ETHEKWINI MUNICIPALITY

GV2008: Contract 1E – 904

LESSONS LEARNED DOCUMENT

PROJECT DESCRIPTION:
THE GENERAL VALUATION OF ALL PROPERTIES WITHIN THE ETHEKWINI MUNICIPALITY AND THE SUBSEQUENT DELIVERY OF A VALUATION ROLL, IN COMPLIANCE WITH THE LOCAL GOVERNMENT MUNICIPAL PROPERTY RATES ACT NO 6 OF 2004.

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Contents

Document Change Control

Revision Number	Date of Issue	Author	Description of Change
0.5	19-08-2008	S. Hatton	Preliminary rough draft
1.0	12-11-2008	S. Hatton	Reworked draft
2.5	07-01-2009	S. Hatton	Expanded draft, circulated to project team for input.
2.6	25-06-2009	S. Hatton	Final Report – distributed to project team

Distribution

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A: OBJECTIVE OF THIS DOCUMENT:

The purpose of this document is to record both the good and the bad things that happened in the project, and to serve project managers working on future projects of a similar nature.

This document starts off with a record of the strategies which led to project success, followed in section C by those areas which left potential for improvement.

This document is supported by the project issue logs (Weekly Activity Lists), together with the Project Diary.

B: PROJECT SUCCESSES:

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ID	PROJECT PHASE	PROJECT SUCCESS	IMPACT ON PROJECT/ LESSON LEARNED
1	Pilot Study	**Pilot Study Undertaken:** From January to March 2005, in accordance with IAAO and accepted best practice, an outsourced Pilot Study was performed in order to assess the readiness of the municipality to undertake a general valuation in terms of the Municipal Property Rates Act, 2004 (Hereafter MPRA), and to determine detailed valuation requirements which in turn informed the tender preparation.	Without the pilot study, the municipality would have approached the GV "cold", and the drawing up of the technical specification for the contract would not have been meaningful.
2	Tender Processing	**Tender Preparation and Adjudication:** An independent project team was appointed, the eThekwini Project Team (Hereafter EPT), following on from the Pilot Study, to start project planning and research and to compile the tender specifications for an outsourced general valuation in terms of the MPRA. This project team undertook a comprehensive, rigorous and structured adjudication of the tender responses. In this adjudication process the EPT created a detailed trade-off study and related adjudication tools which were subsequently adopted by the DLGTA as the provincial standard. The contract withstood an appeal against the tender award due to the bullet-proof adjudication.	Without the meticulous crafting of specifically the technical specification for the GV, it would not have been possible to manage the contractor and keep the project on track. This tender document became the statement of work once the tender was awarded, and was used to monitor and control the project.
3	Project Management	**Deployment of External eThekwini Project Team (EPT):** A decision was taken to appoint an independent, specialist team comprising John Waldeck, Steve Hatton and Graham Baillache to oversee the contractor's implementation of the contract. This team had vast accumulated valuation and IT experience, with intimate knowledge of the city's valuation IT systems and data.The team's objectives were to: 1. Ensure that the project was carried out in compliance with the terms of reference as specified in the municipality's contract No. IE-904 and the MPRA. 2. Satisfy itself as to the quality of project delivery, before the event, through participation in the planning and execution of all project phases affecting deliverables 3. Monitor the work breakdown structure and ensure that the project remained	This team held weekly and bi-weekly meetings with the contractor for the duration of the project, and was intimately involved in the quality assurance process, in many instances drawing up the QA plans for the contractor. Without this intervention the project ran a serious risk of not staying on track with regards the "triple constraint" of schedule, scope and cost.

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		on schedule. 4. Track invoices against the payment plan and authorise payments to the contractor	
4	Legal Compliance	**MPRA "Gap Analysis" and Creation of MPRA Checklist:** One of the first activities which the EPT undertook was to unpack the MPRA, line – by – line and map it to the municipality's business (gap analysis of MPRA) in order to create an MPRA Checklist, which provided a detailed dashboard for legal and procedural implementation. This checklist specified the actions that each clause of the MPRA would necessitate within the municipality, the responsible office and the due date. The MPRA Checklist was used by the DLGTA as well as other Metros to assist with legal compliance and implementation.	The need for this project was created by a piece of national legislation, the Municipal Property Rates Act No. 6, 2004. This detailed gap analysis and creation of a municipal MPRA checklist ensured that there were no procedural shortcomings in the implementation of the MPRA, which prevented possible legal action against the roll when going live.
5	Cost Management	**Payment Plan Tied to Deliverables:** The EPT, in collaboration with the contractor, crafted a detailed payment plan that was tied strictly to deliverables in terms of the project plan. This payment plan drove the project budget, and gave the municipality sound financial leverage. This obviated the typical request in projects of this nature for a fixed monthly cash – flow based on activities, which would have made it impossibly difficult to manage and measure the contractor's performance.	In a long-term project of this magnitude, tying the payment to tangible, measurable deliverables ensured that the product remained on track. Ensure that your projects have clearly defined and measurable deliverables that are tied to the project plan. Avoid activity or time – based payments.
6	IT Systems	**Business Process Design and Technology Platform:** The contract was weighted heavily in its adjudication for business analysis and IT, which afforded the municipality the opportunity of developing cutting edge IT systems to manage the collection of residential and non residential data, as well as the electronic integration of a market report for the purpose of non residential valuations and QA. Some of the noteworthy achievements in this regard are cited below: **1. Data Collection Forms (Non Res)**: A lot of work went into the design and creation of MSExcel templates that served as data collection forms for the non res data collection and valuation process. These forms allowed for data input at both a building and building section level, and were populated with calculations, code lists, validation macros and parameters which performed automatic data validation upon capture by a valuer. For the residential data collection a cutting edge digital pen and paper solution was implemented which included auto validation and upload from the field to a centralised	The software and business processes that were created for this project allowed for effective management of bulk data and valuations, the requirements of which are vast for a project of this size. The bespoke software generated customized reports that were integrally tied to the release of payment. In order to ensure a sound Technology Base, ensure that you provide adequate "knowledge workers" to plan for and design the systems that are required to implement a GV – these projects require a lot of IT and GIS.

