DAVIS WRIGHT TREMAINE LLP

MEMORANDUM

To: WA Senate Investigation File
From: Max Hensley
Date: February 19, 2016
Subject: Mark Ardiel Interview

Monty Gray and I interviewed Mark Ardiel of Sierra-Cedar ("Sierra") at DWT's office in Seattle, Washington for approximately three hours beginning at 10:30 am on Monday, February 15, 2016. Ardiel was accompanied to the interview by his attorneys, Steven Ragland and Briggs Matheson of the law firm Keker & Van Nest. Ardiel and his counsel made themselves available on very short notice and traveled to Seattle to meet with us on the President's Day holiday. The following memo summarizes our discussion.

We explained that we have been hired by the Washington State Senate to investigate the issues surrounding DOC's administration of the sentencing changes caused by the Washington Supreme Court's *King* decision, and told him that we would draft this memo that set forth his comments for his signature. We explained that he would have the opportunity to edit or revise the memo to ensure that it correctly represented his statements, and further encouraged him upon reviewing this memo to add any additional statements or details that he wished to include, even if he had not mentioned them to us in person.

Ardiel is currently a Technology Principal at Sierra; this position is one level below "director ." He was promoted to this position from his prior role as a consultant approximately 4-5 years ago; in total, he has worked at Sierra since early 2007. He was originally hired to join the team that was building the OMNI application. It is Ardiel's recollection that the Sierra team had been working on the project for approximately 3-4 months before he joined Sierra. It took another 1.5 years before they launched OMNI, which went live in mid-2008.

Ardiel attended the University of Victoria in Victoria, British Columbia, Canada for two years, and pursued a degree in engineering but discontinued his studies for financial reasons. He was hired to do computer and database work for the Center for Educational Information in 1998, and was eventually hired full time by that agency. That agency was shut down by the provincial government, but Ardiel's role was maintained and shifted over to another agency. Ardiel joined Sierra from his position in the BC government.

Ardiel himself had no experience in the corrections area. He said that he believes Sierra may have had some experience with OBTS in Connecticut; OBTS was the legacy system used at the Washington DOC until OMNI was deployed. He did not know the details of Sierra's involvement (if any) with OBTS. Sierra has also worked on other applications for the justice

system in BC, including a tool named Cornet, which is used by the BC courts, and a tool named Justin, which is used by the BC police.

It is Ardiel's recollection that Sierra largely built OMNI from scratch. Ardiel understood that IBM was retained to build the system and worked on the project, but DOC brought in Sierra to replace IBM. Ardiel said that when he joined Sierra, the company had not substantially begun development, but was in the midst of design work and ramping up the development team. When asked about OMNI's design documents, Ardiel noted that the design documents and specs were developed and discussed "above [his] level" among management. He said that he believed there probably were a several design documents (the numbering system began with D-1 and Ardiel recalled seeing a document designated D-55); those documents set forth DOC's business requirements for OMNI, and were developed based on DOC's specifications. They would set forth each level of the design process, including high level design, detailed designs, and technical documentation. Ardiel said that Sierra may have a copy in its archives; he noted that he was not in management at Sierra at the time and was not personally involved in the design. He said that he thinks Sierra's contract with DOC probably set forth all of Sierra's deliverables, identified by D-number; but he believed that the design documents had not been updated since the initial implementation.

Ardiel said that the original versions of the OMNI system were numbered versions 3.1 and 3.2; 3.1 had very basic information such as the offender's name and location and the designated staff, while 3.2 began to implement other business functionalities. These functionalities include: prison movement, case management field movement, and two disciplinary sections (one each for prison and field issues). Each of those could feed into the the Sentence Structure Time Accounting functional area (SSTA) area, which is a module within OMNI. There are also many other functional areas that may not have direct links to SSTA.

