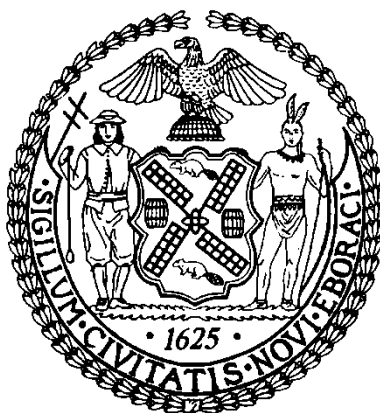


**CITY OF NEW YORK
OFFICE OF THE COMPTROLLER**

**John C. Liu
Comptroller**

**FINANCIAL AUDIT
Tina Kim
Deputy Comptroller for Audit**



**Audit Report on the Hewlett-Packard System
Integration Contract Expenditures Associated
with the Emergency Communications
Transformation Program**

FM11-107A

May 30, 2012



THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
1 CENTRE STREET
NEW YORK, N.Y. 10007-2341

John C. Liu
COMPTROLLER

May 30, 2012

To the Residents of the City of New York:

My office has audited the Department of Information Technology and Telecommunications (DoITT) to determine whether the expenditures of Hewlett-Packard's (HP) System Integration contract associated with the Emergency Communications Transformation Program (ECTP) were reasonable and justified and the scope of services was met. We audit entities such as DoITT as a means of ensuring that systems and technological development and resources of City agencies are cost-effective, efficient, secure, and operate in the best interest of the public.

On April 1, 2005, DoITT contracted with HP as system integrator for the ECTP. The contract includes, but is not limited to, development of two Public Safety Answering Center facilities and a unified Computer-Aided Dispatch system. The audit found that there was no reasonable assurance that the contract expenditures were reasonable and justified and that the scope of services was met. DoITT's questionable selection of HP as the system integrator on the ECTP project in 2005, compounded with HP's poor performance and its inadequate oversight over consultants' performance, resulted in the failure to complete all original component projects of the system integration contract. The preceding factors, combined with poor contract management by DoITT, resulted in significant cost overruns. The estimated cost overrun of the ECTP system integration and overall project management could be as much as \$362 million.

The audit makes 11 recommendations, including that DoITT should use the findings in the report as a starting point to determine how much can be recouped. Specifically, DoITT should review the documentation supporting the \$163 million paid to HP either for unsatisfactory performance from April 2005 to April 2008 or incorrect billings for the time and material services portion of the contract. In addition, DoITT should more closely monitor contractors' performance and improve its oversight on vendor selection and payment processes.

The results of the audit have been discussed with DoITT officials, and their comments have been considered in preparing this report. Their complete written response is attached to this report.

If you have any questions concerning this report, please e-mail my audit bureau at audit@comptroller.nyc.gov.

Sincerely,



John C. Liu

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The City of New York
Office of the Comptroller
Financial Audit

**Audit Report on the Hewlett-Packard System Integration
Contract Expenditures Associated with the
Emergency Communications Transformation Program**

FM11-107A

AUDIT REPORT IN BRIEF

The Emergency Communications Transformation Program (ECTP) was initiated in 2004 to transform and consolidate the City's 911 Emergency Dispatch System. The objective of the ECTP is to centralize and integrate the call-taking and dispatch operations between the New York Police Department (NYPD) and Fire Department of New York (FDNY), including its Emergency Medical Dispatch (EMD) division, into two fully integrated Public Safety Answering Centers (PSAC 1 and PSAC 2) equipped with state-of-the-art hardware and software communications systems.

On April 1, 2005, the Department of Information Technology and Telecommunications (DoITT) contracted with Hewlett-Packard Company (HP) as system integrator for the ECTP. The contract includes, but is not limited to, development for PSAC facilities, organizational transformation of the call-taking process, application integration for all Computer-Aided Dispatch (CAD) systems and the Automated Vehicle Location (AVL) system, and the communication infrastructure supporting the ECTP.

The ECTP system integration contract has a not-to-exceed amount of \$380 million over a five-year term with two additional options to extend the contract for an additional year through June 30, 2012.¹ On January 6, 2012, the projected contract expenditures were \$346 million and as of April 17, 2012, the City expended approximately \$309 million of the \$346 million.

The Comptroller's Office issued the *Audit Report on the Project Management for the Emergency Communications Transformation Program by the New York City Department of Information Technology and Telecommunications* on March 20, 2012 (Audit #7A11-104). The current report addresses a more detailed audit of one aspect of that overall engagement - the HP ECTP system integration contract.

¹ The contract was extended for an additional three months and is due to expire on June 30, 2012.

Audit Findings and Conclusions

We do not have reasonable assurance that the expenditures of the HP ECTP system integration contract were reasonable and justified and that the scope of services was met. DoITT's questionable selection of HP as the system integrator on this project in 2005, compounded with HP's poor performance and its inadequate oversight over consultants' performance, resulted in the failure to complete all original component projects (i.e., unified CAD system and PSAC 2) of this contract.² The preceding factors, combined with poor contract management by DoITT, resulted in significant cost overruns. The estimated cost overrun of the ECTP system integration and overall project management could be as much as \$362 million.

As of April 17, 2012, the City has paid HP \$309 million of the \$346 million currently projected for this contract.³ Effective January 2011, DoITT awarded a second system integration contract, not to exceed \$286 million, to complete one of the original components identified in the project definition (PSAC 2).⁴ Consequently, the anticipated overall system integration cost increases to \$632 million (\$346 million current ECTP projected expenditures plus \$286 million, the cost of the second system integration contract awarded to a different contractor). Based on our analysis of the budget breakdown provided by DoITT, we estimate the cost overruns could be as much as \$362 million (\$632 million minus \$270 million originally estimated for equipment and system integration services for both PSACs).

DoITT should not have awarded the system integration contract to HP in 2005 because 1) HP did not receive the minimum technical score DoITT required to be considered a viable contractor and 2) DoITT did not maintain documentation to justify awarding this contract to HP.⁵ According to DoITT, after the only other contractor withdrew its proposal, HP was awarded the contract even though it did not achieve the minimum technical score because it received outstanding recommendations from two government agencies (NYPD and the US Air Force). However, DoITT did not maintain any documentation to substantiate the alleged outstanding recommendations that supported its decision. In fact, our audit found documentation to the contrary—that on November 4, 2004, HP was rated as a poor performer on another ECTP-related contract (with NYPD) prior to being awarded this contract and thus DoITT had no valid justification for selecting HP.

DoITT also did not exercise good judgment when overseeing the contract and ensuring HP provided qualified consultants to work on the project. Specifically, DoITT did not reduce the maximum contract amount when it decided HP could not implement the unified CAD system or complete the work related to PSAC 2. In addition, DoITT allowed HP to use very large mark-ups for the services provided by subcontractors, changed fixed price component projects to time

² Due to the City's unique operational scale and user requirements, a shared (unified) CAD system was not implemented.

³ The original budget for this system integration contract was not to exceed \$380 million.

⁴ Project definition is a pre-solicitation document that is sent to the potential contractors, which lists the requirements of the project and responsibilities of the selected contractor.

⁵ According to the project definition, which was appended to the executed contract, "Only those proposals that are determined to be technically viable will receive further consideration. To receive further consideration, a proposal's technical score must achieve a minimum of 70% of the technical points."

and material basis, and allowed HP to charge a portion of its administrative costs related to this contract to the City.

After being awarded this contract, HP's performance did not meet the City's expectations. In 2007, the then-DoITT Commissioner expressed that DoITT, NYPD, and FDNY were disappointed by HP's performance. A year later, DoITT rated HP's performance as "Needs Improvement" and "Unsatisfactory" in the 2008 VENDEX Contractor Performance Evaluation. HP's deficiencies were also detailed in a May 2009 report prepared by Gartner Inc. (Gartner), DoITT's independent quality assurance consultant, which reviewed HP's performance under the contract for the period of April 2005 through April 2008. However, HP was allowed to continue its work on this contract. During this period, April 2005 to April 2008, HP was paid \$113 million.

Even after 2007, HP continued to show signs of poor performance over the execution of the contract. Our audit found instances when HP did not ensure that the consultants hired had the qualifications or experience necessary for the positions for which they were billed. Moreover, the consultants' timesheets were not approved in a timely manner. The approval of timesheets was as long as 885 days after the performance of work.

Further, HP did not properly monitor its billings and had a significant billing error rate. Our review identified instances when HP billed the City for consultants at a higher title than they were working at and billed for unsupported consultant hours, questionable hours, and unauthorized overtime. In many instances, the timesheets reviewed and accepted by HP lacked a detailed description to determine the specific work the consultant was being paid for and, in other cases, described activities that added no benefit to the system integration project or activities that were reported before the date of performance. Based on our review of the documents submitted by HP for payment under the time and material section of this contract, the City should recoup at least \$2,509,451 from HP. We, therefore, do not have reasonable assurance that HP properly billed for consultant work associated with the time and material portion of the ECTP project. As a result, DoITT may be able to recoup as much as \$106 million.

Audit Recommendations

We make 11 recommendations, including that DoITT should:

- Use the findings in this report as a starting point to determine how much of the expenditures over original budget can be recouped. Specifically, DoITT should review the documentation supporting the invoices submitted by HP with a view toward recouping as much of the \$113 million paid HP from April 2005 to April 2008 and where HP's unsatisfactory performance deprived DoITT of receiving the full benefit of the services bargained for in the contract. DoITT should also conduct an in-depth review of HP's invoices and supporting documents to determine how much of the \$106 million—in addition to the \$2,509,451 that was specifically identified in this report—can be recouped because HP incorrectly billed for its time and material services. (It should be noted that \$56 million of the \$106 million is included in the

\$113 million paid to HP for unsatisfactory performance for the period from April 2005 to April 2008.)

- Review its contract budget monitoring procedures to ensure that, in the future, if a contractor is no longer expected to perform one or more of the tasks that were originally expected, the maximum contract amount is appropriately reduced.
- Revise its procedures to ensure that the contract solicitation procedures are not ignored and ensure that, in the future, only qualified contractors are selected.
- Maintain in its bid documents written documentation of the reference checks conducted on contractors.
- Review all resumes to ensure that consultants are qualified for the positions they are working in.
- Properly review HP's subsequent invoices, timesheets, and other documentation before approving payments to ensure that payments are appropriate and accurate.
- Limit the mark-up percentage that a contractor can add to the actual cost it pays to its vendors in future contracts.
- Insert a liquidated damage clause into all DoITT's contracts that allows it to assess liquidated damages for each day that delivery is delayed. The contracts should also allow the City to seek remedy for poor performance.