ID	PROJECT PHASE	PROJECT SUCCESS	IMPACT ON PROJECT/ LESSON LEARNED
		database. **2**. **Data Collection Software**: All the GV data acquisition software was designed and written from scratch for the project, and in the case of the non res system it allowed for electronic management of work packages to the contract valuers, using a combination of Pin numbers and bar codes to manage the batching and upload. As mentioned above, automatic field – level data validation was implemented upon form upload. The software also provided comprehensive statistical reporting in terms of the status of the data collection at the level of the individual DCF, which in turn drove the payment process.(This is further elaborated in the following entry) **3. Market Report**: The purpose of the market report is to serve as a guideline to valuers to ensure some form of uniformity and consistency. The market report was integrated into the valuation process to allow for automated identification of error exceptions, etc. **4. Sketching Tool:** A separate sketching tool was deployed in order to create electronic sketches of all non residential property. **5. GIS** Evaluations has a very strong GIS shop and the GIS played a foundational role in the project, being used to drive the data collection management, sales analysis, CAMA locational work etc. Note that the printing requirements of route maps, DCF's etc were huge and a full time complement of 8 resources worked in shifts, 24 by 7 to support the printing requirements of the data collection process. **6. SPSS (Statistical Package):** SPSS is the third party statistical package that was used to do the regression analysis for houses and sectional title flats. **7. Vista Imagery:** A new 3D product was deployed that allows a drive by video of the city to be taken that can be played back in real time to a user on the desktop, thereby providing the full "look and feel" of being in the neighbourhood.	Don't get hung up on IT/ data exceptions, remember that perfect is the enemy of good – e.g. The eThekwini land reform beneficiaries (there were less than one hundred). Ensure that you streamline business processes, prioritising the customer – facing ones, e.g. rates clearances and valuation objections and appeals.
7	Res and Non Res Data Collection	**Quality Assurance (QA) Implemented for data collection:** The project team formulated detailed quality assurance processes at a data attribute level, which enforced sampled recollection and verification of all batches. In addition to this, automated data validation was built into the IT systems at a data attribute level. Software applications were developed to manage the route preparation, batching,	Payment for data collection comprised R18.5 mill (approx. 26% of the project budget), and the quality assurance and attendant reporting processes ensured that this process remained on track, and at an acceptable level of quality.

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		validation checking and QA of the data collection process. These programs were heavily integrated with the GIS to facilitate route printing and batching. Data validation, was performed at two levels: 1. Through automated software validation based on the completeness checks which had been defined, together with a visual scan of each form for obvious anomalies. 2. In the field by specially trained Quality Control Team. This process involved physical visits in areas where DCFs had been selected for Quality Control, verifying what had been captured on the form. This process involved a 12 percent quality check for the first 3 months and 6 percent after 3 months. Incisive reporting tools were developed to record the error failure rates etc. Two levels of QA were implemented – one by the contractor and one by the municipality. eThekwini had a team of internal building assessors QA'ing a sample of the contractors data collection work and recording the results independently.	
8	Non Res Valuations	**Consistency review process by Specialist Panel of Valuers:** An external panel of specialist valuers was assembled and given a brief to review non residential property in bulk, looking for consistency and trying to pick up patterns of error. In dialogue with the province it was established that no other municipalities were involved with checking the quality of their valuations that were returned by contractors.	The quality of the non residential valuations was greatly enhanced in terms of both accuracy and consistency by this intervention.
9	Non Res Valuations	**Formulation of Valuation Policy Guidelines and Practice Directives:** The project team discovered that there were certain technical areas of the Act that required further interpretation in order to consistently apply them to the decisions that had been taken in respect of the valuation and rating of certain property types. To this end a number of policy 'guidelines' were formulated by the EPT, in collaboration with the contractor. Examples are: 1. <u>Inclusion / Exclusion Rules, which covered:</u> • What to exclude from the valuation roll, e.g. Nil values, record does not appear in the Deeds Office, no rates currently being raised etc. • What to value, e.g. Exclude the valuation of municipal properties not valued in the current roll, etc. 2. <u>Agricultural policy, included:</u>	Consistency of approach was hereby ensured among the numerous professional valuers that worked on different aspects of the valuation.

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		• Certain detail relative to crops and plant and machinery. • Primarily issues regarding the classification of use to match the municipality's agricultural rates policy. 3. <u>PSI:</u> • PSI was a totally new area, and to this end the EPT did a lot of upfront policy work relative to PSI, and shared its processes with the Province. • Defined corridor (e.g. Road & rail) and non corridor (e.g. Dams & airports) PSI and the way in which the data would be assimilated, valued and recorded in the valuation roll. 4. <u>Practice Directives:</u> Ongoing practice directives were circulated to the contract valuers that were working on the commercial & industrial valuations, which ensured consistency of approach with e.g. the valuation of private schools, dwellings used for business purposes, etc.	
10	CAMA Valuations – Quality Assurance	**Checking the CAMA model results against Recent Sales:** Once the contractor had applied his CAMA model, produced values, reviewed them and passed them to the municipality the following was independently undertaken by the EPT. <u>Check performed against sales:</u> 1. Recent sales were extracted and checked against what the contractor had valued at. 2. Sales were picked at random in neighbourhoods, sales history interrogated, indexed if necessary and compared to the contractor's value. <u>Check performed against asking prices:</u> Independent sourcing of sales properties and asking prices, and comparison to contractor value. In order to facilitate a quality check of model – generated values, the EPT wrote software to perform bulk comparison of CAMA – generated values to recent Deeds Office sales. The findings were fed back to the contractor's CAMA specialist in order to further calibrate the models. <u>Workshops with Municipality's Valuation Staff:</u> In addition to the checks against recent sales, the EPT also held workshops with the municipality's valuation staff whereby values were reviewed at a neighbourhood level, and assessed in terms of the valuers' knowledge of the local market. The findings were fed back to the contractor's CAMA specialist in order to further calibrate the models.	The CAMA values were not just accepted at face value by the municipality, but subjected to independent checks against recent sales and local valuer knowledge of the market. This resulted in further calibration of the CAMA models, and a more accurate valuation roll.