We turned the discussion to SSTA. SSTA is not the largest part of the OMNI system in terms of length of code, but it is fairly large and among the most complicated, as a result of the business functions that required implementation of the sentence structures created under Washington law. Ardiel said that the SSTA area is large and overwhelming when taken as a whole, but it can be broken down: he explained that the base piece is the sentence structure imposed by the court, that complexity is introduced by variations in the types of sentences imposed at the cause, count, and confinement levels, further complexity is introduced by the relationship between consecutive and concurrent segments of a sentence, and that even more complexity is caused by the differing calculations governing the amount of good time that can be earned, the various sentence components that it can be applied to, and the distinction between good time and earned time, among other issues. These other issues include the application of discipline or sanctions, and calculations of community time as separate from time in the DOC's facilities.

In order to determine an offender's release date, OMNI calculates an earned release date for each confinement, which is then rolled up to the count level, then to the cause level, and finally to the offender level. This is further governed by what is known as the "Max-Ex" or maximum expiration date, or the date on which an offender would be released if he or she did not earn any good time, and the "Stat-Max," or the statutory maximum, which depends on the

2

crime that an offender was sentenced for. The complexity in this area is largely driven by Washington's complex sentencing structures. This calculation involves many lines of code, but the program is drafted in a way that reduces the amount of code by recursively calling certain segments (which adds further complications). Ardiel described the process as "traversing an object tree," and said that for each element, it was necessary to reach the bottom of the tree before moving back up for the next element. Asked to rank the complexity of the SSTA area, Ardiel stated that it was a 10 on a 1-10 scale; prison movements were approximately a 5-6; and other areas were in the range of 2-3. This complexity is caused by the complexity of the business (i.e., DOC) requirements, which his team needed to actually understand rather than simply applying logical relationships.

Ardiel said that at the beginning of his time at Sierra, he was not specifically devoted to the SSTA area, but as the OMNI system moved into the maintenance phase, Ardiel was one of the developers who stayed with the company. He was for a time the development lead on the DOC contract, although he left that role when he went on personal leave in 2015. During that time, Ardiel's position was backfilled by another Sierra consultant, who assumed the leadership position on the DOC contract, and has retained that role since Ardiel's return in September 2015. Ardiel said that all members of the team work in all areas of the OMNI program, and that he is familiar with almost the entire system as a result of his longevity with the team. He said that he is certainly the most familiar with SSTA, as he is the only person who has worked on it consistently since 2007. However, Ardiel said that he is not the only one who can or does work on it. He believes that DOC probably prefers that he personally handle SSTA issues because of his experience, but that other team members certainly can do the work, and would do so if asked by the business.

We asked whether the *King* fix was intended to fix a programming error or a design error. Ardiel said that his understanding now (although he did not have understand this issue in 2012— or any time prior to December 2015—because it was never explained to him by the DOC) is that the original programming was based on a 2002 decision of some kind; whatever determinations were made at that time carried forward into the implementation of OMNI. OMNI was designed and implemented according to the specs that Sierra received from DOC; he now sees that those specs must have been in error, but the system was programmed properly according to the requirements DOC provided. Ardiel is not specifically aware where in the design documents that spec would be located, although he would expect to find it in a section relating to the business rules and be little more than a simple statement explaining how credits were to be applied.

We asked about the process of rolling out OMNI in 2008. Ardiel recalled that the system may have had some initial bugs that took a few months of work to resolve, although he could not recall specific functional issues at this time. He remembered that there were lots of tickets requesting alterations of one type or another, and substantial pre-implementation testing. One performance issue that arose shortly after implementation was that use by multiple users at the same time caused certain errors; another issue related to slow refresh times for certain more complicated pages.

3

Ardiel said that he worked most closely with the business team at DOC, which was led by Dave Dunnington, although the members changed over time. Sue Schuler has been a member of that team for a substantial portion of the time that Ardiel has been involved. Ardiel did not work with DOC during the original design and implementation, so he could not say precisely who was there in 2008. He also worked with Steve Collins, who seemed to understand the technical aspects of the system, and testers David Gale (whom Ardiel believed had the longest tenure) and the current testing head Brian Alonzo. Ardiel did not know what DOC's procedure was for determining which staff Ardiel would work with; he felt that there was a lot of turnover among his contacts there.