City Response

The Office of Citywide Emergency Communications (OCEC) responded to our draft report rather than DoITT. We, therefore, refer to "City" officials rather than OCEC or DoITT in our comments. City officials disagreed almost entirely with the audit's findings and conclusions and disagreed with seven of the 11 recommendations. Furthermore, they maintain that the audit's findings and conclusions are "premised on a fundamental misunderstanding of the scope of HP's work as system integrator on PSAC 1. This misunderstanding is also the basis of the audit's unsupportable conclusion that the system integration work for ECTP 'could be' up to \$362 million over budget."

We strongly disagree with the City's position. In its response, the City presents several questionable arguments which attempt to refute the report's findings, but each argument was disproved. In some cases, statements are made that are contradicted by the City's own documents and appear to be factually inaccurate. This final report may have been less contentious if the City had fully and openly discussed its concerns with the audit team prior to submitting its written response, which is the customary practice.

The City's disagreement with seven of our recommendations is largely based on its disagreement with the report's findings. Because we believe our findings to be correct, we reiterate our recommendations, which we believe should be implemented.

The full text of the response received from City officials is included as Addendum to this report. Our comments concerning the response are included as Appendix II, which precedes the Addendum.

INTRODUCTION

Background

ECTP was initiated in 2004 to transform and consolidate the City's 911 Emergency Dispatch System. The objective of the ECTP is to centralize and integrate the call-taking and dispatch operations between NYPD and FDNY, including its EMD division, into two fully integrated Public Safety Answering Centers (PSAC 1 and PSAC 2) equipped with state-of-the-art hardware and software communications systems. Additionally, the ECTP is to enhance the quality of citizen interactions with the emergency call center, improve emergency dispatch times, optimize the use of emergency call-taking and dispatch resources, upgrade business continuity and disaster recovery capabilities, and ensure safety of emergency response personnel. DoITT is responsible for overseeing the program.

On April 1, 2005, DoITT contracted with HP as system integrator for the ECTP. The contract includes, but is not limited to, development of PSAC facilities, organizational transformation of the unified call-taking process, application integration for all CAD systems and the AVL system, and the communication infrastructure supporting the ECTP. According to the project definition, the system integrator would be primarily responsible for three major components:

- oversee the completion of PSAC 1, provide, maintain, and support all program components, and decommission all services, applications, communications, and facilities whose functionality will be replaced with PSAC 1,
- develop a new unified CAD system for both NYPD and FDNY, and
- design, oversight, management, support, and maintenance of PSAC 2, the subsequent reconfiguration of PSAC 1 after the completion of PSAC 2, and decommission all services, applications, communications, and facilities whose functionality will be replaced with PSAC 2.

HP is also responsible for managing and monitoring affiliated projects not part of this contract and the overall implementation of the ECTP.

The system integration contract has a not-to-exceed amount of \$380 million (including estimated costs of \$114 million for system integration services, \$110 million for CAD development, and \$156 million for equipment, hardware, and software) over a five-year term with two additional options to extend the contract for an additional year. As of January 6, 2012, the estimated expenditures for the contract were approximately \$346 million. DoITT had exercised its options and extended the contract to June 30, 2012. By this date, HP is expected to complete all the component projects related to PSAC 1. However, two other original components of this contract will not be completed (the unified CAD system and the PSAC 2).

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current report addresses a more detailed audit of one aspect of that overall engagement - the HP ECTP system integration contract.

Objectives

The audit's objectives were to determine whether the expenditures of HP's ECTP system integration contract were reasonable and justified and the scope of services was met.

Scope and Methodology Statement

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives except that the resumes for 183 of 464 consultants, who were billed on a time and material basis, were not provided. We, therefore, could not determine whether HP properly assigned qualified consultants and properly billed for the consultants whose resumes were not provided. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

The scope of this audit was April 1, 2005, to December 31, 2010. Please refer to the Detailed Scope and Methodology at the end of this report for the specific procedures and tests that were conducted.

Discussion of Audit Results

The matters covered in this report were discussed with DoITT officials during and at the conclusion of this audit. A preliminary draft report was sent to DoITT officials and discussed at an exit conference held on May 9, 2012. On May 11, 2012, we submitted a draft report to DoITT officials with a request for comments. The Office of Citywide Emergency Communications (OCEC) responded to our draft report rather than DoITT. We, therefore, refer to "City" officials rather than OCEC or DoITT in our comments. City officials disagreed almost entirely with the audit's findings and conclusions and disagreed with seven of the 11 recommendations. Furthermore, they maintain that the audit's findings and conclusions are "premised on a fundamental misunderstanding of the scope of HP's work as system integrator on PSAC 1. This misunderstanding is also the basis of the audit's unsupportable conclusion that the system integration work for ECTP 'could be' up to \$362 million over budget."

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had fully and openly discussed its concerns with the audit team prior to submitting its written response, which is the customary practice.

The City's disagreement with seven of our recommendations is largely based on its disagreement with the report's findings. Because we believe our findings to be correct, we reiterate our recommendations, which we believe should be implemented.

The full text of the response received from City officials is included as Addendum to this report. Our comments concerning the response are included as Appendix II, which precedes the Addendum.

FINDINGS AND RECOMMENDATIONS

We do not have reasonable assurance that the expenditures of the HP ECTP system integration contract were reasonable and justified and that the scope of services was met. DoITT's questionable selection of HP as the system integrator on this project in 2005, compounded with HP's poor performance and its inadequate oversight over consultants' performance, resulted in the failure to complete all original component projects (i.e., unified CAD system and PSAC 2) of this contract. The preceding factors, combined with poor contract management by DoITT, resulted in significant cost overruns. The estimated cost overrun of the ECTP system integration and overall project management could be as much as \$362 million.

As of April 17, 2012, the City has paid \$309 million of the \$346 million currently projected for this contract. Effective January 2011, DoITT awarded a second system integration contract, not to exceed \$286 million, to complete one of the original components identified in the project definition (PSAC 2). Consequently, the overall system integration cost increases to \$632 million (\$346 million current ECTP projected expenditures plus \$286 million, the cost of the second system integration contract awarded to a different contractor). Based on our analysis of the budget breakdown provided by DoITT, we estimate the cost overruns could be as much as \$362 million (\$632 million minus \$270 million originally estimated for equipment and system integration services for both PSACs).

DoITT should not have awarded the system integration contract to HP in 2005 because 1) HP did not receive the minimum technical score DoITT required to be considered a viable contractor and 2) DoITT did not maintain documentation to justify awarding this contract to HP. According to DoITT, after the only other contractor withdrew its proposal, HP was awarded the contract even though it did not achieve the minimum technical score because it received outstanding recommendations from two government agencies (NYPD and the US Air Force). However, DoITT did not maintain any documentation to substantiate the alleged outstanding recommendations that supported its decision. In fact, our audit found documentation to the contrary—that on November 4, 2004, HP was rated as a poor performer on another ECTP-related contract (with NYPD) prior to being awarded this contract and thus DoITT had no valid justification for selecting HP.

DoITT also did not exercise good judgment when overseeing the contract and ensuring HP provided qualified consultants to work on the project. Specifically, DoITT did not reduce the maximum contract amount when it decided HP could not implement the unified CAD system or complete the work related to PSAC 2. In addition, DoITT allowed HP to use very large mark-ups for the services provided by subcontractors, changed fixed price component projects to time and material basis, and allowed HP to charge a portion of its administrative costs related to this contract to the City.

After being awarded this contract, HP's performance did not meet the City's expectations. In 2007, the then-DoITT Commissioner expressed that DoITT, NYPD, and FDNY were disappointed by HP's performance. A year later, DoITT rated HP's performance as "Needs Improvement" and "Unsatisfactory" in the 2008 VENDEX Contractor Performance Evaluation. HP's deficiencies were also detailed in a May 2009 report prepared by Gartner Inc. (Gartner),

DoITT's independent quality assurance consultant, which reviewed HP's performance under the contract for the period of April 2005 through April 2008. However, HP was allowed to continue work on this contract. During this period, April 2005 to April 2008, HP was paid \$113 million.

Even after 2007, HP continued to show signs of poor controls over the execution of the contract. Our audit found instances when HP did not ensure that the consultants hired had the qualifications or experience necessary for the positions for which they were billed. Moreover, the consultants' timesheets were not approved in a timely manner. The approval of timesheets was as long as 885 days after the performance of work.

Further, HP did not properly monitor its billings and had a significant billing error rate. Our review identified instances when HP billed the City for consultants at a higher title than they were working at and billed for unsupported consultant hours, questionable hours, and unauthorized overtime. In many instances, the timesheets reviewed and accepted by HP lacked a detailed description to determine the specific work the consultant was being paid for and, in other cases, described activities that added no benefit to the system integration project or activities that were reported before the date of performance. Based on our review of the documents submitted by HP for payment under the time and material portion of this contract, the City should recoup at least \$2,509,451 from HP. We question, based on the findings found in our review, whether HP properly billed for consultant work associated with the time and material portion of the ECTP project. As a result, the City may be able to recoup as much as \$106 million.

Significant Cost Overruns and Incomplete Component Projects

HP did not complete all of the major component projects within the maximum contract price. The estimated expenditures of the system integration and overall project management could be as much as \$632 million. Although the HP system integration contract has a not-to-exceed amount of \$380 million and the projected contract cost—\$346 million—appears to be below the maximum contract price, the \$380 million included two components that HP did not deliver (i.e., unified CAD system and PSAC 2).⁶ Therefore, the estimated cost for the undelivered components should have been deducted from the original contract amount in determining the cost of PSAC 1.

HP only completed PSAC 1; it did not deliver a unified CAD system or PSAC 2, which was required according to the project definition. In order to determine the cost of these two components of the project, we requested that DoITT provide a detailed breakdown of the \$380 million project cost so that the cost allocated for each component could be determined. However, DoITT could only provide a general estimated cost breakdown of \$114 million for system integration services, \$110 million for CAD development, and \$156 million for equipment, hardware, and software. Using DoITT's estimated cost breakdown, we estimated that the potential cost overrun of the system integration could be as much as \$362 million. See Table I for our estimate.

⁶ The contract cost excludes cost associated with construction of the PSACs.