<table>
<tr><th>ID</th><th>PROJECT PHASE</th><th>PROJECT SUCCESS</th><th>IMPACT ON PROJECT/ LESSON LEARNED</th></tr>
<tr><td>11</td><td>Valuation Roll Publication</td><td>Co-ordination of the Val Roll Publication and Public Launch:
The resources that are needed for the public launch of the valuation roll are not to be underestimated. The MPRA is prescriptive in terms of the content of the valuation roll and a municipality must give careful thought to the number of printed copies that they require to be displayed around the city, and also the electronic media for viewing the roll.
eThekwini had searchable versions of the valuation roll burnt to CD, and these were deployed on laptops to the customer care centres, where valuation roll staff were on hand to assist the public in finding and viewing their property in the valuation roll.
The demand for public access via the internet was so great that the municipality's website crashed within hours of the valuation roll going live. Fortunately the contractor had the IT capacity to provide a mirror site facility that was up and running within hours.
Section 49 of the MPRA requires that an extract of the valuation roll be posted to each property owner. A lot of preparation went into the design and support of this process as it was a new function for the Real Estate Unit of the municipality, and not related to the typical billing post runs.
IT support was also provided in that a property owner was afforded the option of downloading a copy of his/ her section 49 notice from the website, or else the municipal staff could print a copy on demand and have the property owner collect from the municipal offices.</td><td>Careful planning ensured that there were adequate resources and capacity to support the heavy demands of going live with the valuation roll.
Some successes were:
1. Quick creation of a mirror website for public access.
2. Training and deployment of internal resources at customer care centres to facilitate search and objection form completion.
3. Electronic support of section 49 notice creation on demand.</td></tr>
<tr><td>12</td><td>Communications Management</td><td>Communications Campaign run by the Municipality:
The communication requirements for this project were extensive, and a decision was taken up front to run the communication campaign internally using the municipality's communication department.
To this end regular workshops between the EPT and the communications unit were held from the outset of the project, and a highly successful and pervasive communications campaign was implemented, which included the following:
1. A program of press releases with the traditional print media (Sunday Tribune, Mercury, Daily News, Isolezwe, etc.).
2. Ezasegagasini Metro Supplements: Comprising inserts in the municipality's free newspaper supplement, keeping ratepayers abreast of everything from the reason that they pay rates, to detail concerning the rate randage and objection process.
3. A program of press releases with community newspapers (Caxton Group): These were more localized, advising e.g. of when data collectors would be in certain areas, etc.
4. Airtime on Commercial and Community radio stations: Especially after the go live, there were frequent radio interviews with the Deputy City Manager: Treasury, Head:</td><td>The public were well informed by the intense media and communications drive, which alleviated a lot of queries and confusion.
The eThekwini communications campaign was highly effective, and the artefacts that were created were used as templates by other municipalities and the Province.</td></tr>
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		Real Estate and the contractor, answering questions from the public. 5. Video Production: An English and Zulu video was created which informed the viewer concerning the whole MPRA implementation and rating process. This was played in banking halls, given to councilors, used by the DLGTA and other Metros, etc. 6. Pamphlets and Wall Charts: Pamphlets were distributed in taxi/ bus ranks, wall charts displayed in banking halls, etc.	
13	Publication of the Valuation Roll	**Objection Call Centre:** The objection process in terms of the MPRA was something totally new to the property – owner. In terms of the earlier Ordinance only the property owner had the right of appeal, whereas in terms of the MPRA every home owner is served a section 49 notice, and anybody is entitled to object against any other property. This is then followed by new, prescribed processes that would result in an appeal further down the line. The municipality never had capacity to manage the flood of queries that the go live precipitated, and to this end a variation order was implemented to the contract, whereby Evaluations sub – contracted a specialized facility to handle calls from the public during the objection process. The scope of this call centre was to answer questions relating to the section 49 notice and the related objection process, and point people in the right direction in order to receive further technical assistance where necessary. To this end the call centre maintained a daily issue logging process, whereby high – profile and urgent queries were directed to municipal officials for personal attention and resolution.	The fact that the project directors had the foresight to put together a high – end call centre at very short notice contributed greatly to the acceptance of the valuation roll and related processes by the public. The call centre contact number was circulated widely in the print media and in official correspondence from the municipality, which alleviated a lot of potential ratepayer conflict and unpleasantness.
14	Objection Management	**Objections – Business Process and IT System Framework**: The Act was unpacked by the project team in a series of workshops that resulted in the design of a customized business process that fully supported the various options as set out by the Act, and the development of a supporting IT system. The system was workflow – driven and contained a framework of correspondence that was automatically generated for the objector at various stages of the process, requesting further information, notifying of objection outcomes, advising where objector not owner, etc. All objections were also scanned and uploaded to the system, which allowed them to be accessed electronically, and easily disseminated to estate agents that were recruited to assist with the assessment.	The upfront design of business processes and an IT system enabled the objections to be successfully completed in unreasonable tight timeframes that were imposed by the politicians. 53000 objections were effectively complete by February 2009.

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15	Valuation Queries	**Implementing an Ongoing Query Management Process with the Contractor:** A high volume of customer queries were generated by the publication of the new valuation roll. The queries were handled internally by the municipal valuation roll staff, and often entailed unpleasant encounters with angry customers both telephonically and at the customer counters. A spreadsheet issue-log of queries was set up, where the queries were captured by the municipal staff and forwarded to the contractor for processing, with an agreed turnaround time of one week. The queries were categorized for response, with the following being of note: • Errors for supplementary 1 were identified, and letters posted to the customer. • Omitted properties were prioritized for inclusion in supplementary 1, and letters posted to the customer. • Queries were reconciled to the objection process, and pulled out of the query process where an objection had also been lodged. The process culminated in the design of a 'section 78 query form', along the lines of the objection form. This allows a customer that might have missed the objection process to lodge a query that is attended to for inclusion in the municipality's next supplementary roll.	Speedy implementation of business processes around customer queries helped a lot to gain public confidence in the new valuation roll, and to rationalize the rates income with minimal negative impact due to early identification of errors for processing in the first supplementary valuation roll. Just a word of caution - don't be overwhelmed by the number of queries received, always look at the bigger picture and view as a percentage of the whole valuation roll. E.g. eThekwini received approx 1600 valid queries that kept counter staff fully engaged for weeks, yet these only represented 0.2% of the valuation roll in total.
16	Supplementary Valuations	**Implementation of First Supplementary Roll to Coincide with GV Roll:** Ethekwini published its first supplementary valuation roll on 22 May 2008, which became effective on the same date as the GV roll, being 01 July 2008. This was made possible by an early review of the GV Roll, and identification of areas that needed attention in terms of value review, as well as the inclusion of omitted properties and more recent Deeds Office registrations.	The fast-tracking of the first supplementary valuation roll afforded an opportunity to correct errors and avoid loss of rates income, as well as allay unnecessary ratepayer pain and confusion for the overvalued properties.
17	Business Architecture	**Business Process Re-engineering by the Municipality:** The MPRA fundamentally changed that way that the municipality's valuation department worked, a prime example being the former splitting of the department along the functional lines of separate land and building valuations, whereas the MPRA only accommodates a single market value. The Valuation Roll department undertook a series of business analysis workshops whereby all the As Is business processes were mapped against the MPRA and re – engineered where necessary. The following was covered by this process: 1. Identification of current valuation roll business processes 2. Investigation of the impact of the MPRA on As Is processes 3. Documentation of the proposed business processes	Architectural Vision: Ensure that there is someone on board that understands your business intimately, especially for large projects that cut across functional areas. This person will need to identify needs and be able to pull in necessary resources for specialisation as required.

ID	PROJECT PHASE	PROJECT SUCCESS	IMPACT ON PROJECT/ LESSON LEARNED
		4. Identification of special projects that would result from the process changes e.g. targeted data cleanup and preparation for new rates policy. 5. Investigation of overall staffing requirements 6. Determination of which processes can be performed in house and which needed to be outsourced. 7. performing a cost - benefit analysis to determine maintenance model (in house versus outsourced. 8. Preparation of a report to Council with recommendations. 9. Implementation of new processes in terms of the Council resolution. 10. A rewrite of the duty schedules and redesign of organograms.	
18	Quality Assurance	**EPT Coverage Audit of the Roll:** The municipality needed a level of satisfaction that full coverage of the city had been achieved with the new valuation roll, and that nothing had been left out. This was effected by an audit, undertaken by the EPT, which reconciled the old VA2 roll to the GV valuation roll. The basic process that was followed is set out below: 1. A data extract was drawn of all rate numbers, including sub codes that appeared in the old valuation roll (VA2.0), together with the old value and the new market value and a Status Code which the contractor provided. 2. A data extract was drawn of all new rate numbers, together with values, that appeared in the MPRA roll, but which did not appear in old valuation roll (VA2.0). 3. Extracted for further analysis all rate numbers where the new market value was blank or zero. 4. A match was performed between 2 and 3 above, to account for instances where the new record (e.g. a sectional title unit) related to a record in the old valuation roll (e.g. the parent scheme). Wherever a match was found the records were deemed to be accounted for, and removed from the analysis. 5. A total of 27 877 records remained unaccounted for, and became the subject of further detailed interrogation. The 27877 queries were satisfactorily resolved through an iterative research process with the contractor, and the release of the project retention money was tied in to the satisfactory sign-off of this coverage audit.	This exercise assisted in ensuring that full coverage of the eThekwini Municipal area was achieved in the valuation roll.