We asked Ardiel to explain the process by which an OMNI change is requested and implemented. Ardiel said that he did not fully understand the DOC's internal processes, but believed that they maintained some kind of gatekeeper that would allow them to get an estimate for the work. He believed that DOC had a different process for fixing defects as opposed to making changes or enhancements that allowed fixes to move straight into the request queue. We asked whether he was aware of a 'triage group' at DOC, and Ardiel said that he was not. He said he was not involved in that process.

Ardiel stated that DOC held twice-weekly OMNI meetings (in which Ardiel would participate by phone from his office in Victoria, British Columbia). These meetings were used to review the current issues in the ClearQuest software, and were the primary points of contact between Sierra and the DOC's business team. Ardiel would generally be the only Sierra person at the meetings, but approximately 15 DOC employees would attend, generally including Dave Dunnington, Sue Schuler, Brian Alonzo, and technical staff. The twice-weekly meetings were not used to discuss whether certain items should be implemented or in what order (prioritization), but were primarily status updates on items set for the current release. Sierra's programmers would channel their issues and questions for DOC through Ardiel to be brought up at these meetings. Ardiel said that these meetings were informal, and did not believe that he had kept any notes or other records of the discussions.

Ardiel explained that shortly after OMNI was implemented, DOC developed a schedule to release updates every 8 weeks. In order to meet this schedule, Sierra's five programmers would typically code for approximately 1 month, complete two weeks of testing, and then send the updates to DOC for two weeks of further testing before the release. Ardiel recalled that at some point, Dunnington's business team began estimating how much could be done within that 8-week time period, and would come up with a list of projects for the next release. Ardiel understood that Dunnington developed this list by working with the business team. Ardiel's understanding as to how these lists were generated is as follows: After OMNI had been up and running for a time, DOC developed a sense of how many items a release could include. If there was room for 50 items, for instance, the representatives of each of the various business groups might be asked what their top five items were. Occasionally a release would be dedicated to a specific business area (for example, if that area had a large backlog of tickets) or to a specific OMNI functionality, such as a high-priority project, or new functional components brought in from other DOC systems. The decision whether to dedicate a release to a specific business area or functionality was solely DOC's. In addition, the number of items and which items to work on were determined by the DOC business unit. Ardiel noted that entries into the ClearQuest system

4

have a field identifying the proposed release for the item; he is not sure whether those are entered by the IT staff or by others within the agency. Ardiel noted that he is not privy to that information.

Ardiel recalled that at some point, DOC maintained a tracking chart showing the number of outstanding requests broken out by which of OMNI's functional areas they impacted, and showing the number fixed in the most recent release and the number of additional requests received in that timeframe. Ardiel believes that these charts may have been developed by Cindy Chu at DOC, and Ardiel believes that Dunnington and Ira Feuer (DOC's CIO) should be aware of them. Ardiel remembered former CIO Doug Hoffer reviewing these charts, as well as DOC employee Mark Quimby; he said that CIO Kit Bail did not go over these to his knowledge during her tenure. Ardiel was not sure whether there were specific monthly meetings to discuss these charts or if they were simply on the agenda for the existing OMNI meetings. Either way, DOC stopped using them regularly approximately 5-6 years ago. The chart did not have any information as to the relative importance of the projects, but simply a numerical total of how many had been resolved, requested, and were pending. For example, DOC might have looked at a functional area and determined that there were 10 items and decided to focus on that area until there were zero items. Those 10 items could be just spelling errors, but the idea was to get the numbers down. There was no focus on the nature of the items, just the volume.

We asked Ardiel whether he had any basis to compare DOC's workflow management to best practices in the industry. He said that his only experience in this area was on the OMNI project, so he did not know how it compared to others. However, he felt that the lack of formal process was not ideal. Ardiel did not have much professional interaction with Hoffer, although he thought Hoffer was "a nice person." He never interacted with David Switzer. Ardiel thinks that Dunnington does a good job of knowing the business areas and getting input from them. Ardiel said he did not work closely with DOC employees, and did not have grounds to assess their strengths and weaknesses. He noted that he had seen a lot of turnover among the people with whom he was in contact.