Table I
Estimated Cost Overrun

Projected HP Contract Expenditures	\$346 million
Estimated Cost for PSAC 2 System Integration by another contractor ⁷	<u>286 million</u>
Subtotal	\$632 million
Less: Original Cost for both PSACs ⁸	<u>(270 million)</u>
Estimated Cost Overrun for System Integration	<u>\$362 million</u>

DoITT’s Poor Decision on Vendor Selection
May Have Contributed to Increased Contract Expenditures

DoITT should not have awarded HP the system integration contract because 1) on two occasions, HP did not receive the required minimum technical score and 2) DoITT did not maintain documentation to justify awarding this contract to HP. Achieving the minimum technical score is an indication that the contractor has the minimal experience and necessary skills to fulfill the requirements of the agreement. HP’s failure to receive the minimum technical score required should have been an early indicator that HP did not have the qualifications or abilities to fulfill requirements of the contract. DoITT’s selection of HP was a contributing factor to the delays and the contract cost overruns incurred.

In 2004, DoITT used a contract solicitation method known as the mini-bid process to solicit a contractor to provide system integration services for the ECTP. The project definition was sent to 109 New York State Office of General Services (OGS) pre-approved contractors. DoITT only received two proposals—from HP and iXP Corporation (iXP). According to the project definition, “Proposals will be first scored on their technical merit. Only those proposals that are determined to be technically viable will receive further consideration. To receive further consideration, a proposal’s technical score must achieve a minimum of 70 percent of the technical points.” The City’s evaluation committee reviewed the initial proposals submitted by HP and iXP for technical merit and scored them 63.23 percent and 74 percent, respectively. Even though HP’s technical score fell below the required 70 percent, DoITT did not disqualify HP from the solicitation process. Instead, HP was given a second opportunity to submit a second best and final offer. Once again, HP scored below the required 70 percent (HP scored 66.62 percent). The evaluation committee recommended iXP be awarded the system integrator contract; however, iXP unexpectedly withdrew its proposal.

Instead of re-soliciting the contract, DoITT disregarded HP’s poor technical scores and, in May 2005, awarded the contract to HP. Our review of DoITT’s procurement files concluded that DoITT based this award on the following factors:

⁷ DoITT awarded a new \$286 million contract effective January 3, 2011, for a new system integrator to oversee the completion of PSAC 2.

⁸ \$380 million minus \$110 million budgeted for unified CAD system equals \$270 million (balance to provide system integration for PSAC 1 and PSAC 2).

- ECTP is an extremely complicated and difficult project. DoITT believed re-soliciting would not have resulted in additional responses and would have delayed the project.
- HP received outstanding recommendations for its system integration support structure when DoITT conducted reference checks with the NYPD and US Air Force.
- HP was already in contract with NYPD to provide a new CAD system—not the unified CAD system described in the project definition, which was one of the systems that the selected contractor needed to integrate into the new 911 call center.

However, the procurement files did not include the outstanding recommendations that NYPD and the US Air Force allegedly provided. These recommendations were cited in the Award Narrative that stated “HP has demonstrated a unique ability to perform the role on the NYPD contract” and “provided in-depth quality control measures to ensure that NYPD had visibility into CAD development activities, such that NYPD will not view new product releases until they are first validated by HP.”

However, our review of NYPD’s VENDEX Contractor Performance Evaluations on the CAD system contract contradicts DoITT’s assertions. HP’s overall performance on quality and timeliness was rated poor or unsatisfactory by the NYPD on several occasions, including an evaluation dated November 4, 2004 (prior to DoITT’s decision to disregard its solicitation requirement). In fact, HP failed to deliver the NYPD CAD system and, in 2008, entered into a settlement agreement to repay the City \$33 million.

Poor DoITT Contract Management Contributes to Increased Contract Expenditures

DoITT made poor contract management decisions that resulted in increased contract costs. Specifically, DoITT did not reduce the maximum contract amount by amending the contract when it decided not to require HP to complete two original components of the contract (unified CAD system and PSAC2). As a result, DoITT paid significantly more than it originally budgeted for PSAC 1. In addition, DoITT subsequently decided to contract with another contractor in 2011 to complete PSAC 2, which further increased the overall potential project costs to \$632 million (\$362 million representing an estimated cost overrun).

In addition, DoITT did not limit HP’s mark-up or require HP to pass any savings on to the City that it gained by having subcontractors perform work on this contract. The system integration contract did not include a provision that would limit the mark-ups HP could charge if it hired subcontractors. HP relied heavily on its subcontractors to fulfill the contracted services. Of 528 consultants who worked on this contract, 413 were hired by subcontractors to provide services to the City. Consequently, HP simply billed at the stated contract rates, which were significantly higher than the rates paid to the subcontractors, instead of passing any savings onto the City. We compared the hourly rates HP paid to subcontractors to the stated contract rates that HP charged to the City and found that HP charged a mark-up ranging from 9 percent to 195

percent. The total amount of mark-up paid during the seven sampled months reviewed was \$2,302,686, with an average mark-up rate of 54 percent.⁹

Because HP was selected through the New York State mini-bid process, HP must also adhere to the backdrop contract requirements when soliciting technology, commodities, and services for DoITT. In addition, although the City contract allows HP to use the stated contract rates to bill for subcontracted consultants, the New York State backdrop contract also mentions that DoITT is entitled to any savings that HP gained by having subcontractors perform the work. Specifically, the New York State backdrop contract states,

“[t]he highest standard of care shall be imposed on Contactor to secure project products at the lowest available price. . . and b) that Contractor’s negotiated bid price for such products (whether on a centralized contract or not) is at or below the State contract price. Contractor’s principal duty shall be to obtain the ‘*Best Value*’ for the Issuing Entity who shall be entitled to all savings negotiated by the Contractor on its behalf.”

We recognize that a fair mark-up percent would normally be added to the work of subcontractors. For example, in another IT contract, DoITT included a clause that limited the contractor to “bill the City a rate that is equal to the rate that the subcontractor charges to [the contractor] plus 25 percent.” This percentage is significantly lower than the 195 percentage mark-up charged by HP on some consultants for which it billed the City. Because DoITT did not include a fixed mark-up for subcontracted services within its contract, it allowed HP to bill the City using very large mark-ups. Had DoITT limited the subcontracted services mark-up to 25 percent, the City would have saved significantly. For example, if the City had limited the mark-up charged to 25 percent on the subcontracted services, it would have saved approximately \$1.3 million out of the \$9.8 million charged during our seven-month sample period.

Another instance of DoITT’s poor management of this contract occurred when DoITT amended eight fixed price component projects to a time and material basis in March 2006. Generally, fixed price component projects are paid only when milestones are met and the vendor has provided the contracted services at the agreed upon fixed price (i.e., if the project is delayed, there is no additional cost to the City). However, a time and material project is billed for the actual amount of hours to complete the task rather than on actual accepted deliverables. If a time and material project is not finished on time with all required deliverables, the City bears the risk of cost overruns.

For example, in an original fixed price task order, HP was required to provide program management, processes, and consulting services for Stage 1 activities, which included relocating three FDNY communication offices personnel and EMD division to PSAC 1 by fall 2006. However, FDNY personnel did not move into PSAC 1 until August 2009 and EMD first moved in June 2010. If the task order remained as a fixed price, HP would have been paid at the rates specified and when the milestones were met. Switching the component project to a time and

⁹ The seven sampled months are March to June 2006, April 2007, September 2008, and August 2010. The methodology used to select the sampled months can be found in the Detailed Scope and Methodology section of this report.

material basis allowed HP to bill the City an hourly labor rate plus an applicable mark-up for the time spent on the project. The management office had an original estimated cost of \$18 million, which was increased to \$53 million by December 2010. (We were unable to determine the extra costs that the City paid for this task order because additional tasks were added to the component project.)

Our analysis found that 24 of the 30 subcomponent projects¹⁰ representing 42 percent of the total estimated cost, as of December 31, 2010, utilized a time and material billing method. Having such a high percent of the contracted cost being billed on a time and material basis could easily lead to cost overruns.

Moreover, DoITT allowed HP to pass administrative costs it incurred for this contract to the City. Specifically, HP leased a management office in the City and HP passed through all of the costs associated with it, including but not limited to, renovation, rent, utility charges, City rent tax, facility management, and office services, such as coffee, pantry, paper, toner, postage, and office supplies, to the City. In addition to the actual cost associated with operating a management office, DoITT allowed HP to charge the City an additional 7.5 percent mark-up starting in December 2007 (i.e., HP did not charge any mark-up to the City from April 2006 to November 2007). We question why DoITT would begin allowing HP to charge a mark-up percentage on top of its administrative costs when the City was being already charged for all of the administrative costs and was not charged the mark-up percentage from April 2006 to November 2007.

DoITT Did Not Take Action on HP's Poor Performance

DoITT was dissatisfied with HP's performance during the first three years of the contract (from 2005 to 2008) yet DoITT did not take any action to either recoup any portion of the \$113 million spent during this period and/or terminate the contract. There were at least two instances when DoITT noted HP's poor performance.

In an unsigned April 5, 2007, DoITT four-page memorandum, the then-DoITT Commissioner informed the then-Deputy Mayor that DoITT, NYPD, and FDNY had become increasingly disappointed by HP's performance. The memorandum stated that HP had failed to meet the City's expectations and contractual requirements in a numbers of key areas and had demonstrated poor management, poor leadership or staffing, poor subcontractor management, poor communication, limited system integration methodology, and poor corporate support. All three agencies recommended that the contract should be put up for re-bid.

HP's performance continued to be poor. In a May 2008 VENDEX Contractor Performance Evaluation, DoITT rated HP's performance as "Needs Improvement" or "Unsatisfactory." Of the 20 questions asked in the Vendex evaluation form, HP did not receive one rating above "needs improvement." Specifically, DoITT rated HP as unsatisfactory in the following areas: technical and professional quality of services, overall quality of fiscal

¹⁰ The major components of this contract are made up of 30 subcomponent projects.

administration, cooperation with City agency staff and responsiveness to agency requests, accuracy and timeliness of fiscal reports and invoices, and contractor's overall performance.

HP's deficiencies were described in a May 2009 "Lessons Learned" report prepared by Gartner, the independent quality assurance consultant, which reviewed HP's performance under the contract for the period of April 2005 through April 2008. The report stated that HP:

"has largely focused on project management rather than system integration; [HP] approaches for planning, problem solving and change management have been limited resulting in lack of traceability and inability to resolve problems; limited value in managing an 'end to end' solution."