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19		**Objection Filtering - Sectional Title Scheme Revisits:** When processing sectional title objections, a decision was taken to use the opportunity to review the entire scheme if certain criteria were met. We settled on two criteria, being: 1. Where the majority of sections (over 50%) were revised through the objection process, and 2. Where these sections had been revised on an average of more than 50% per section either up or down. This resulted in 417 schemes being reviewed as inputs for supplementary 2, with the assumption that further scheme reviews would be undertaken as maintenance work.	Sectional title was a problem area, being the first time that this data had been acquired and valued by the municipality. This intervention contributed greatly towards the integrity of the sectional title valuation roll.
20	IT Systems	**Value Assist 3.0:** Value Assist is a custom – developed property valuation and administration IT system that was initially developed by the eThekwini Municipality, and is now used by a number of municipalities in South Africa. The old version (VA2) was based on the Local Authorities Ordinance. During the GV project, software products were developed to cater for all project phases, which fed into a complete functional rewrite of Value Assist (VA3), to make the product fully MPRA compliant. A parallel project was established with the objective of taking these inputs and rewriting VA3 to make it MPRA – compliant. The new version, Value Assist 3.0, now incorporates the following product features: • **Valuation Engine:** This is the core of Value Assist and values all property types including residential, sectional title, commercial/industrial, agricultural, and PSI. The product contains Automated Valuation Models and supports multiple approaches to valuation including the CAMA, income and cost approach. • **IDOT Module (Deeds Office Update):** This is an automated interface to the deeds office that automatically updates deeds office transfers for full and sectional title property, and creates exception reports of mismatches for resolution by a user. Value Assist also maintains a full **sales history** of all property types that affords the user a snapshot of the property configuration as at the time of sale. • **Rates Clearance Processing:** VA3 houses a state-of-the art rates clearance processing module (IRCAM), which supports the automated submission and processing of rates clearance applications (RCAs). The system has a facility to further integrate with a product that is used by most conveyancing attorneys that	The GV project afforded the municipality the opportunity of rewriting it's bespoke valuation software, which has become a leading valuation roll solution for a number of metros and municipalities around SA.

ID	PROJECT PHASE	PROJECT SUCCESS	IMPACT ON PROJECT/ LESSON LEARNED
		allows for the electronic submission of rates clearance applications by the conveyancing attorney. The system automatically routes the RCA to the valuation department and then to the debt management division in order to seamlessly complete the necessary checks and balances, and automatically generate the rates clearance certificate. Rates clearance management is a high profile, customer facing process which Value Assist has greatly streamlined in order to reduce the legwork that is typically involved in the manual submission of rates clearance applications. IRCAM has recently been re-engineered to accommodate the stipulations of the Municipal Property Rates Act relative to the processing of rates clearance applications against sectional title property. • **Property Engine:** The system houses a powerful search engine that allows searches on all property types, using various combinations of the attributes for that property type including sectional title and PSI. The property engine also allows for edit functionality on standard property attributes such as ownership, account and address information, and creates an audit trail for every change made to the attributes of a property. All changes are date and time stamped in the database, allowing for tracking of complete property history. • **Rates Modeling Tool:** Value Assist 3.0 has a unique rates modelling tool that allows for what – if scenario analysis of your municipality's rates policy in conjunction with the property value base, and determination of the rate randage and tariff policy finalisation. • **Property Register:** The property register supports the generation of a Valuation Roll with each GV, and a Supplementary Valuation Roll at user defined intervals from the VA3.0 system in a format which is easy to manage and portable. The statutory and Part B requirements of the Municipal Property Rates Act are also catered for. • **GIS Module:** Allows the user to view, query, analyze, and manipulate data within a spatial environment using ESRI technology. The product also supports the intensive GIS requirements that the CAMA process requires in terms of locational analysis.	

ID	PROJECT PHASE	PROJECT SUCCESS	IMPACT ON PROJECT/ LESSON LEARNED
		• **Objection and Appeals Management**: The management of objections and appeals in terms of the Municipal Property Rates Act has been fully automated in Value Assist 3.0, to include the logging and capture of objections and appeals, the generation of letters to the ratepayer at various stages of the process, the recording of all changes to the data and/or market value of a property which have occurred as a result of the objections process, and the capture of changes and final update to the valuation roll. • **Workflow Management**: Value Assist has a cutting edge workflow management module that allows user – defined processes to be configured to suit your business processes. Each user has a personal in box to which they log in to receive their work tasks. Workflow reporting underpins this module, and allows for effective **performance management** of valuation staff. • **Exemption Management:** Value Assist has a separate module to manage exempt properties and the administration and annual application process that these properties require. This is a very sensitive area that always comes under close scrutiny from the auditor general. • **System Reporting:** Value Assist uses SQL Reporting Services to create a wide range of user – driven reports to support all aspects of the property administration and valuation business, including a Property Record Sheet, Sales Ratio Comparison reports, Value Analysis Report by usage/zoning/area, MPRA Section 49 Notice, etc. • **Data Export:** Value Assist supports the export of data as a text file, Excel, DBF and XML formats for bulk external analysis.	

C: PROJECT LESSONS LEARNED

ASSUMPTIONS:

1. Data Acquisition and Cleanup:

In reading lessons learned from similar projects, one discovers a lot of lessons being learned with regard the acquisition and cleanup of data from the various required sources, e.g. Deeds Office, legacy valuations systems, Surveyor General, etc. In the case of eThekwini most of this pain was averted in that the Real Estate department, at the time of awarding the GV contract, had just completed a major, multi – year data consolidation and cleanup project to both the Deeds Office and Surveyor General Data sets. Furthermore, six former operational entities had been consolidated onto a single IT platform prior to the commencement of this data cleanup project.

The city had also just completed the bespoke development of a consolidated valuation IT system (Value Assist 2.0) that housed the cleaned up and consolidated valuation roll, with an automated system to manage updates of Deeds Office transactions. This consolidated database was given to the contractor as a starting point for the project, thereby avoiding typical lessons learned in respect of data consolidation, acquisition and cleansing.

2. Outsourced Turnkey Project:

The fact that the municipality took a decision to implement the GV by means of an outsourced turnkey project, awarded to a single service provider, ensured that a lot of pain and red - tape related to procurement using municipal policies was avoided, in that the contractor managed the procurement of goods and additional services.

ID	PROJECT PHASE	BACKGROUND/ DESCRIPTION	LESSON LEARNED/ IMPACT
1	Tender Preparation	**Section 33 of MFMA – Contract Duration:** The EPT was alerted, after tender award, to this clause in the Municipal Finance Management Act that stipulates that a process of community participation must be engaged in if the contract spans more than three financial years. Fortunately we were in a position to negotiate and bring the contract – end forward by a couple of months to 30 June 2008	Shorten your contract if it spans more than three financial years, otherwise comply with section 33 of the MFMA before tender award.
2	Contract Negotiation	**Upfront payment to the contractor and retention:** The contractor requested 15% of the contract fee upfront in order to set up infrastructure, but the municipality was not in accordance. Instead the EPT was creative with the payment plan and devised a number of monthly progress reports that could allow the early release of funds, especially in the area of CAMA modeling, data collector recruitment & training, communications, etc.	In hindsight, If we had to redraft a tender it may be expedient to include a sub clause that waives the 15% retention on direct expenditure related to the setting up of a project office. In our case a 15% retention was held on ALL payments.