Ardiel said that the OMNI meetings were run by various people over time; he is not sure who is formally in charge of them, although he believes that it would likely be Dunnington during the 2012-2015 period. When Dunnington is not present at the OMNI meetings, it is someone else from his team who takes over. Substantively, the OMNI meetings consisted of projecting the list of items on a screen and walking through them one by one.

We asked whether Ardiel was aware of a "governance group" or "governance team." He said that he was not familiar with such a group.

We asked Ardiel for more detail on the chart or spreadsheet showing the backlog of items in ClearQuest. To the best of his recollection, Ardiel stated that the list was generally fairly constant over time, although the sheet was difficult to interpret as DOC brought non-Sierra work into ClearQuest. Thus, the numbers would include tasks that Sierra was not responsible for. This may have been the reason DOC stopped using these charts in OMNI meetings. In addition, DOC had 2-3 internal developers who worked on OMNI issues. Ardiel did not remember the specific number of outstanding items at any particular time, but guessed that it remained stable at

approximately 700-800 pending items. He noted that that number included very minor items such as typos.

We explained to Ardiel that some DOC staff had expressed a concern to us about new projects taking up bandwidth that otherwise would have gone to OMNI maintenance. Ardiel agreed with that characterization, "for sure." As an example, Ardiel said that the Resource Program Manager (RPM) program was brought into OMNI, which required about 6 months of work by 2-3 programmers; those programmers were taken off of the maintenance team for that period of time. Ardiel's impression was that new projects got "airtime" while maintenance work did not. Ardiel has no input on or understanding of how or why non-maintenance work was performed under Sierra's maintenance contract; his general impression without reading the contract is that if DOC asked for it, Sierra was willing to do it. As he understood it, DOC's contract with Sierra required Sierra to provide five full-time developers in return for a flat monthly fee. How DOC chose to use those resources was up to DOC. He said at times, Sierra would receive new contracts from DOC that would compensate Sierra for bringing in additional programmers for particular projects. Whether items were described as "defects" or "enhancements" to the system, from Sierra's point of view, everything was a task to be performed. Ardiel remembered that at times he informed DOC that certain work was too substantial to be performed within the time allotted for a particular maintenance release. Ardiel said that the scope of the contract was outside of his responsibilities; thus, when asked how DOC decided whether a new project would be done as part of the existing contract or as part of a new one, Ardiel noted that he was not involved with such decisions. Sierra has an account manager who handled those types of issues.

Ardiel further said that he believed the Advance Corrections project may have had both a new contract component and a component that was handled under the maintenance project. He believed that for nearly all of 2015, almost his entire maintenance team was working on that issue. Another substantial project was the Persistent Prison Misbehavior issue, which was not a new item but a very substantial project that required lots of time. He also mentioned two new contracts that Sierra worked on: a health services contract and a needs and goals contract, which he described as a portion of the Advance Corrections project.

Ardiel said that he was not a party to the DOC's discussions about when certain fixes would be scheduled initially and whether fixes would be handled internally or by Sierra. DOC would inform him of the work that Sierra was expected to handle after DOC made its decisions. During the update process, work on a particular release needed to stop on what was known as the 'code freeze' date so that testing could begin. At that point, Ardiel and his team would turn to the items scheduled for the next release. If the code freeze date approached and an item was incomplete, the decision would be made by the DOC business team to either move an item to a future release, or to continue to work on an item if it was particularly important. Ardiel and the Sierra developers were not involved in this decision making process. Typically, Dunnington would ask the DOC business person responsible for the relevant functionality whether to move the item or to continue work on it past the code freeze date.

As the "code freeze" date approached, Ardiel and the DOC would consult regarding any outstanding issues that had not been completed, and DOC would provide a priority list of areas

6

to focus on and complete. The code freeze date was generally immovable, but on occasion work could continue into the testing period (although that caused risks by shortening the time allotted for testing). When asked why DOC did not simply move the release dates, Ardiel stated that he did not know, but suspected that the release date was generally firm because updates to multiple systems (not just OMNI) may have been involved. Those dates were very rarely moved, although Ardiel noted that the January 2016 release date was pushed by 5 days to accommodate the *King* fix without further delay. In addition, it was possible to release a "hot fix" or an update outside of the scheduled release cycle. These were rare, but occurred when DOC's business side determined that an issue was too important to wait for the next cycle. Ardiel remembers those occurring 1-2 times per year; occasionally there are unplanned hot-fixes when a problem is discovered shortly after a release. Hot fixes are generally performance-based; Ardiel cannot remember any that were required based on a change in the law, as those changes are generally known in advance and can be planned for. He noted that hot fixes carry the risk of introducing new errors in the effort to correct old ones.