Despite HP's poor performance, DoITT did not terminate the contract or assess any liquidated damages. Under the New York State backdrop contract, DoITT could have assessed liquidated damages in the amount of 1 percent of the contract value of the late deliverable for each day that receipt is delayed over the stated time frame, up to the value of the contracted price for the deliverable. Moreover, the New York State backdrop contract states that the City can also seek remedy for poor performance when the "failure to meet the performance or inter-connection requirements of the specifications remains Contractor's responsibility and shall be remedied at Contractor's expense." For the period from April 2005 to April 2008, DoITT might be able to recoup up to \$113 million—\$57 million for fixed price services and \$56 million for time and material services. (The \$56 million for time and material services is included in the \$106 million and discussed in the next section of the report, which details various billing errors identified in this audit.)

HP's Inadequate Oversight of Consultant Performance

HP did not ensure that: the consultants were qualified for their titles; billings of consultants' hours were appropriate and accurate; the timesheets submitted reflected actual work performed; and the timesheets were approved in a timely manner. DoITT contracted with Gartner to be an independent contractor responsible for overseeing HP's performance. In August 2006, Gartner identified significant billing problems for the period from November 1, 2005, to June 10, 2006. Of the 40,716 hours that HP attempted to bill the City, Gartner disallowed approximately 6,000 hours (14.7 percent), representing approximately \$1.5 million in overcharges. Gartner also recommended deferring approximately \$1.8 million in milestone payments for those fixed priced component projects that should be deferred as a result of work that has been rescheduled. According to a DoITT official, HP never billed the hours identified by Gartner.

If Gartner's review had not been conducted, HP could have billed the City thousands of hours that had no actual or little benefit added to the component projects. For the \$1.8 million in milestone payments, DoITT's project manager modified the payment schedule deferring the payments. However, HP did not follow the amended payment milestone schedule and instead billed the City in accordance with the original payment schedule.

Our own review of the consultant work hours and qualifications found an additional 8 percent of billing errors amounting to \$786,927 that DoITT unknowingly paid for. Table II shows all billing errors and the delays in final approval of timesheets during each sampled month. (A more detailed breakdown of the billing errors and delays in final approval of timesheets can be found in the Appendix of this report.)

**Table II
Billing Errors and
Timesheets Approval Time**

	Mar 06	Apr 06	May 06	Jun 06	Apr 07	Sept 08	Aug 10	Total
Total Time and Material Services Billed to the City	\$1.5 M	\$1.3 M	\$1.3 M	\$1.4 M	\$1.3 M	\$2.2 M	\$0.7 M	\$9.8 M
Billing Errors (in thousands)	\$149	\$88	\$97	\$70	\$193	\$179	\$11	**\$787
Billing Error Percentage	9.81%	6.73%	7.31%	5.05%	15.03%	8.01%	1.45%	8.02%
# of Consultant Billed	69	64	62	70	60	84	34	171
# of Timesheet Submitted	*255	223	245	240	234	350	123	1670*
Timesheets Approved within 30 days	11	0	2	1	57	203	36	310
Timesheets Approved between 31 to 60 days	37	9	0	72	65	99	43	325
Timesheets Approved between 61 to 180 days	168	186	227	107	98	38	40	864
Timesheets Approved after 180 days	28	28	16	60	14	10	4	160

* Eleven timesheets were approved without approval dates.

** We calculated an additional \$1.7 million for errors that were initially identified in the sampled months and were carried through our entire scope period.

The specific billing errors we identified include:

- **Unqualified Staff** - During our sample period, HP incorrectly billed the City \$40,818 for three consultants who were only qualified to be administrative staff. Our review of the consultants' resumes found that these three consultants only had experience as administrative assistants, but were billed to the City as Project Manager Level I or Program Analyst Level I. Without the proper qualifications or experience, we question how these consultants performed "Engineering Management" and "Planning and System Engineering" for the ECTP as described in one of the timesheets. We further question whether HP exercised due diligence when assigning consultants to the ECTP component projects. Based on the three consultants' qualifications and the payment information provided by DoITT, we believe that during our scope period,¹¹ a total of \$396,078 was paid to HP for these three unqualified consultants.

Incorrect Consultant Titles - HP billed eight consultants at a higher paying title than they were working at. The incorrect bills totaled \$174,746 during our sample periods.

¹¹ The scope of this audit was April 1, 2005, to December 31, 2010.

For example, a subcontractor billed HP for one consultant as a Specialist Level III, but HP billed the City at a rate for a Project Manager Level III. The rate difference of the two titles is \$46 per hour. Had DoITT reviewed these consultants' qualifications and HP's bills, it could have determined that the consultants were not qualified for the higher title.

Our review of the consultants' resumes revealed another five consultants who were not qualified for their titles. In total, HP overbilled \$1,543,710 during our scope period for these 13 consultants who we identified based on the billing information provided. In addition, due to the insufficient information provided on 71 consultants' resumes, we were not able to determine whether these 71 consultants were qualified for their titles and paid appropriately.

- **Unsupported Consultants' Hours** - HP overbilled the City \$14,952 for hours that were not supported by subcontractor invoices. Specifically, during our sample period, we found six instances where HP billed for more consultant hours than it was billed for by its subcontractors.
- **Non-Allowable Time Billed** - During our sample period, HP billed non-allowable hours totaling \$152,427. Specifically, we found that HP billed for administrative duties (e.g., preparing timesheets), time disallowed by Gartner, holidays or time-off, and other non-allowable time. For example, HP should not have billed DoITT for consultants to print and bind documents, open the door for visitors, print and post a calendar in the conference room, and handle the sanitation problems in the restrooms. HP billed the City for these clerical tasks at a rate of \$192 per hour. We question whether the tasks described above should have been billed to the City at all and how these charges could actually have been approved.
- **Unauthorized Overtime Billed** - HP did not always obtain proper authorizations for overtime hours billed. Specifically, we found 17 instances during our sample period when consultants lacked prior written approval for exceeding allowable hours billed for a week. Contract Attachment A section titled "Maximum Weekly Billable Hours" states that,

"For services being provided by the Contractor on an hourly basis, the Contractor shall not bill the City for more than 40 hours of work per individual per week; provided, however, that on an exception basis, approved in advance in writing, the City may permit variation from this rule..."

Our review of the timesheets submitted for the sampled period disclosed that \$18,353 in overtime was paid without prior written approvals.

- **Timesheets Description** - HP billed the City \$191,735 for services that had no description or lacked detailed description of work performed by consultants during our sampled period. Our review of consultants' timesheets submitted to DoITT

identified payments based on vague descriptions of work performed. Sixty timesheets did not have a detailed breakdown of the task performed by each consultant. The descriptions on those timesheets were either too vague to provide a meaningful understanding of work performed or a single task was repeated over a period of several days. For example, one consultant billed the City for 176 hours over a 30-day period for “general management.” This lack of detailed description makes it impossible for anyone reviewing the timesheet to determine whether the hours billed are justified and reasonable. Additionally, there were seven timesheets totaling 150 hours that did not list any descriptions of work tasks performed.

We also found two consultants who submitted timesheets that were identical to their previous week’s timesheets (HP approved both timesheets). Both consultants submitted identical timesheets except for the date of performance.

- **Questionable Timesheet Activities** - We identified some questionable timesheet activities in the electronic timekeeping system (Replicon) that HP’s consultants began using in 2007.¹² Our sample review of timesheets processed through Replicon disclosed that 1,049 hours were entered before the actual work date. Consequently, the City was billed \$193,896 for these questionable hours. Specifically, timesheet entries appeared to be completed in advance of when the work was actually performed. For example, one consultant’s weekly timesheet period covering April 1, 2007, to April 7, 2007, contained entries noting the tasks performed during that week that were entered on February 23, 2007, and March 2, 2007—a month prior to the actual event date. Timesheet entries should be made based on actual work performed and not completed based on planned work.

Our audit also noted that there were lengthy delays in approving timesheets. The approval time from the period of performance to the final approval date for our sample period ranged from two to 885 days. Of the 1,670 timesheets that we reviewed, 1,024 timesheets (61 percent) were approved beyond 60 days from the period of performance. Significant delays in approving timesheets invalidate the review process and lead us to question whether anyone was actually monitoring the consultants’ work.

As a result of these timesheet errors, we calculate that the totaling billing errors resulted in overpayments to HP of at least \$2,509,451 (\$786,927 for the errors during our sample periods plus \$1,722,524 for errors that were initially identified in the sample periods and were carried through our entire scope period). However, due to the unreliable billing documents submitted by HP and the lengthy approval process, we question the validity of the entire \$106 million HP billed (as of December 31, 2010) for its time and material services. (It should be noted that \$56 million of the \$106 million is also included in the prior section which discusses the \$113 million spent on HP’s unsatisfactory performance from April 2005 to April 2008.)

¹² Beginning in 2007, HP and its consultants ceased submitting paper timesheets for billing purposes and began using Replicon, an electronic timekeeping system.

RECOMMENDATIONS

DoITT should:

1. Use the findings in this report as a starting point to determine how much of the expenditures over original budget can be recouped. Specifically, DoITT should review the documentation supporting the invoices submitted by HP with a view toward recouping as much of the \$113 million paid HP from April 2005 to April 2008 and where HP's unsatisfactory performance deprived DoITT of receiving the full benefit of the services bargained for in the contract. DoITT should also conduct an in-depth review of HP's invoices and supporting documents to determine how much of the \$106 million—in addition to the \$2,509,451 that was specifically identified in this report—can be recouped because HP incorrectly billed for its time and material services. (It should be noted that \$56 million of the \$106 million is included in the \$113 million paid to HP for unsatisfactory performance for the period from April 2005 to April 2008.)

City's Response: "We do not agree with recommendation 1 because, as noted above, the auditors' findings of cost overruns are substantially overstated. Nonetheless, we agree to review Hewlett-Packard's billing and work product to determine whether any of the actual overruns resulted from actionable breaches of contract by Hewlett-Packard, and, if so, whether and how to seek recoupment from Hewlett-Packard."

2. Review its contract budget monitoring procedures to ensure that, in the future, if a contractor is no longer expected to perform one or more of the tasks that were originally expected, the maximum contract amount is appropriately reduced.
3. Revise its procedures to ensure that the contract solicitation procedures are not ignored and ensure that, in the future, only qualified contractors are selected.