ID	PROJECT PHASE	BACKGROUND/ DESCRIPTION	LESSON LEARNED/ IMPACT
3	Project Planning	**Detailed Project Plan – Work Breakdown Structure:** This is the primary tool by which you will measure the progress of your project. Try to be involved in the creation of this plan if possible in workshop settings. We ended up base lining the approx. ninth version of the WBS, 7 months into the project, which was used as the final detailed project plan.	On a project of this size it is difficult to baseline your schedule upfront. One needs to remain flexible, break the project up and work with smaller action plans. Be sure to check back to your master plan regularly however to ensure that there is no milestone slippage.
4	Legal Compliance	**Registration of Valuers:** It is advisable to ensure that all the valuers being used on the project are suitably registered, and that their registrations don't preclude them from valuing the type of property for which they have been engaged. For GV2008 the contractor emailed lists of valuers that it intended using through to EPT for verification against the Council's website.	Your municipality will be exposed legally if valuers that do not comply with the stipulations of the MPRA are working on your project.
5	Data Audit & Preparation	**Use Code Definition and Collection:** The contractor implemented its own set of temporary use codes for non residential property when collecting and valuing, and this practice resulted in possibly the largest amount of unnecessary and risky work on the project that stemmed from any single issue. We ended up implementing a number of complex mappings to rectify the fact that the contractor had gone into the field using temporary use codes.	Have your use codes clearly defined upfront and ensure that they correlate to your rates policy Ensure that these are collected in the field. Ensure that each non residential property has a clearly defined primary use (as opposed to section use), that correlates to your rates policy.
6	Data Audit & Preparation	**Time Wasted on Cleanup of Building data from legacy Systems:** A lot of time and effort was expended in analyzing the Non Res BEV (building) data for the Central Entity and trying to identify trends and patterns. The BEV data was not coded and the EPT believed that in most instances it was useless for GV purposes. The objective of this exercise was to try and map the BEV data to standard non res components and the initial intention was to model this data. Once the EPT advised that this was not permissible in terms of the contract the next stage was to try and create standardized data per property to hand to the valuers for on site verification; this would have prevented recollection of floor areas etc. At the end of the day the non res cleanup of BEV data was scrapped and the valuers ended up being handed a straight print from the existing Value Assist per property, with the BEV data listed as it stands.	The lesson learned is to not expend too much time and effort up front trying to clean irreparable data, when a major re-canvass and re-inspection is being implemented anyway.

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7	Data Audit and Preparation	**Data Cleanup Scope relating to Existing Municipal Data:** Be careful that the contractor does not push work related to cleanup of your existing valuation roll or billing data back onto the municipality, unless it has been specified as part of the tender brief. eThekwini clearly stated in its tender specification that the contractor must satisfy itself as to the condition of the city's existing data prior to tendering. Any further data cleanup research and repair work that was required was for the contractor's account.	This needs to be carefully considered when preparing the tender brief. It might well be that your municipality does not have the capacity, and needs to include data cleansing in the scope of its GV project.
8	Data Audit and Preparation	**Working with Sectional Title Deeds Office data:** This area requires a lot of careful thought and preparation. Evaluations experienced difficulty in getting the municipality's full dump of sectional title data and matching it to Value Assist at a scheme level. Evaluations maintained sectional title ownership separately for the duration of the project at a section level. The plan was initially for the sectional title data collectors to link the sections to form units while doing the field collection, e.g. where the same owner owned a garage and a flat that were separately registered. This approach was subsequently changed and as per the definition of a section in the Sectional Title Act, it was decided to treat all sections separately and not to link via ownership. Evaluations were responsible for sourcing the postal addresses for sectional title units. ***NOTE***: Data World sourced the Sectional Title data from the Deeds Office in Cape Town and experienced technical delays in obtaining a full data dump. The Deeds Office ran out of space to download the full file and the extract crashed repeatedly due to power outages. It was initially planned that the data would be acquired in April 2006 while the final extract was only obtained in June. There were time lags in sourcing recent sales, and some section detail was missing	1. Don't try to link your sections (e.g. flat and garage owned by same owner). This is very onerous and difficult to maintain. 2. Bear in mind that you will have a number of garages registered as separate sections that, in the case of eThekwini, ended up in the residential category of property and had to be flagged in the billing system so as not to attract the residential exclusion. 3. Do a quality audit of postal addresses long before the need to post section 49 notices arises.
9	Data Audit and Preparation	**Sourcing Sectional Plans:** With sectional title unit information being collected for the first time at section level, heavy reliance was placed on using sectional plans to e.g. acquire the section areas. The Deeds Office ended up assisting us to source sectional title plans, and were not forthcoming in terms of promised delivery.	Allow for pain and delays in sourcing these plans, and validating the necessary section – level information.

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10	Data Audit and Preparation	**Land Reform Beneficiaries (and Special Nature Reserves):** Ensure that you get a listing early on of your land reform beneficiaries as these need to be given rates refunds from 02 July 2005 and a process put in place to monitor the ten year exclusion period and subsequent phasing in. Special Nature reserves have their own rating requirements that are not as urgent as Land Reform Beneficiaries.	In the case of eThekwini the impact was not high, as there were only 115 land reform beneficiaries and six special nature reserves.
11	Data Audit and Preparation	**Vacant Land CAMA Issue: No consolidated Zoning Scheme:** A matter of concern was that we did not have a consolidated zoning scheme for the City, but rather quite a few disparate sources which could have caused problems in terms of valuation. The zoning is important when it comes to the CAMA modeling of vacant land, and the completion of land valuations could be delayed or compromised if there is no zoning data, which might require having to wait until data collection is completed before knowing what usage the property has. A subsidiary issue was that the CAMA analysts will not necessarily use CAMA for all vacant land. If there are not enough sales some will be given to non res valuers and the CAMA analysts wanted to establish how to identify which vacant land would be residential and which would be non residential, for purposes of allocating to a valuer/ data collector.	If your municipality does not have a consolidated zoning scheme, try to arrange for this to be sourced and captured onto the data in time for the CAMA modeling process to be implemented.
12	IT Systems	**Third Party Software Tools – Ownership:** Evaluations needed to buy a number of third party GIS tools, e.g. ArcMap, Geostatistical Analyst and 3D Analyst for the project, through GIMS. These belong to the Council and were licensed in the name of eThekwini's Corporate GIS department.	Be sure to do an audit of all software that is used on the project, and determine whether your municipality will need to take ownership at the end of the project. Factor in maintenance planning in terms of licensing and costs.
13	Data Collection	**Data Collector Screening – Criminal Record Check:** Ensure that a criminal record check is run against your data collectors before designation. You do not want any comebacks from incidents in the field. Any data collectors with a criminal record must not be delegated.	With the current culture of crime in South Africa, a lot of homeowners will readily use the data collection program as an excuse for heightened crime levels in their neighbourhood. One needs to be mindful of this.
14	Legal Compliance	**Duplicate copies of ID Cards and Letters of Designation/ Delegation to be lodged with the Province:** Ensure that your contractor provides you with duplicate copies of ID cards to be lodged with the province in terms of the MPRA.	The MPRA requires that copies of designation and delegation outputs be lodged with the Province.