We asked Ardiel to explain ClearQuest's severity ranking, which listed every project on 1-4 scale. He said that ranking a project 1 meant that it needed to be done to avoid a system crash; these would be done off cycle due to their urgency, although they occasionally arose close enough to a release to allow them to be included in the general releases. A 4 ranking means that the issue could go permanently unfixed without causing any real issues. Ardiel estimated that around 60% of the items in ClearQuest were ranked 3, with approximately 20% ranked either 2 or 4. DOC set those rankings. They were not explicitly discussed in the OMNI meetings, although Ardiel speculated that they were used to determine which items were sent to him for work.

Ardiel explained that Sierra would sometimes get the list of items to work on for an upcoming release at the time that the previous release went into code freeze. However, it was up to the DOC to determine how far ahead to schedule items for maintenance releases. These decisions are beyond the scope of the Sierra developers. As an example, Ardiel noted that they are currently closing out release number M-50, and are awaiting the list of projects for M-51. He said that although the list would be set somewhat in advance, DOC would also add items to previously set lists that they believed to be important, which increased the workload for each M-release and made it less likely that the maintenance team could complete all of the tasks assigned. Items are also moved to later releases when issues arise in testing that prevents them from being released as scheduled. Overall, however, it remains up to Dunnington and the business team whether to continue working on an item or to move it to the next release. If an item is moved to a later release, Ardiel and the other Sierra developers would focus on the items remaining on the earlier release. DOC could also schedule a "mid-release" item if it deemed it necessary.

We turned to the specific work that Ardiel and Sierra did on the *King* fix. We described the time frame where Wendy Stigall identified the issue and sent it to Schuler in December of 2012, Schuler reported on her "consultation" in late March 2013, and the item was approved in early April and originally set for release in September of 2013. Ardiel said that timeline did not strike him as odd, and that items were routinely scheduled several releases into the future. He said that his focus is on the current release, and although he has access to the data showing what

7

is scheduled for future items, he has no reason to look forward to those. He either does not have access or is not aware of having access to DOC's other tracking measures, including Easy Vista and the Service Desk Request system.

We asked whether Ardiel tracked his time and allotted it to particular items, and he said that he did not. All of his time is billed to DOC, and he therefore enters the amount that he works but does not record specific tasks. The same is true for the entire maintenance team. He has done a rough estimate of the developer time spent on the *King* fix since this issue arose in 2015. From November 2015 to release in January, Ardiel spent all of his working time on *King*, which he estimates totaled approximately 300 hours. Prior to that, he estimates that he spent approximately 80-100 hours between 2013 and 2014 on the fix.

We showed Ardiel a document prepared by Schuler with a time estimate of 20 hours for Sierra's work (Bates Number WS_000050). Ardiel said that he was the source of that estimate, but that it was a rough estimate quickly arrived at and based on a very superficial description of the problem provided by DOC that made it appear to involve a comparatively simple switching of the order in which credits were applied. Ardiel pointed out that Sierra provides five full-time-equivalents for a flat monthly fee; so he is unsure why the State even asked for cost estimates for individual items. He assumed that it had something to do with budgeting.

Ragland suggested that it might be helpful for Ardiel to provide some context to this estimate. Ardiel explained that a common problem with DOC requests is that they are either overly specific or overly vague; he rarely receives a global business document that captures for him the implementation of the change they are requesting in all scenarios. He thinks that although DOC employees have obtained certain skills through their work experience, they are not experts in project management or in managing software maintenance; they are more in the nature of subject-matter experts. His general practice is to send out examples of the kinds of issues that may arise while he is coding and to ask what the outcomes should be. This in turn occasionally requires DOC to turn to the AG or others for further advice. He generally identifies these problems by programming until he hits a fork in the road and needs to determine which path to go down; he cannot continue without direction from the business unit.