City's Response: "We do not agree with recommendations 2 and 3 because, as outlined above, we believe they are based on incorrect premises."

4. Maintain in its bidding documents written documentation of the reference checks conducted on contractors.
5. Review all resumes to ensure that consultants are qualified for the positions they are working in.
6. Properly review HP's subsequent invoices, timesheets, and other documentation before approving payments to ensure that payments are appropriate and accurate.

City's Response: We agree with recommendations 4 to 6.

7. Strengthen its internal controls for payments, including but not limited to

- Requiring its contractors to provide more supporting documents, such as subcontractor invoices.
- Ensure that contractors are paid the correct hourly rates for consultants used on the job.
- Cease paying contractors for non-allowable or questionable consultant hours that were identified in this report.
- Ensure that contractors are not paid for consultants' overtime without first obtaining proper written approval.
- Ensure that each contractor requires its consultants to provide detailed descriptions on the timesheets for the tasks that he/she performed prior to issuing payment.
- Require contractors to review timesheets in a timely manner.

City's Response: "We agree that the items listed in the recommendation should be part of the payment review process."

8. Research and periodically update the acceptable fair market rate that IT consultants will be paid based on their title and qualifications on DoITT's projects.
9. Limit the mark-up percentage that a contractor can add to the actual cost it pays to its vendors in all of its future contracts.
10. Limit the use of time and material service provision in its contracts.
11. Insert a liquidated damage clause into all of DoITT's contracts that allows it to assess liquidated damages for each day that delivery is delayed. The contracts should also allow the City to seek remedy for poor performance.

City's Response: "We do not agree with recommendations 8 through 11 as they are stated. These recommendations pertain to contract terms that must be negotiated with potential vendors, and cannot be imposed unilaterally. If these recommendations were couched in language to the effect that the City should include these matters in their contract negotiation objectives, we would agree with the recommendations – but those recommendations would be moot because we routinely include these provisions among our contract bargaining objectives. Successful negotiation by definition requires compromise, and negotiators must assess the balance of importance of various interests in deciding where compromises can be made. If the premise of these recommendations is that these four contract negotiation objectives supersede all other negotiation objectives – scope of work, deliverables deadlines, and so on – then we disagree with that premise."

Auditor's Comments: The City's disagreement with seven of our recommendations is largely based on its disagreement with the report's findings. Because we believe our findings to be correct, we re-iterate our recommendations, which we believe should be implemented.

DETAILED SCOPE AND METHODOLOGY

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives-- except that the resumes for 183 of 464 consultants, who were billed on a time and material basis, were not provided. We, therefore, could not determine whether HP properly assigned qualified consultants and properly billed for the consultants whose resumes were not provided. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

The scope period of this audit was April 1, 2005, to December 31, 2010.

To achieve our audit objectives, we reviewed the HP system integration contract, task orders, and amendments as well as New York City Procurement Policy Board rules and Directive 1 submitted by DoITT. We reviewed Gartner's Component Project Analysis, dated August 10, 2006, for its assessment on HP's performance from November 1, 2005, to June 10, 2006, and Lessons Learned issued in May 2009. To gain an understanding of DoITT's internal control process over contract payments and HP's timekeeping and billing process, we interviewed relevant personnel (i.e., Accounts Payable Analyst, ECTP Director of Program Management Office, ECTP Director of Information Technology Service Management, DoITT's Director of Risk Management, DoITT's Director of Audit and Accounts, DoITT's Agency Chief Contracting Officer, and HP's System Integration Manager). We documented the results through narrative memoranda and flowcharts. We also conducted on-site observations of the existing Public Safety Answering Center (PSAC 1) and the site for the second Public Safety Answering Center (PSAC 2).

To gain an understanding of HP's responsibilities, we obtained and reviewed all task orders (i.e., component projects) and any subsequent amendments. To determine which task orders were for equipment purchase, firm fixed price services, and time and material services, we reviewed and summarized all the task orders.

To determine accuracy of the Replicon timesheets, we judgmentally selected March 2009—the month with the highest amount charged to the City—to be our sample. We reviewed the invoices and the consultants' timesheets and compared the number of hours reported on the timesheets with the data extracted from Replicon. Based on the problems identified in Gartner's assessment report, we judgmentally selected all invoices (i.e., equipment, firm fixed price, and time and material) billed for March 2006 to June 2006 for our review. In addition to the four months selected in 2006, we randomly selected one month from 2007, 2008, and 2010 (i.e., April 2007, September 2008, and August 2010) to review HP's time and material service billings. We also obtained and analyzed HP's purchase orders to its subcontractors for the months selected in 2006, 2007, 2008, and 2010, and the associated subcontractors' invoices to determine whether the amounts charged to the City were reasonable. To determine whether the consultants HP billed the City for were qualified to work in their titles, we obtained and had our Assistant Chief

Information Officer, Bureau of Information Systems and Unit Chief – Information Technology, Office of Contract Administration review the consultants’ resumes.

Lastly, we obtained and reviewed the proposals and documents maintained by the DoITT’s ACCO to determine whether HP was selected through a proper solicitation process.

**BILLING ERRORS AND DELAYS IN TIMESHEETS APPROVAL
FOR TIME AND MATERIAL SERVICES**

	March 2006	April 2006	May 2006	June 2006	April 2007	September 2008	August 2010	Total
Total Time and Material Services Billed to the City	\$1,514,573	\$1,307,630	\$1,323,123	\$1,390,212	\$1,286,236	\$2,238,700	\$752,634	\$9,813,108
Types of Billing Errors								
Unqualified Staff	2,209	1,399	1,326	2,209	884	32,791	0	40,818
Incorrect Consultant Titles	20,413	18,482	24,347	32,058	35,078	38,119	6,249	174,746
Unsupported Consultants' Hours	267	0	2,673	1,016	9,889	0	1,107	14,952
Non-Allowable Time Billed	17,224	42,007	23,131	9,892	31,191	28,982	0	152,427
Unauthorized Overtime Billed	0	1,069	12,004	0	4,211	1,069	0	18,353
No or Lacked Detail Description	108,414	25,014	33,281	25,026	0	0	0	191,735
Questionable Timesheet Activities	0	0	0	0	112,067	78,256	3,573	193,896
Total Billing Errors	\$148,527	\$87,971	\$96,762	\$70,201	\$193,320	\$179,217	\$10,929	**\$786,927
Billing Error Percentage	9.81%	6.73%	7.31%	5.05%	15.03%	8.01%	1.45%	8.02%
# of Consultant Billed								
# of Consultant Billed	69	64	62	70	60	84	34	171
# of Timesheet Submitted								
# of Timesheet Submitted	*255	223	245	240	234	350	123	*1670
Timesheets Approved within 30 days								
Timesheets Approved within 30 days	11	0	2	1	57	203	36	310
Timesheets Approved between 31 to 60 days								
Timesheets Approved between 31 to 60 days	37	9	0	72	65	99	43	325
Timesheets Approved between 61 to 180 days								
Timesheets Approved between 61 to 180 days	168	186	227	107	98	38	40	864
Timesheets Approved after 180 days								
Timesheets Approved after 180 days	28	28	16	60	14	10	4	160

* Eleven timesheets were approved without approval dates.

** We calculated an additional \$1,722,524 for errors that were initially identified in the sampled months and were carried through our entire scope period.

Discussion of the City's Response

I – Significant Cost Overruns and Incomplete Component Projects

City's Response: Your auditors' findings and conclusions [are based] on a fundamental misunderstanding of the scope of HP's work as the systems integrator on PSAC 1. "This misunderstanding is also the basis of the audit's unsupportable conclusion that the systems integration work for the ECTP 'could be' up to \$362 million over budget. . . . In fact, the total projected cost of the HP work—\$346 million—is \$34 million under the \$380 million contract amount, and by the SI contract end date on June 30, 2012, HP will have completed all of the systems integration work it was obligated to perform."

City's response states "As part of this audit process and on many prior occasions we have explained that HP's \$380 million contract did not include the build out cost or systems integration work for PSAC 2. The 76 page, extremely detailed Statement of Work for ECTP, submitted as part of the contract registration materials to your office in 2005, makes clear that the systems integration work for PSAC 2 was limited to 120 days of work, primarily on project definition (HP SOW at §2.9.6.10, pp.39-40)."

City's response further mentions "Regarding CAD, your auditors observed that during the project, the City decided not to pursue a 'unified' CAD solution, and conclude on that basis that the City 'did not reduce the maximum contract amount' by the \$110 million allocated for CAD-related work in the contract. As we have repeatedly explained, this conclusion is based on the false assumption that delivery of a unified CAD was part of the Hewlett-Packard contract. In fact, the contract covered a unified CAD feasibility study and upgrades to the existing CAD systems if a unified CAD was not pursued—not a unified CAD system. Hewlett-Packard performed the required unified CAD feasibility study, and the decision was made not to contract for a unified CAD and multiple upgrades were implemented."

Finally, the City's response states "*Hewlett-Packard delivered additional functionality not originally contemplated by the contract.* [Emphasis in Original] Funds that were not spent on the development of a unified CAD were used to develop new functionality, which had not been considered when the contract was originally drafted. This is to be expected in the development of a complex, long-term technology project. Amendments to the Hewlett-Packard contract were entered into to implement those additional functionalities. Examples of this include Notify NYC (Reverse 9-1-1), Remedy/Consolidated Management Database, City Street/Center Line (CSCL), as well as upgrades to and maintenance of the then existing systems—improvements which have also had substantial value to the City. Therefore, while it is correct that the \$110 million contract amount could have been reduced when the City decided not to pursue the unified CAD, the contract amount would then have been re-increased each time that one of these contract changes was effectuated."

Auditor Comment: The City's statement that the findings and conclusions are based on a fundamental misunderstanding is completely false. Since a negligible amount of work was performed on PSAC 2 and a unified CAD system was not provided, the City is now trying to

portray HP as just a “systems integrator on PSAC 1,” when the project was intended to accomplish much more than this. The Project Definition clearly outlines that the systems integrator was primarily responsible for PSAC 1, a unified CAD (pp. 1 and 2), and PSAC 2 (pp. 1, 3, 22, 24, 27, 29, 34 to 38, & 62). In addition, HP’s Statement of Work submitted to the City regarding PSAC 2 lists “HP Project Results and Deliverables” as follows: HP will be the System Integrator overseeing the project (PSAC 2) and renovation, Oversight of Project Milestones, Risk Management, Maintenance Support, etc...