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15	Data Collection	**Residential Data Collection Detailed Quality Assurance Plan:** In terms of applying detailed quality assurance measures to the data collection and valuations eThekwini researched and found that ISO9000 was not apposite. A great deal of effort was spent in finalizing a QA plan that specified on a macro level the percentages of DCF's that were going to be QA'd and the processes that would be followed to QA them, and that at a micro level provided specific acceptance/ rejection criteria at a field - level (data characteristic - level) per batch and DCF (data collection form). The EPT then devised its own sampling and statistical criteria for applying detailed quality assurance to the data and valuations, using a composite of ISO 9000, COCT lessons learned and IAAO best practice. A QA plan was drafted and work shopped with the contractor, which became a standard that was rolled out to the province by the DLGTA.	1. Go through the process of deciding which are your critical and non critical, subjective and objective items on the DCF (data collection form) and then decide what level of error you will accept. We grouped the items and allowed a scaled level of tolerance based on the criticality of the item in shaping the value. 2. Build in sufficiency/ completeness checks. Link validation rules to access, allow for non or partial access, e.g. certain attributes, like number of bathrooms and bedrooms, will only be compulsory if full access is attained, whilst things like quality and condition will be compulsory for all. 3. Decide on your batching and sampling rules, E.g. 12 % first three months, 6 % thereafter, so many per batch etc.
16	Data Collection	**Data Collection Progress – Software Issues:** An issue was identified as a result of attempting to approve the first round of High Value DCF’s (29 000 in total) for payment. The totals reflected as having passed QA on the DCF Manager software were significantly lower than the manual records that were being maintained by the QA managers. It was discovered that certain QA managers were keeping independent manual records due to technical errors and user issues with the software that had not been escalated to the IT personnel. The cash-flow on the project was severely impacted because the software was lagging so far behind the manual records that depicted the data collection progress . KEY ISSUES: A user feedback session was held with the users at which the following primary issues were identified: 1. The communication channels for reporting software issues were too complex and formal, and a heavy reliance was placed on the users to log their issues.	At the end of the day the lesson learned was that the business analysts had designed a complicated process together with a range of very busy, complicated statistical reports that were not adding real value. In addition the software implementation had not been followed up with the users in order to refine the system and or process. The following remedial actions were identified as being necessary: 1. Create simple, streamlined reports that will run in real time and reflect strategic KPI’s that will assist the data collection process. 2. Hold regular user – feedback sessions with the QA/ Area managers, data editors and data capturers in order to refine the software.

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		2. Critical server errors had been hanging around for weeks, lost in the issue reporting chain. 3. The contractor needed a dedicated IT resource to follow up implementation of the DCF Manager software with the users and make necessary program changes or implement retraining. <u>OUTCOME:</u> Evaluations resolved to hold a daily production meeting, first thing in the morning, with key personnel to identify bottlenecks and ensure that the data collection process and supporting software remained on track.	
17	Data Collection	**TLA (Total Living Area) Extraction and Verification for CAMA Modeling purposes:** Apart from location, the Total Living Area (TLA) is the other primary driver of your CAMA model. We chased our tail around on this one, toggling between whether we would use existing data versus digitized imagery. <u>Process History:</u> **1.** We initially decided to extract the TLA from the existing valuation system – Value Assist. This process entailed mapping the existing +/- 600 building components to +/- 7 CAMA data characteristics that are being used for CAMA modeling. This is a tricky exercise and errors were made that resulted in the TLA's being incorrectly extracted from Value Assist and incorrectly printed on the DCF. **2.** We also elected to digitize building footprints from aerial photography and were hoping to use this to QA the TLA which resulted from the mapping exercise. This process entailed writing software to capture the footprints, and training a team of data capturers to do the work. This did not work due to problems with eaves, double stories etc and we ended up discarding the footprints. **3.** The final QA plan for TLA's entailed statistical sampling of inliers with verification of areas against building cards and plans and measuring where necessary, together with a field review for all outliers. For those low value properties less than 15m2 we ended up accepting the digitized footprints. Notwithstanding this plan, we experienced problems with gaining access to properties for measuring and ended up digitizing footprints from a newer set of aerial photography, and attempting to incorporate this.	1. The TLA is one of the primary shapers of value, and careful thought must be given up front as to how one plans to collect this information. If one has good aerial photography there are tools that allow this to be digitized from the desktop, and time and resources must be factored in for field measurement for high value areas. Bear in mind that access is a problem. 2. Extract TLA from your attribute data collection and manage separately in terms of cost and progress. If possible, start a structured program of sampled measuring, per neighbourhood from the outset.

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		Changes were also being made to the **payment plan** in order to pull out a separate stream of delivery for the TLA as opposed to the characteristics that were being collected by the data collectors.	
18	Data Collection	**Single Res: Data Collector Access & Security Issues:** An issue was identified in that a number of instances were reported where the data collector has made no attempt to enter the premises. The municipal valuer addressed a mass feedback session of data collectors on 28 June 2006, and addressed the following issues pertaining to data collection that had bubbled to the surface thus far: 1) Access – Entry To Dwelling: The issue of deciding to go in versus not going in to the premises. No matter what you do you will be wrong, however try & at least get access to the yard and look at the building from the outside. If the owner is happy to let you inside the house then go in. If he is not happy don't force yourself in. 2) Pairing: Don't move in pairs. It is intimidating to the homeowner. This is an ongoing problem that needs to be closely monitored. 3) Security: Don't ask any questions relating to the property security. Have a look for yourself and mark the form accordingly.	With the current culture of crime in SA, lots of issues were experienced by data collectors trying to get into the houses. Homeowners are suspicious by nature, and there were incidents of e.g. robberies being blamed on the data collectors. At the end of the day the data collector cannot be too forceful about gaining access, and will need to make do with viewing the building from outside if necessary.
19	Data Collection	**Single Res Data Collection Call Back Card:** Be very careful as to the level of detail that is requested of your ratepayers via the contractor's call back card. You don't want to ask them to fill in a lot of technical information that you may have in your system already. Also ensure that the contractor's call centre number is clearly displayed on the card, and that the ratepayer is also given the option of a postal address that the form can be posted to, not only a fax No.	The problems experienced with the call – back cards are self – explanatory (see left).
20	Data Collection	**Sectional Title: Data Collection - No Access:** The EPT's understanding of the data collection process was that the data collector would sit with the building supervisor, the chairman of the body corporate or the managing agent for each scheme to correlate the scheme and unit information. Subsequent progress reports from the contractor revealed e.g.2861 'Entrance, 9645 'External' and 3387 'No Access' results, which raised alarm bells as to access and quality.	Quality assurance is an ongoing process of data improvement. A method needs to be set up for detailed monthly progress reporting, that will give the decision makers accurate information as to the levels of access that are being attained in the field by data collectors. (The recent trend of desktop data collection