Ardiel was on parental leave from February to August 2015. Originally, he was scheduled to take four months of leave; but he later extended it to six months. Ardiel informed the DOC in December 2014 that he would be out on leave beginning in February 2015. Sierra assigned another developer with prior SSTA experience to join the team while Ardiel was on leave.

We showed Ardiel the ClearQuest report for the *King* fix, which on page 287 reflects that the fix was scheduled for M-34, moved to M-35, then moved to M-36, and then back to M-35. Ardiel stated that he interpreted these changes as reflecting Dunnington's work process of clearing out a particular release (in this case, M-35) by moving all the items to the succeeding release before pulling back the items that he actually wanted to include in the earlier release.

We noted the direction on page 286 of this document to implement the *King* fix before another item; Ardiel explained that item was the Persistent Misbehavior issue he previously

mentioned. He thought that entry would have been based on a discussion in an OMNI meeting, and noted that in fact, the Persistent Misbehavior fix was completed first. He understood that Persistent Misbehavior was a high-priority item.

We noted the entry showing that the *King* fix was labeled "must-fix" for both M-37 and M-38. Ardiel explained that at one time DOC set priorities for the items in a release on an A-B-C scale; A items were 'must fix'; B items were those that had been bumped from a previous release; C items were any new additions. He explained that although the "must-fix" designation appears to disappear from the record, the report only shows items that are changed, so if the same status is maintained, it would not be shown on the report for later dates. At the same time, if an item comes up in the ClearQuest log as "must fix," that would mean it was not so designated previously. He said that DOC no longer uses the A-B-C scale.

We asked why, if the *King* fix was originally scheduled for release in September, the first record of Ardiel beginning work on the issue was in late September. He noted that it had already been moved from M-34 to M-35 before he started work on it. Ardiel noted that only two or three people from the DOC can set the field designating an item for a particular release.

We asked whether Ardiel had ever been informed that this was a priority or ASAP fix, and showed him Stigall's original request where she informed IT of that information. He said that he likely had access to that document, as it would have been attached to the ClearQuest records, but that he would not have gone searching for it. This note that this was a priority or ASAP fix was directed internally to DOC personnel. Ardiel said that he was never told that this fix was uniquely important; in his mind, this was just one more of the many items he dealt with. We asked whether he realized while programming the fix that it would have an effect on release dates. Ardiel stated that he was not cognizant of the impact. He explained that he typically views OMNI in technical terms as they pertain to coding errors, not in terms of offenders getting out of prison. As a developer, Ardiel often approaches the maintenance requests as scenarios to be worked out in the code. He did not realize the real-world implications of this coding error, and that this issue was a "big deal" until the controversy erupted in December of 2015; this includes when he was finalizing his work in November of 2015. At no point prior to December 2015 did anyone at the DOC explain to him the implications of the error—i.e., that offenders had been released early. He never made it a higher priority than any other item, because he was not instructed to do so by the DOC. He noted that the first sample run to test the calculations showed that approximately 3,000 records would be impacted by the change, and remembered thinking that was a large number; however, this test, which showed only the simple fact that a record is impacted, did not tell him the scope of the impact, whether the previous number was wrong, or, if it was wrong, in which direction (i.e., a calculation resulting in a release date that is too early versus too late).

We asked whether Ardiel generally had confidence in the release dates that OMNI now produced. He said that was a "tricky question" and stated that there were so many variations in sentences and applicable laws that he couldn't personally say whether the interpretations of those sentences and laws created the correct business requirements by DOC to input into OMNI, although he had to assume that they were. Outside of that factor, he said that there were some anomalies based on the way that particular sentences are set up in the system, and explained that

9

there were known errors where sentences are modified and where a person is released and reoffends and then is required to serve two sentences at the same time. His confidence in the system is "pretty good" and he thinks OMNI does a "very good job of coming up with what is expected of it."