HP’s contract not to exceed authorization of \$380 million was based on the assumption that these primary areas of responsibility would be fulfilled. Regardless of why these areas were not completed, the overall contract authorization should have been reduced proportionately by the funds allocated for these purposes, and it was not. Instead, the City spent \$346 million on just PSAC 1 and some work integrating the existing CAD systems, which will be discussed later.

In regard to PSAC 2, the City is attempting to further distort the facts. In its response, the City states, “The 76 page, extremely detailed Statement of Work for ECTP, submitted as part of the contract registration materials to your office in 2005, makes clear that the systems integration work for PSAC 2 was limited to 120 days of work, primarily on project definition.” This would lead the reader to believe that HP met its obligations regarding PSAC 2. The Statement of Work states, “The specific set of work activity and work products that HP will perform during **the first** 120 day period for the PSAC 2 project are identified below...” (Emphasis added). Every other project area was addressed in the same manner. The City did not mention that the purpose of that entire document (Task Order 0) is only to detail the scope of work for the first 120 days of the project, and not as the limitation that the City now uses it as, in its response. However, after this Task Order, the City and HP never addressed PSAC 2 again despite the fact that the Project Definition stated that the systems integrator was responsible for the design, oversight, management, support, and maintenance of PSAC 2. While there may be valid reasons as to why PSAC 2 was not implemented, the contract amount should have been reduced because the \$380 million incorporated its costs. Instead of reducing the contract amount, the City used the money budgeted for PSAC 2 to cover costs on PSAC 1.

As previously stated, the City decided not to pursue a unified CAD system. Instead, the City claims to have upgraded and integrated the existing CAD systems. The City had allocated \$110 million of the \$380 million contract to develop the new unified CAD system. From the documentation provided by DoITT, we were only able to identify approximately \$33 million in estimated costs related to the existing CAD systems. The \$33 million includes the \$300,000 associated with HP’s feasibility study of the unified CAD. However, some of this work would have had to be performed anyway, such as integrating AVL. AVL would have had to be integrated regardless of what system(s) the City decided to use (There was a separate allocation of \$114 million specifically set aside for integration).

The City also states that funds allocated for a unified CAD were used to develop new functionality that had not been considered when the contract was originally drafted. Assuming the new functions cited by the City were not part of the original scope of work, there are issues with this, too. In a memorandum dated April 5, 2007, the former DoITT Commissioner

informed the former Deputy Mayor that HP failed to prevent its sub-contractor from generating scope (new work) at additional expense to the City.

By the end of the HP systems integration contract, the City should have had an operational PSAC 1, PSAC 2, and a newly developed unified CAD. For \$346 million, the City has an operational PSAC 1, the existing CAD systems (which are now integrated), and some new functionality that may have been improperly generated at the City's expense.

II – DoITT's Poor Decision on Vendor Selection may have Contributed to Increased Contract Expenditures

City's Response: "You also conclude, apparently based on the fact that recommendations by the NYPD and US Air Force could not be verified, that the City should not have selected HP in 2005. While it is true that the selection of a systems integrator for this project was challenging, the City shared all of this information with your office in 2005 in a detailed Award Narrative that laid out the basis for HP's selection, the known weakness in their initial proposal, and the steps that were taken to address them. . . . The narrative given to your office clearly explained the steps that were taken to ensure that HP put together a team that could carry-out the work, and on this basis, your office registered the contract and enabled the project to move forward. Those facts, not set forth in your audit, are wholly inconsistent with the audit's assertion that HP was awarded the contract based on a 'questionable selection' process. Indeed, the audit reads as though the Comptroller's Office was part not part of the process your audit now criticizes."

Auditor Comment: The Comptroller's Office Contract Administration unit relies on the integrity of information submitted by the contracting agency when making decisions on contracts. In this case, critical pieces of information provided in the Award Narrative cannot be supported and, in fact, are contradicted by the City's own documents. Consider the following, submitted by DoITT to the Comptroller's Office, on its Award Narrative for the project:

"The original proposal indicated HP lacked public safety and (specifically) Computer Aided Dispatch ('CAD') experience. However, HP has since demonstrated that they have the requisite experience in working on major public safety projects. Reference checks with the NYPD and US Air Force yielded **outstanding** recommendations of the HP SI support structure. Both departments have used HP as an SI and spoke of HP's ability and experience in working in a complex and time critical environment" (Emphasis added).

The audit team attempted to verify the validity of these statements and came to alarming conclusions. According to an email, a DoITT Senior Contract Manager requested the results of the DoITT Program Manager's reference check on HP. The Program Manager stated, "DoITT performed a reference check on HP with the NYPD and a high ranking military official who also has used HP as a Systems Integrator for the U.S. government. Both NYPD and the Officer both spoke to HP's ability and experience in working in a complex and time critical environment. DoITT was pleased to hear that both references **were positive** and that the large scale of the government project demonstrated that HP can perform well as the SI there as well" (Emphasis added). One would expect that, at a minimum, DoITT officials would at least record the names

of the people spoken to. However, this is all the documentation DoITT provided to support the references.

The accuracy of these reference checks is highly questionable, assuming they occurred at all. Based on DoITT's "support," it is not only impossible to verify the Air Force's so-called "outstanding" recommendation, but also the description of the individual who allegedly provided the recommendation. That description is so vague that it is even unclear if he works for the Air Force. Furthermore, as stated in the audit, NYPD's VENDEX Contractor Performance Evaluations on the CAD system contract completely contradicts DoITT's assertions. Again, HP's overall performance on quality and timeliness was rated poor or unsatisfactory by the NYPD on several occasions, including an evaluation dated November 4, 2004 (prior to DoITT's decision to disregard its solicitation requirement). Yet again, it is impossible to verify who made the NYPD's so-called "outstanding" recommendation as DoITT neglected to document the name or even the title of the individual who allegedly made these comments.

Even if these reference checks took place, the fact that DoITT stated they "yielded outstanding recommendations" is very troublesome. Nowhere in that email provided by DoITT does it state HP was outstanding. However, this is what DoITT purported to the Comptroller's Office in the Award Narrative. The email only stated that both references were positive. The Comptroller's Office, in part, relied on DoITT's reference checks, which certainly appear to have been embellished.

In regard to contract rates, the Award Narrative states that the City negotiated rates 60 percent below the OGS rates. This statement is false and is also included on page 2 of the City's response. The City is actually paying 40 percent below the OGS rates—not the 60 percent claimed. Furthermore, the OGS rates are the maximum amount allowed under the contract and do not reflect fair market value. According to the Award Narrative, the average OGS rate for all titles is \$294 and the average rate the City negotiated with HP was \$180 (i.e., the City pays 61 percent of \$294 OGS rate or a 40 percent reduction from the OGS rates). Even with the 40 percent discount, the City still paid HP more than the market rates for the consultants who worked for the project. In fact, the Award Narrative shows that despite receiving a lower overall technical score, HP's final negotiated rates were 6 percent higher than iXP's, the other bidder on the contract who withdrew.

In its response, the City stated, "the City shared all of this information with your office in 2005 in a detailed Award Narrative that laid out the basis for HP's selection..." This statement does not appear to be correct as it is clear that "all" of the information was not shared and that some of what was provided was questionable.

III –DoITT Did Not Take Action on HP's Poor Performance

City's Response: "We have repeatedly acknowledged that the City had performance issues with HP in 2006 and 2007, and took steps to correct them. In December 2006, working with its quality assurance vendor Gartner Inc., DoITT identified seventeen (17) specific performance areas for improvement. Throughout 2007, Hewlett-Packard made improvements in all 17 areas, resulting in a 2008 performance rating of 'satisfactory.' In fact, HP will have successfully

completed all of the tasks it was obligated to perform as a systems integrator on the ECTP project.”

Auditor Comment: The audit states that DoITT should have taken action to either recoup a portion of the contract expenditures or terminate the contract—neither of which it did. Furthermore, the referenced performance evaluation was issued in October 2008 and specifically evaluates HP as satisfactory in the accuracy and timeliness of fiscal reports and invoices category, which includes invoices and timesheets. However, our audit examined the invoices and timesheets submitted by HP in September 2008 and found an 8 percent rate of error. That appears to be neither a significant improvement from prior years nor satisfactory performance. In addition, the City is now implying that the performance improvements identified by DoITT led to HP successfully completing all of the tasks it was obligated to perform as a systems integrator on the ECTP project. But, the City’s response is misleading.

From 2005 through May 2008, HP had issues that were so critical that DoITT, NYPD, and FDNY recommended that the contract should be put up for re-bid. Yet HP somehow “successfully completed all of the tasks it was obligated to perform” while only receiving a satisfactory rating throughout the remaining term of the contract. According to the Statement of Work (Exhibit III of the contract) dated March 6, 2005, PSAC 1 should have been completed by June 2007. However, PSAC 1 was not completed until February 2012— more than four and half years late. Although the City blames Verizon, it is illogical to believe that HP’s poor performance did not significantly contribute to the delays and cost overruns. Furthermore, HP was responsible for overseeing Verizon’s work.

With all these issues, the City actually implies that the HP systems integration project is \$34 million under projected costs and also states that PSAC 2 was not part of the project. Throughout its response, the City states that HP performed the tasks it was “obligated” to, but this is due to the fact that the City never issued any additional Task Orders beyond Task Order 0 for PSAC 2. However, this does not mean that PSAC 2 was not part of the original scope and budget of the project. Again, DoITT used the money budgeted for PSAC 2 to cover costs on PSAC 1.

IV – Inadequate Oversight of Consultant Performance

City’s Response: “We believe that the auditors substantially overstated the shortcomings in Hewlett-Packard’s oversight of consultants’ performance.

“For example, it is not the case that consultants were paid for overtime that was not authorized as required by the contract. The contract includes the following provision:

‘Maximum Weekly Billable Hours. For services being provided by the Contractor on an hourly basis, the Contractor shall not bill the City for more than 40 hours of work per individual per week; provided, however, that on an exception basis, approved in advance in writing, the City may permit variation from this rule.’

“The auditors applied a different standard for the definition of ‘overtime’ than the contractual standard; therefore their finding on payment of ‘unauthorized overtime’ is incorrect.”