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		A special – focus meeting was held with Evaluations, were the following was decided on: ***Corrective Action to be Implemented:*** <u>Sectional Title: Targeted Verification of High - Profile Schemes Exercise:</u> As a result of the special concerns session held on 01 June, Evaluations hand – picked approx. 1000 schemes of more than four stories from HV and MV areas for a targeted verification exercise. 1. A special task force visited all 1000 schemes and collected according to agreed procedures. Areas that had already been done were revisited. 2. For areas that had already been done the original DCF was sent back into the field with the data collector.	using street-level 3D imagery is to a large extent replacing the requirement for a physical inspection of each dwelling unit).
21	Data Collection	**Sectional Title Special Project – Update Postal Addresses:** As this was the first time that the municipality would be billing sectional title units separately for rates, the collection of postal addresses for sectional title was a critical aspect of the data collection exercise. Widespread problems were experienced in terms of the ST postal adresses that were collected and used for the S49 post. The section number had been populated in the address field, and in most instances did not seem to correlate to the flat/ door number. The result was that there were schemes all over the city with boxes of S49 letters sitting in the manager’s office, and the managers didn’t know what to do with them. It was resolved, in a special focus meeting, that a special project would be set up to resolve sectional title owner anomalies and repair sectional title postal addresses. Evaluations were requested to undertake a special project that would achieve the following: 1. Resolve Owners with Province's IDOT: A lot of the ST owner info was very old and incorrect. 2. Send out Letters to all Bodies Corporate: Mail Bomb all bodies corporate requesting postal address and owner validation. 3. Set up Infrastructure to capture corrected feedback.	Postal Addresses for sectional title is an area that requires special attention the first time around, and we ended up undertaking a couple of mail-bombs to bodies corporate in an effort to improve the data quality. The feedback was generally very positive, and the managing agents were keen to assist.
22	Data Collection	**Exclusion of Sales Review DCF’s from Single Res Data Collection:** The sales review DCF’s for Single Res High Value properties were not excluded from the batching & printing for the bulk data collection. This was a serious oversight as it would have resulted in duplication of effort and an unnecessary additional visit to the property owner.	This lesson is self – explanatory, to avoid duplication of effort and two site visits for the sales properties.

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		This was discovered on a Thursday, and with the SR data collection kicking off on the Monday, Evaluations assigned resources to manually pull out all of the sales review forms from the data collection batching over the Comrades Marathon long weekend. These resources worked the whole weekend, and the properties were also excluded electronically from the upload to the DCF Manager software.	
23	Data Collection	**Continuous Refresh of your Project Data with Property Changes (Adds & Alts, New Subdivisions, etc):** eThekwini initially planned to do this in real time but subsequently elected to perform a periodic data sweeping exercise in order to pick up additions and alterations, changes of use, new subdivisions, consolidations, etc. Pre determined milestones were set, upon which a snapshot of Value Assist was compared to the GV2008 Project Database and all property changes extracted. These property changes were analysed and business rules defined that would drive the decision as to what level of change would trigger a recollection in the field, and re-valuation.	Ensure that you have a process in place that will identify property changes that take place during the GV, and feed these into the project. With all the activity related to a general valuation, it is very easy for this process to slip through the cracks. In the case of eThekwini we cut off the data sweeping at 31 Jan 2008, which meant that the maintenance of the valuation roll needed to go back and pick up all property changes from this date.
24	CAMA Valuation	**Sales Review Data Collection:** EThekwini experienced issues with the quality of the sales data collection which was initially unacceptable, and timeframe slippage was experienced in getting this process up to speed. In the case of eThekwini this problem was attributable to the calibre of resource being used. This was one of the longest – standing items on the project issue log, and we ended up discarding the first round of residential sales review & benchmarks due to poor quality, and having to redo them in shortened timeframes.	Ensure that you plan a separate data collection process for your sales review early on in the process, which captures the data attributes for sold properties, as at the date of sale. The sales analysis and data collection is one of the critical success factors upon which the CAMA valuation is dependent. Ensure that you are using qualified valuers or estate agents to do this work, and arrange specialised training for these resources.
25	Communications Management	**Community Participation - Ward Committee Meetings and Councillor Involvement:** It was the intention of the project team to engage the councillors early on in the process in order to get political buy – in, and for them to promote the new valuation and rating process in their wards. An initial kick-off session was planned in the city hall, which failed due to poor attendance. It was then resolved to try and use the ward committee meetings but there were legal issues constraining this activity as ward committees still needed to be re elected for the year in question. The option of ratepayer association was then mooted, but the municipality's	Planning needs to start early if municipal politicians (councilors) are to be engaged in the program. The councilors and ward committee structures need to be approached through the applicable channels, e.g. the speaker's office. Fortunately the lack of political buy-in was not so serious at eThekwini as most of the low value and formerly disadvantaged areas ended up winning in the new rating dispensation by either

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		Community Participation section advised that ratepayer associations are not as popular as they used to be and it was recommended instead that a single meeting be called with Councillors and zonal leaders in attendance. The speaker's office never managed to organize this centralised zonal meeting, and a few of the contractor's valuers ended up attending some community forum meetings during the rates policy road show, to field questions related to the valuation process.	paying no rates, or less than they had been paying.
26	Value Review	**Timeframes for Review of Final Product:** Chapter 3 of the MPRA Regulations stipulates that the valuation roll must be submitted to the municipal manager five months before the effective date of the valuation roll. This pushed forward the cutoff dates for data capture, etc. and allowed less time for a structured review and independent verification of the roll by e.g. performing checks against recent sales and independent value review.	In hindsight, it would have been preferable to have had the luxury of building in more time for an independent review of the final product before handover.
27	Publication of Valuation Roll	**Section 49 Postal Addresses:** The posting of bulk correspondence to the customer is not a typical function of the Real Estate Unit and problems were experience with e.g. mapping postal addresses for full title, (The issues with acquiring postal addresses for sectional title have already been addressed above). The Real Estate department ended up with a high volume of returned mail deposited in boxes on the office floor that needed special attention.	Ensure that a process is planned for, with the municipality's billing/ postal service to manage the allocation of postal addresses and post runs for the section 49 notice.
28	Quality Assurance	**Non Residential QA of Valuers' Work:** When planning the project it had not been envisaged that the work performed by professional valuers would need to be subject to further quality assurance, as it was assumed that the standard and quality of work would be regulated by the valuation profession. It soon became evident that this was not the case, and some very poor quality work was coming through from the sub-contracted valuers, specifically for non residential valuations. It became necessary for the EPT to fast track the design and implementation of QA processes for non residential valuations that covered, e.g: 1. <u>Completeness check performed upon</u>: 1.1. The data, to check that the minimum info required as per the spec was collected. This was done electronically where the DCF would not upload unless certain minimum fields had been populated.	With individual valuations or specialised data collection for e.g. agriculture, don't rely on the fact that professional valuers are being used that are regulated by their profession. The work received was often of a very poor standard, and a few valuers had to be fired from the project due to the QA measures that were introduced. These QA measures were a variation to the initial project scope, which had not planned to check the work of professional valuers.