We asked about new defects related to the *King* fix, and he said that was possible. He is aware of some changes that have been made since it was released, but thought some had been caught in testing. He recalled that one was related to the application of credits to field-only sentence, and said that Schuler might have been unaware that the system was giving credits on those types of sentences; OMNI has now been altered so that it no longer does that. Ardiel was not sure whether to call that a defect or an update, as Schuler did not seem to be aware that the situation was even possible. Ardiel said that another related issue is the stoppage time question, and that a fix for that is scheduled for the next release. This problem arises when there are multiple confinements running concurrently where they have varying statutory maximums; he asked DOC to get advice from the AG on that issue. He noted that there may be other, smaller issues that are being worked on currently as well.

We asked whether Ardiel would characterize the OMNI code as fragile, and Ardiel said that he would not. He said that it is complex, as there are many rules and many exceptions to those rules; therefore, there is a high potential for mistakes if someone is not familiar with the code. He said that this was not based on the age of the system, but rather on the necessity of calculating sentences under Washington's complex set of laws. He said that understanding the code required business knowledge, and would be somewhat difficult for a new programmer to pick up quickly. However, it is "not rocket science" and other developers on the Sierra team for the DOC contract could definitely have done it although perhaps not as quickly as he could. He said that all members of Sierra's team worked on all areas of the OMNI application, but noted that, to his knowledge, none of the other developers were ever requested by DOC to work on this item.

We turned back to Ardiel's work on the *King* fix and noted that he had begun work in September of 2013, but stopped at some point. Ardiel said that he had questions about the business requirements for the item and didn't receive answers. Ardiel noted that he could not make up the answers, which could only come from the DOC, and thus could not proceed with programming the fix, so he moved to another item. Ardiel believes that the DOC at times was unable to answer his questions about the business requirements because they were unsure what the answers were, and needed to consult with others within the agency and at the Attorney General's office. He believes that one other major item that he turned to was the persistent misbehavior fix, which took several months. Ardiel believes that he worked this project to conclusion before turning back to the *King* fix. He turned back to the work in November of 2014, and does not remember what happened in the interim that caused him to return to this project. In 2014, he wrote an algorithm that served as the foundation for the fix. He explained that in order to apply this fix, he had to switch the order in which good time was applied to consecutive sentences from parent – child to child – parent. This caused a complication when there were multiple 'children' of different lengths. Ardiel believes that he stopped working on the problem in 2014 while waiting for additional business requirements from the DOC. He

10

believes that he would have been working on it in February of 2015 when he went out on leave, and he remembers that DOC elected to put the item aside until he returned from leave.

We asked whether other members of the maintenance team could have completed the project if DOC had wanted Sierra to continue working on the *King* fix during his leave, and he said that they absolutely could have, although it may have taken them longer to do the work. We explained that Schuler had told us that Ardiel was the only member of the team in whom she had confidence to work on the SSTA code. He said that it was possible that Schuler felt that way, but that others on his team were familiar with OMNI and the Java platform, and were capable of doing the work even though they were less familiar with SSTA in particular. Ardiel estimated that he handles approximately 80% of the SSTA programming personally. Ardiel said that DOC's internal developers appeared reluctant to touch the SSTA code.

Turning back to Ardiel's work, we asked whether he completed the Persistent Misbehavior project before returning to the *King* fix. He said that was likely. He remembers that it was sitting on the side of his desk for a substantial amount of time.

We asked how Ardiel communicated his questions to DOC, and he said that he would use email and would also raise issues in OMNI meetings, which are purely verbal and are not logged anywhere to his knowledge. We showed Ardiel his email conversation with Wendy Stigall in September 2013 [WS_000055] and he stated that her answer in this email was the information he had cut and pasted into ClearQuest. He said that this was the only answer to his questions that he remembered getting; he recalls that he had more questions regarding the business requirements for this item. Ardiel recalls that for this item he was presented with a limited number of scenarios regarding sentencing calculations. Ardiel was able to develop the code to address the sentencing calculation errors for these specific scenarios, but then would encounter new issues involving new scenarios, and lacked the business requirements to code a "global" fix for the millions of potential sentencing scenarios. Ardiel would ask the DOC what the business requirements were for the new scenarios. He explained that he moved off of the *King* issue because he didn't have all of the information he needed from the business and had plenty of other things that he could turn to and work on; he explained that DOC drives his workflow and that he picks up issues as they come to him.