A footnote included in the City's response states, "At our exit conference with the Comptroller's staff on May 9, 2012, the staff indicated that they relied on a statement of 'overtime' criteria given to them by a member of the staff of the Office of Citywide Emergency Communications (OCEC). Those additional criteria were imposed by the OCEC in 2010, as a measure to tighten monitoring beyond the requirements of the contract, and those criteria were not in effect during the 'sample period' used by the auditors. However, as we pointed out during the exit conference, it is the contract provisions that control the legal rights and obligations of the contracting parties. At the exit conference, we undertook to obtain and provide this information to the auditors, but we were unable to do so before you issued the draft report on the morning of May 11, 2012."

The City's response also states that "The report also concludes that Hewlett-Packard's submission of some consultant timesheets more than 60 days after the period of performance covered by those timesheets 'invalidate[d]' the review of those timesheets. While we agree that speedy review is important, the conclusion disregards the interactive process between Hewlett-Packard and the City in reviewing work product and deliverables prior to the timesheet approval. Also, the draft report does not acknowledge that many of the issues and concerns that were identified occurred during the program's initiation, and were recognized and subsequently addressed by DoITT and its quality assurance vendor."

The City further responded that "You cite the potential recoupment of approximately \$2.5 million based on your interpretation of certain timesheets (0.66% of the overall contract value), and assert that the City 'may' be entitled to up to \$106 million. Regarding billing, we note that the City negotiated billing rates for HP that were on average of more than 60% below the rates set in the OGS contract used for this procurement. . . . While we believe that the audit's findings of 'overbilling' are significantly overstated, we will undertake an additional review of HP's billings to determine if any recoupment is warranted."

Auditor Comment: The City is attempting to downplay the seriousness of HP's billing problems by asserting that the auditors overstated the shortcomings of HP's oversight of consultant performance. The City initially discusses the unauthorized overtime issue cited in the audit report. However, this issue constitutes a fraction (less than 1 percent of the total exceptions identified) of what DoITT was cited for. The City raised no other objections to any of the other findings identified at the exit conference. Furthermore, the disagreement noted was based on misinformation provided during a meeting attended by DoITT's Director of Information Technology Management Services (ITMS)—the responsible City Official.

In fact, the City tries to discredit the auditors by stating that we used a different standard for the definition of overtime than the contractual standard. When this issue was discussed at the exit conference, DoITT officials questioned how we applied the overtime criteria. We told them that we only allowed the contractor to bill 32 hours when a national holiday occurred. However, the same official who attended the initial meeting regarding the standard stated during the exit conference that the contract language ruled. The City now states in its response that the auditors should disregard what they were initially told and apply the contract standard, which is silent on this issue, and that the statement previously made did not apply to the period under audit, as the policy was instituted in 2010.

However, DoITT's own documents do not support its final position. Based on the documents provided, DoITT was clearly applying the 32-hour standard during the period under audit. A timesheet covering the period from February 16, 2009, to February 22, 2009, included a national holiday (similar to the situation cited in our audit). This timesheet indicated that the approver's comment stated "maximum number of working hours on a holiday week is 32 hours." Clearly, the policy was in effect well before the date imposed by the City in 2010.

The City's response is problematic because the responsible City official did not appear to know their own policy for maximum billable hours. The City had three different answers on what its policy was, and then in its response ultimately settled on one not supported by its own documents.

The City also downplays the importance of the timely review of consultant timesheets. Timesheets are documents that substantiate work performed. Without timely review, management's assurance of the work actually performed becomes less reliable. To be dismissive of the fact that 61 percent of the sampled timesheets were approved beyond 60 days from the period of performance is inexcusable regardless of any interactive process that may occur between HP and DoITT.

Further, the City claims that the many of issues and concerns were addressed by its quality assurance vendor during the program's initiation. While this may be true, DoITT's QA vendor identified a 15 percent error rate in HP's billing (covering November 1, 2005, to June 10, 2006). We found that after DoITT and its QA vendor allegedly implemented changes, significant error rates continued to occur. One would expect these issues to be resolved by those changes.

Finally, the City is dismissive of the audit's findings stating the recoupment of \$2.5 million is 0.66 percent of the overall contract. However, as the City should know we only audited a sample of the contract expenditures. This sample specifically related to time and material services billed to the City. The \$2.5 million is the minimum that should be recouped and represents only the findings of our review of a sample of timesheets. It does not include potential recoupment based on a review of the entire population of timesheets or based on weak internal controls related to approval and poor performance. This is a clear example of the City's fundamental misunderstanding of what the audit findings and conclusions were. In this instance, the City fails to grasp the simple concept of a sample. Under the City's logic, if you examine 100 randomly selected invoices worth \$100 out of a population of 10,000 worth \$10,000 and the testing finds all \$100 should be recouped, this is not a problem as the \$100 represents only 1 percent of the overall population. This misses the point that the \$100 represents a 100 percent error rate of the items tested, and indicates an internal control issue for the entire population. The lack of understanding of basic audit concepts and simple internal controls may partially explain why the City fails to understand the seriousness of the audit's findings.

The City needs to reassess its position and take a more-in-depth review of billings rather than the cursory one it implied in its response.



OFFICE OF THE MAYOR
OFFICE OF CITYWIDE EMERGENCY COMMUNICATIONS
15 Metro Tech Center, 18th Floor
Brooklyn, New York 11201

BRUCE GASKEY
Director

(646) 285-3711
Email: bgaskey@cityhall.nyc.gov

May 25, 2012

The Honorable Tina Kim
Deputy Comptroller
Audits and Accountancy
1 Centre Street
New York, New York 10007-2341

Dear Deputy Comptroller Kim:

Thank you for the opportunity to respond to the draft Audit Report on the Hewlett-Packard System Integration Contract Expenditures Associated with the Emergency Communications Transformation Program (ECTP).

At the outset, I note that we disagree almost entirely with your auditors' findings and conclusions, which are premised on a fundamental misunderstanding of the scope of HP's work as the systems integrator on PSAC 1. This misunderstanding is also the basis of the audit's unsupportable conclusion that the systems integration work for the ECTP "could be" up to \$362 million over budget. (Draft Audit Report, P2) In fact, the total projected cost of the HP work—\$346 million—is \$34 million under the \$380 million contract amount, and by the SI contract end date on June 30, 2012, HP will have completed all of the systems integration work it was obligated to perform.

You also conclude, apparently based on the fact that recommendations by the NYPD and US Air Force could not be verified, that the City should not have selected HP in 2005. While it is true that the selection of a systems integrator for this project was challenging, the City shared all of this information with your office in 2005 in a detailed Award Narrative that laid out the basis for HP's selection, the known weaknesses in their initial proposal, and the steps that were taken to address them. As you are aware, the City initially solicited 109 vendors for this work; 2 submitted proposals and ultimately, all but HP withdrew. The narrative given to your office clearly explained the steps that were taken to ensure that HP put together a team that could carry out the work, and on this basis, your office registered the contract and enabled the project to move forward. Those facts, not set forth in your audit, are wholly inconsistent with the audit's

assertion that HP was awarded the contract based on a "questionable selection" process. Indeed, the audit reads as though the Comptroller's Office was part not part of the process your audit now criticizes.

Today, due to the work that HP has completed, the first Public Safety Answering Center (PSAC 1) is fully operational and the SI services HP was contracted to perform to reach that milestone have been successfully completed. This means that for the first time in the history of the City of New York, NYPD, FDNY and EMD services are all located on the same floor and operating on the same technology. The modernization of the City's 9-1-1 system includes state-of-the-art equipment that has greatly expanded technological redundancy and improved inter-agency communications and emergency response. PSAC 1 has successfully handled more than five million calls, and ECTP has already strengthened and improved the City's public safety response. We are confident that that improvement will continue as we complete and operationalize PSAC 2—the 911 call center currently under construction in the Bronx. Your audit does not discuss—or even mention—the accomplishments, made possible in large part due to the work HP successfully performed.

You also conclude that DoITT did not “exercise good judgment overseeing the contract,” apparently based on evaluations conducted by the City during the project, that stated that HP's performance was unsatisfactory, or needed improvement. We have repeatedly acknowledged that the City had performance issues with HP in 2006 and 2007, and took steps to correct them. In December 2006, working with its quality assurance vendor Gartner Inc., DoITT identified seventeen (17) specific performance areas for improvement. Throughout 2007, Hewlett-Packard made improvements in all 17 areas, resulting in a 2008 performance rating of “satisfactory.” In fact, HP will have successfully completed all of the tasks it was obligated to perform as a systems integrator on the ECTP project.

You cite the potential recoupment of approximately \$2.5 million based on your interpretation of certain timesheets (0.66% of the overall contract value), and assert that the City “may” be entitled to up to \$106 million. Regarding billing, we note that the City negotiated billing rates for HP that were an average of more than 60% below the rates set in the OGS contract used for this procurement. The City instituted and used invoice review checklists for the payment of invoices and, as the audit notes, Gartner assisted in invoice review that resulted in the disqualification of approximately 6,000 hours during the project. While we believe that the audit's findings of “overbilling” are significantly overstated, we will undertake an additional review of HP's billings to determine if any recoupment is warranted. The remediation plan that improved HP's performance, and the oversight the City had in place show that City has, in fact, held vendors accountable throughout this project, by suspending payments and securing back credits where appropriate—without fanfare and unprompted by audits or investigations. And we will continue to do so.

Regarding CAD, your auditors observe that during the project, the City decided not to pursue a “unified” CAD solution, and conclude on that basis that the City “did not reduce the maximum contract amount” by the \$110 million allocated for CAD-related work in the contract. As we have repeatedly explained, this conclusion is based on the false assumption that delivery of a unified CAD was part of the Hewlett-Packard contract. In fact, the contract covered a unified CAD feasibility study and upgrades to the existing CAD systems if a unified CAD was not pursued—not a unified CAD system. Hewlett-Packard performed the required unified CAD feasibility study, and the decision was made not to contract for a unified CAD and multiple upgrades were implemented. The contract component for CAD development was fully performed, and no reduction in the contract amount was warranted. The City received upgraded, integrated and fully operable CAD systems for NYPD, FDNY and EMS. As noted above, the new system has successfully handled approximately 5.6 million calls.

In short, your audit suggests that the HP contract never should have been entered into, that the contract was poorly managed, that HP performed poorly, and that the systems integration work on the ECTP project is significantly over budget. None of these conclusions are supported by the facts. HP performed all of the work it was obligated to perform, the cost of HP’s work was \$34 million less than the contract authority, and PSAC 1 is fully operational because the dozens of systems needed to make it work have been successfully enhanced. The sections below respond to the audit’s findings and conclusions in more detail.