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		1.2. Attachments: Sketches, photos, field notes, etc. 2. Methodology Employed: We were not going to check this originally because use of professionals but ended up with an agreed percentage per valuer being checked by the contractor's specialist valuer panel, and a further percentage being checked by the municipal project team. This consisted of a physical scrutiny of each DCF and related artifacts checking for: Valuation method- ie Income, depreciated replacement cost, etc. Errors were divided into fundamental and minor. Fundamental errors affected the value and were changed by the specialist valuer panel. Minor errors related to data queries and were returned to the valuer for repair. 3. Consistency Check: This was undertaken by a specialist valuer panel that was assembled specifically for this purpose. This comprised reports per neighbourhood , per use that listed various data that was scrutinised by the panel. 4. Reasonableness Check: Comprised independent checks of the contractor's values against sales and asking prices.	
29	IT systems	**Rounding off of Final Values:** This issue was bandied about a lot, with a number of different models being proposed before the final rounding off rules were accepted.	Ensure that you have clear rounding off rules for property values up front, and that these are implemented in the IT system. (Try to keep them simple).
30	IT Systems – Data Management	**Data Management – Last Minute Back-end Uploads to the GV Database:** Quality issues arose due to hurried database management in the rush of the final days of assembling the roll, where errors were made with bulk "back-end" updates to the GV system. The most noteworthy error on our project constituted an IT error in uploading a file of 'nodal adjustments' that had been made outside of the system for commercial properties that appeared in residential 'development nodes', where properties that were not meant to be corrected had the corrections applied to them, in inflated ratios. This caused approx. 200 commercial properties to be published with grossly inflated values in the GV roll. Approx R 5.776 Billion in value and some R 103.4 million in rates income was almost lost in this process (2.55% of the rates income budget)! The problem was, however, identified in time and corrected in the first supplementary valuation roll, but resulted in some ratepayer confusion.	Ensure that IT best practice is followed with regards database management, and that a single experienced manager is assigned to manage the checking in and out of versions of the database. Any bulk updates to the valuation roll database must follow a strict process of quality control.

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31	IT Systems – Data Management	**Data Management - City Rates Fiasco:** The most visible data error reached the front page of the Saturday Independent on 2008-03-01. Due to a data error, approx 15000 semi-detached dwellings in Chatsworth, Phoenix and Newlands did not have the TLA split on the initial data load. This resulted in the two adjacent halves of semi-detached dwellings having vastly different values, as the model applied all of the TLA to only one half of the semi-detached house. Evaluations repaired the data, reran the model and fixed the problem in the first supplementary valuation roll. Fortunately the impact on the Rate Randage was minimal, and it was noted that +/- 7700 went up, while +/- 10000 went down in value with virtually no impact on the rates.	Ensure that IT best practice is followed with regards database management, and that a single experienced manager is assigned to manage the checking in and out of versions of the database. Any bulk updates to the valuation roll database must follow a strict process of quality control.
32	Publish Valuation Roll	**Publication of Rate Randage:** EThekwini had not finalized the tariff modeling at the time of publishing the valuation roll, which resulted in an inflated number of unnecessary objections. To compound the problem, at the time of going live with the valuation roll an indicative example with a fictitious, rather excessive residential rate randage was released in the press, which the public mistook as being the actual rate randage. This resulted in a high volume of frivolous and unnecessary queries from the public.	If possible, try to finalise the rates modeling before publication of the roll and release the rate randage, or a very close "indicative randage" at the same time, as this will allay a lot of queries. All the customer really wants to know at the end of the day is what the cost is going to be on their monthly account. One needs to make it quite clear, however, that the right to object is against the market value of the property, and not against the amount of rates that will be levied.
33	Systems Integration	**Involvement of Billing/ Income on the Project:** We did not have a member of Income present on the project, and in hindsight a billing representative at the weekly project meetings might have obviated some the issues that arose after go-live in terms of setting up processes to manage ownership and address queries etc. Certain aspects of the rates policy might have been finalized earlier if a billing representative was on board, and understood some of the complexities that were faced, particularly relative to sectional title property.	It is advisable to include a representative from Billing in the core project team, as there are a lot of project dependencies between the Valuation Roll and Income departments.
34	Publication of Valuation Roll	**Placement of Media Notices (Section 49):** Section 49 of the MPRA is very specific in terms of the dates and process for the publication of the valuation roll in the press and government gazette. This is one process that can derail the implementation if not strictly followed, and in	Ensure that sufficient time and planning with the communications department is allowed, in order to budget for and place the media adverts. Also bear in mind that the provincial gazette only

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		the case of eThekwini the Communications Department was responsible for implementing the media publication relative to section 49. Due to an oversight on the part of the Communications Department, the second media advert for the GV roll was never placed. The municipality applied to the MEC for local government, in terms of section 80 of the MPRA, for a condonation for non-placement of the second media advert, which was granted.	publishes on certain days of the week.
35	Objection Management	**Deadline for the Processing of Objections:** When the project was initially designed, it was not planned that there would be a tight deadline for the completion of objection processing, and the MPRA does not prescribe any timeframes in this regard. However, the MM made promises in and to the press, etc. that all objections would be processed before the first rate accounts go out in July. The imposition of this deadline meant that constant innovation was required in terms of categorizing and fast-tracking the processing of objections. The speed at which the work had to be executed resulted in data capturing errors, and some quality assurance issues. Notwithstanding, all 53000 objections were satisfactorily processed in record time, and the IT system that was created to manage this process is a forerunner of its kind.	Try to leave enough time for the processing of objections, and ensure that a system is in place that will allow reporting back to the customer of the status of an objection at any point in time. Global progress reporting to the public via the media is also required, and must be planned for.
36	Objection Management	**Method of Submitting Objections:** Ethekwini accepted objections from the customer by a number of channels: - by fax, post, email, etc. this resulted in a lot of frivolous and duplicate objections being received. In hindsight it might have been prudent to only allow objections to be physically lodged at the customer care centers, and accepted from the customer once the property had been located in the valuation roll and an objection number allocated upon receipt. In the case of eThekwini, all objections were accepted up front, and captured after the fact and an objection number then allocated.	The method by which the municipality accepts objections will greatly affect the number of objections that are submitted.
37	Objection Management	**Reconcile Objections to the Supplementary Process:** We discovered that a lot of objections were already flagged to be processed in the first supplementary valuation roll. Our objection outcome correspondence and business processes had to be revised to accommodate this. It was ultimately agreed to leave the correction in the supplementary valuation process, but not to publish the change in the	Ensure that your objection process and supplementary process are reconciled. Properties being changed via objection must not be published in a supplementary valuation roll.

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		supplementary valuation roll. This required dedicated IT and resource planning. Special consideration was afforded to omitted property objections, as customers cannot always find their property on the new roll. Be sure that you have a dedicated process to validate omitted properties, and generate appropriate correspondence to the customer where the property already appears in the roll, or is flagged for the first supplementary roll.	
38	Objection Management	**Prepare for Appeal Board:** The appeal board requires a report of all objection changes that are greater than or equal to 10%. We decided to wait until objection capture was complete, and all owners have had a chance to appeal before creating this report. In addition to this, eThekwini is currently busy with an intermediate process of identifying the (i) big ticket and (ii) residential hardship appeals with a view to undertaking additional research in order to prepare for the appeal board. This entails identifying possible scenarios & recommendations in terms of pre-discussion with the board, in order to schedule and prioritise the appeals.	Be sure to get an early "heads up" on the valuation appeals, and ensure that all inputs are ready in time for the board.