We asked about the Sierra maintenance team, and Ardiel said that (prior to this issue arising) it consisted of 3 others in Victoria and two on-site in Olympia. His team members are: Avinash Kumar and Timothy Beirne in Olympia and Kevin Neufeld, Kyle Kayfish, and Ben Kunka in Victoria. Both Ardiel and one other team member are assigned part-time (50%) to the DOC contract, which converts the 6 programmers to 5 FTEs. A former team member, Kyle Wuolle, did most of the original implementation of the sentence calculations, but he left Sierra approximately 3 years ago. Because of the "Needs and Goals" project, Ardiel now has two new team members, who are based in Halifax, Nova Scotia, Canada. Ardiel does not know whether DOC has the power to approve reassignment of the members of the Sierra team, although he suggested that Sierra's account manager Mike Zanon might be aware of that information.

We asked whether Ardiel was familiar with Assessments.com. He said that he knew the name, and that they had developed an offender scoring and risk assessment program known as

11

OSPS that interfaces with OMNI. OSPS feeds a risk level for offenders into OMNI that drives outcomes such as release plans and eligibility for early release. He said that there are occasional data exchange problems, but that those are handled externally. Ardiel is also aware of a "STRONG-R" project which was a similar offender scoring/assessment tool. Ardiel had heard rumors that the CEO or owner of Assessments.com may have been friends with someone high up in DOC, but was not aware of any details.

We asked whether Ardiel had any additional comments that might be helpful for us to know. He said that the *King* fix was never presented by the DOC as a priority for him to work on, even in November 2015 when he was completing the work. By the time it had become an emergency, Ardiel's job on the coding was largely completed. He explained that in the fall of 2015, when Ardiel came back from leave, he worked on a couple of projects before turning to the *King* fix. He further explained that it was not until December or January of 2015-2016 that he understood that the term "*King* fix" referred to the implementation of a Washington Supreme Court decision, and that he realized that fact through reading the press on this issue. He had no previous understanding that this dated all the way back to 2002; for him, it began with the 2013 request, which did not fully explain the nature of the error or its real-world implications. He did not learn of the Attorney General's advice on the issue until December 2015 when it was publicly posted on DOC's website, and noted that was the first time he had seen that side of the issue.
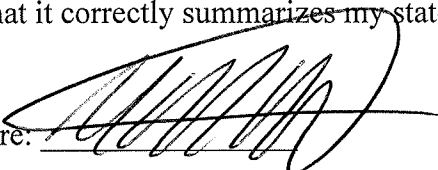
We asked how the process of updating OMNI had changed in the last several months, and Ardiel said that since mid-December 2015, DOC had been doing much more processing of change requests; he noted that he was not involved in any of that work. He understands that DOC is in the process of developing a scoring system that will assist in prioritization of items, and that the Secretary needs to be involved. He is not engaged in that process, but feels as though there is a microscope on him and his team. He also feels that it may be more difficult to get decisions from DOC, because people are reluctant to commit in the current political climate. DOC still operates on a cycle of predetermined release dates, and there are still other projects competing for resources with maintenance items.

We requested that Ardiel provide us with the design documents showing the original specs for the OMNI system that we had discussed earlier in the interview. Ragland noted that some documentation might be considered confidential by DOC, and emphasized that Sierra certainly wishes to cooperate with the investigation into this matter, but also is mindful of its obligations to its client. Therefore, Sierra would want to make sure that DOC authorized Sierra to provide project-related documents to us. Ragland stated that he suspected DOC consent would not be an issue and that Sierra would search for these documents right away.

* * *

I have reviewed this memorandum, have been given the opportunity to revise it for accuracy, and agree that it correctly summarizes my statements to investigators.

Signature:

Name: MARK ARDIEL

Date: 02/23/16