTA	KZN Cooperative Governance and Traditional Affairs	ND Rural Dev & Land Tech	ND Rural Development and Land Reform
KZN ED&T	KZN Economic Development and Tourism	ND Science & Tech	ND Science and Technology
KZN Edu	KZN Education	ND Socl Dev	ND Social Development
KZN DOH	KZN Health	ND Police	ND South African Police Service
KZN HS	KZN Human Settlements	ND Sports & Recr	ND Sport and Recreation South Africa
KZN OTP	KZN Office of the Premier	ND Statis SA	ND Statistics South Africa
KZN Treasury	KZN Provincial Treasury	ND Tourism	ND Tourism
KZN PW	KZN Public Works	ND Trade & Ind	ND Trade and Industry
KZN SD	KZN Social Development	ND Transp	ND Transport
KZN S&R	KZN Sport and Recreation	ND Water Aff	ND Water Affairs
KZN DOT	KZN Transport	ND WC & D	ND Women, Children and Disabled People
LP AGRIC	LP Agriculture	NW ALR&RD	NW Agriculture and Rural Development
LP COGSTA	LP Coop Governance, Human Settlement, Trad Affairs	NW EDEC&T	NW Economic Dev, Conserv, Environ and Tourism
LP EDE&T	LP Economic Development, Environment and Tourism	NW BE&T	NW Education and Training
LP Edu	LP Education	NW Fin	NW Finance
LP DOH	LP Health	NW DOH	NW Health
LP OTP	LP Office of the Premier	NW HS	NW Human Settlements
LP Treasury	LP Provincial Treasury	NW LG&TA	NW Local Government and Traditional Affairs
LP PW	LP Public Works	NW OTP	NW Office of the Premier
LP R&T	LP Roads and Transport	NW PWR&T	NW Public Works, Roads and Transport
LP SSL	LP Safety, Security and Liaison	NW SDWC&PD	NW Social Development, Women, Children & People with disabilities
LP SD	LP Social Development	NW SA&C	NW Sport, Arts and Culture
LP SA&C	LP Sport, Arts and Culture	WC Agric	WC Agriculture
MP ARD&LA	MP Agriculture, Rural Dev and Land Admin	WC CS	WC Community Safety
MP SS&L	MP Community Safety, Security and Liaison	WC CA&S	WC Cultural Affairs and Sport
MP COGTA	MP Cooperative Governance and Traditional Affairs	WC ED&T	WC Economic Development and Tourism
MP CS&R	MP Culture, Sport and Recreation	WC Edu	WC Education
MP EDE&T	MP Economic Development, Environment and Tourism	WC DEADP	WC Environmental Affairs and Development Planning
MP Edu	MP Education	WC DOH	WC Health
MP Fin	MP Finance	WC HS	WC Human Settlements
MP DOH	MP Health	WC LG	WC Local Government
MP HS	MP Human Settlements	WC OTP	WC Office of the Premier
MP OTP	MP Office of the Premier	WC Treasury	WC Provincial Treasury
MP PWR&T	MP Public Works, Roads and Transport	WC SD	WC Social Development
		WC T&PW	WC Transport and Public Works