There Were No Significant Cost Overruns on the Hewlett-Packard Contract

With respect to the HP contract, it is important at the outset to note, contrary to the audit’s findings, that:

- 1) There have been no substantial cost overruns on the deliverables for which HP was responsible pursuant to the contract;
- 2) The primary contract cost overrun resulted from the delay in the delivery of the E911 telephony system, for which the City is pursuing and expects to receive a substantial recoupment; and
- 3) There were no incomplete component projects.

As part of this audit process and on many prior occasions we have explained that HP’s \$380 million contract did not include the build out cost or systems integration work for PSAC 2. The 76 page, extremely detailed Statement of Work for ECTP, submitted as part of the contract registration materials to your office in 2005, makes clear that the systems integration work for PSAC 2 was limited to 120 days of work, primarily on project definition (HP SOW at § 2.9.6.10,

pp. 39-40). Anyone familiar with the scoping of a project of this complexity would recognize this. And the City has repeatedly explained it, and pointed out that the cost of the systems integration work for PSAC 2 was not part of the \$380 million contracted for PSAC 1, because PSAC 2 was still at the conceptual stage of development when HP started work on PSAC 1.

Notwithstanding this fact, and reams of back-up detail that the City has provided on all of the work HP performed, your audit cites the \$286 million contract awarded to Northrop Grumman for systems integration work on PSAC 2 as support for the proposition that the systems integration work for ECTP is more than \$300 million over budget. There is simply no basis for that conclusion, and to keep it in the final audit would deliberately misrepresent the facts regarding the City's management and HP's performance of this contract, and the entire ECTP project.

The Hewlett-Packard systems integration contract was capped at \$380 million. Of that amount, approximately \$34 million will not be spent, reducing the actual cost of the Hewlett-Packard to approximately \$346 million. The audit calculates a cost "overrun" of \$362 million on the Hewlett-Packard contract, based on three false assumptions:

First, the audit assumes that the entire \$286 million estimated cost for PSAC 2 systems integration contract constitutes a cost overrun. That assumption is incorrect because:

- *The Hewlett-Packard contract was not intended to cover all of the PSAC 2 work.* The draft audit report asserts that the Hewlett-Packard contract was intended to cover the "design, oversight, management support and maintenance of PSAC 2, the subsequent reconfiguration of PSAC 1 after the completion of PSAC 2, and decommission[ing of] all services, applications, communications, and facilities whose functionality will be replaced by PSAC 2." In fact, the Hewlett-Packard contract required Hewlett-Packard to conduct an analysis of the overall PSAC 2 design approach and project needs, which would be used to help inform the eventual PSAC 2 design and construction. Regarding PSAC 2, the Hewlett-Packard task orders covered only preliminary analysis and planning for the build-out of PSAC 2, and expressly stated that the contract did not include the build-out itself, because the scope of that work could not be determined until the preliminary analysis and planning was completed.

Second, the audit assumes that the entire \$110 million intended for CAD development constitutes a cost overrun. That assumption is incorrect because:

- *Hewlett-Packard performed substantial CAD development work.* Although production of a unified CAD solution proved to be infeasible, Hewlett-Packard nonetheless developed and implemented upgrades to existing CADs, which are now interoperable for the first time. The modernized, interoperable CAD systems have significantly enhanced the speed, accuracy and coordination of emergency response in New York City. Therefore, the CAD work that Hewlett-Packard performed has had substantial value to the City.

- *Hewlett-Packard delivered additional functionality not originally contemplated by the contract.* Funds that were not spent on the development of a unified CAD were used to develop new functionality, which had not been considered when the contract was originally drafted. This is to be expected in the development of a complex, long-term technology project. Amendments to the Hewlett-Packard contract were entered into to implement those additional functionalities. Examples of this include Notify NYC (Reverse 9-1-1), Remedy/Consolidated Management Database, City Street/Center Line (CSCL), as well as upgrades to and maintenance of the then existing systems – improvements which have also had substantial value to the City. Therefore, while it is correct that the \$110 million contract amount could have been reduced when the City decided not to pursue the unified CAD, the contract amount would then have been re-increased each time that one of these contract changes was effectuated.

Third, the draft report assumes that the City has taken no recoupment measures. In fact, the City is vigorously pursuing a recoupment claim against Verizon for its delay in the delivery of E911 software essential to ECTP. That delay imposed costs on the City – including additional billing by Hewlett-Packard. We expect those negotiations to be concluded shortly and to obtain a substantial recoupment for delay costs.

The Selection of Hewlett-Packard Was Appropriate

DoITT's selection of Hewlett-Packard in 2005 was valid, justified, and transparent. As noted above, when the proposed Hewlett-Packard contract was submitted to your office for registration in 2005, the circumstances of their selection were fully and accurately reported in the award narrative. This included a detailed description of the solicitation process, which started with 109 vendors, only two of which submitted proposals that were ultimately viable (HP and iXP). After extensive negotiations, which included the development of a detailed work plan and addition of expertise to the HP team, the City concluded that they had the capacity and experience to proceed. The alternative would have been to re-start the procurement, which the City noted in its submission to your office, would have cost substantial time and money, and would not likely have generated better results. Ultimately, the Comptroller agreed with this assessment and the City's plan to deliver ECTP, because the contract was registered.

DoITT Took Appropriate Steps to Improve Hewlett-Packard's Performance

The assertion that "DoITT did not take action" to improve Hewlett-Packard's performance in the first three years of the contract, from 2005 to 2008 is simply false. The report correctly notes that DoITT rated Hewlett-Packard's 2007 contract performance as "needs improvement." The report intimates that the appropriate recourse would have been to terminate the contract. However, termination of the contract while in progress would itself have imposed considerable costs and delays.

The fact that DoITT opted for a different course of action does not support the conclusion that no action was taken. In fact, DoITT and its quality assurance vendor, Gartner, Inc., diligently

monitored Hewlett-Packard's work performance, and when concerns surfaced, DoITT addressed them. During 2006, DoITT documented and communicated the City's concerns about Hewlett-Packard's performance. In December 2006, DoITT identified 17 specific performance areas for improvement. Hewlett-Packard made improvements in all 17 areas, resulting in a 2008 performance rating of "satisfactory."

Hewlett-Packard's Oversight of the Performance of Consultants was Satisfactory

We believe that the auditors substantially overstated the shortcomings in Hewlett-Packard's oversight of consultants' performance.

For example, it is not the case that consultants were paid for overtime that was not authorized as required by the contract. The contract includes the following provision:

"Maximum Weekly Billable Hours. For services being provided by the Contractor on an hourly basis, the Contractor shall not bill the City for more than 40 hours of work per individual per week; provided, however, that on an exception basis, approved in advance in writing, the City may permit variation from this rule."

The auditors applied a different standard for the definition of "overtime" than the contractual standard; therefore their finding on payment of "unauthorized overtime" is incorrect.¹

The report also concludes that Hewlett-Packard's submission of some consultant timesheets more than 60 days after the period of performance covered by those timesheets "invalidate[d]" the review of those timesheets. While we agree that speedy review is important, the conclusion disregards the interactive process between Hewlett-Packard and the City in reviewing work product and deliverables prior to the timesheet approval. Also, the draft report does not acknowledge that many of the issues and concerns that were identified occurred during the program's initiation, and were recognized and subsequently addressed by DoITT and its quality assurance vendor.

¹At our exit conference with the Comptroller's staff on May 9, 2012, the staff indicated that they relied on a statement of "overtime" criteria given to them by a member of the staff of the Office of Citywide Emergency Communications (OCEC). Those additional criteria were imposed by the OCEC in 2010, as a measure to tighten monitoring beyond the requirements of the contract, and those criteria were not in effect during the "sample period" used by the auditors. However, as we pointed out during the exit conference, it is the contract provisions that control the legal rights and obligations of the contracting parties. At the exit conference, we undertook to obtain and provide this information to the auditors, but we were unable to do so before you issued the draft report on the morning of May 11, 2012.

Most importantly, the auditors' assessment of the oversight of consultants was made without reference to processes and checklists maintained for that purpose. We certainly agree on the importance of rigorous internal payment controls. OCEC and DoITT maintained processes and checklists used to validate invoices and payments.² The checklists require all of the items that are contained in recommendation 7 to the draft report.

Response to Recommendations

Regarding the recommendations in the draft report, we disagree with the following:

- We do not agree with recommendation 1 because, as noted above, the auditors' findings of cost overruns are substantially overstated. Nonetheless, we agree to review Hewlett-Packard's billings and work product to determine whether any of the actual overruns resulted from actionable breaches of contract by Hewlett-Packard, and, if so, whether and how to seek recoupment from Hewlett-Packard.
- We do not agree with recommendations 2 and 3 because, as outlined above, we believe they are based on incorrect premises.
- We do not agree with recommendations 8 through 11 as they are stated. These recommendations pertain to contract terms that must be negotiated with potential vendors, and cannot be imposed unilaterally. If these recommendations were couched in language to the effect that the City should include these matters in their contract negotiation objectives, we would agree with the recommendations – but those recommendations would be moot because we routinely include these provisions among our contract bargaining objectives. Successful negotiation by definition requires compromise, and negotiators must assess the balance of importance of various interests in deciding where compromises can be made. If the premise of these recommendations is that these four contract negotiation objectives supersede all other negotiation objectives – scope of work, deliverables deadlines, and so on – then we disagree with that premise.

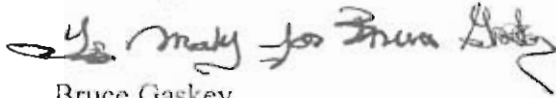
We agree with the other recommendations, subject to the following qualifications:

- Regarding recommendation 7, we agree that the items listed in the recommendation should be part of the payment review process. As discussed above, those items have been included in that review.

² The "Invoice Preparation Checklist" was not reviewed by the auditors.

Once again, thank you for the opportunity to comment on your draft audit report. **If I can be** of any further assistance or provide additional information, please do not hesitate to be in touch.

Sincerely,

A handwritten signature in black ink that reads "Bruce Gaskey". The signature is written in a cursive style with a large initial "B" and a long, sweeping underline.

Bruce Gaskey
Director

cc: Caswell F. Holloway, Deputy Mayor for Operations
Rahul N. Merchant, Chief Information and Innovation Officer