致 Raghav 先生:

首先，我代表公司对评估小组此次对北京国信创新科技股份有限公司（以下简称公司）做的 CMM5 成熟度评估表达最诚挚的敬意与感谢。

2015 年，自公司着手做过程改进，非常明显的是，CMMI 给公司带来了大量的提升，无从方法论、建设思路，还是从公司的发展成长，都有适应公司发展的更高级别的评估来解决公司当前面对的棘手问题。

本次 CMMI 的评估，从 1 月 15 日正式开始，目前已经基本完成评估，再次感谢评估小组的大力支持。本次评估给予公司带来了非常大的帮助，通过各位评估小组发现的弱项和提出的建议，非常准确的揭露出公司在过程改进中的一些薄弱环节。我认为，从已发现的弱项中，能够很全面的反映出公司的软件工程实践状态。通过本次评估，我认为至少在以下几个方面获得经验教训:

1. 在高成熟度的实践过程中，量化管理尤为重要，量化数据的获取和分析可以帮助我们更准确的识别出公司各种过程的真实情况。本次评估过程中提出一些关于量化管理方面的改进建议，包括组织级 QPPO 和 PPB 的更新频率，项目对于 QPPO 的制定标准等，这些建议非常值得我们重视和学习；

2. 软件产品的开发质量和代码规范是一个软件公司的核心和命脉，在本次评估过程中，我们清晰得发现在编码规范这方面，我们还有很大的改进空间。公司会将这方面的问题作为后续改进的重中之重，进行全面的挖掘和优化，保证后续软件开发的整体品质；

3. 公司的发展与人才培养密不可分，我们在评估过程中，发现人员配比不足和培训投入不足给公司的管理带来的一系列问题。人才是立足之本，人才的有效投入，不是成本而是收益。因此在后续的改进过程中，我们不仅要优化组织结构，实现专人专岗，更要在技术、业务以及项目管理方面加强培训，并建立更好的企业知识分享体系，以支撑企业更好的发展前进；

4. 细节决定成败，项目管理是一个个环环相扣的过程组合，每一个过程的结果都会影响到其他过程的成败，所以每个过程的管理都要落到细节，而不是只注重整体结果。在本次评估中，评估小组发现了一些配置审查单不够详细、QA 工时未统计以及版本更新没有全部记录等细节问题，看似这些细节不足以影响单个项目的进度，但实际对于公司的整体管理水平的提升却产生很大的障碍。俗话说，千里之堤溃于蚁穴，日积月累，将会对影响到公司的商业目标和战略目标，因此这些建议也非常值得我们重视；

5. 创新是公司的发展动力，在本次评估中，我们也意识到公司在新技术和新工具的引入上是有所欠缺的。规避风险和考虑当下的投入产出比，确实是公司在做决策时主要考虑的因素，但公司为了保持技术领先以及长远发展，应当在技术创新和工具更新方面有更大的投入；

6. 标准引导行为，一个高成熟度的公司，其员工的行为会有统一的规范，因此一套成熟常新的 OSSP 标准过程体系是必不可少的。由于公司 EPG 成员都属于兼职状态，我们整套体系文件定期虽然有定期更新 ，但缺乏全面梳理。因此，在这次评估中也发现部分规范老旧、模板格式不统一、量化数据不完整等问题，在后续的改进过程中，我们也会安排专人对标准过程体系文件进行整体化梳理；

7. 在本次评估中，评估小组提出的一条建议:"如果 QA 需要 1 个月的时间才能找到 1 条风险可忽略不计的不合规记录，请考虑其合理性。"这让我非常震惊，我们过度重视行为，反而忽略了行为本质。过程改进并非为了改进而改进，而是为了更

好而改进，相信我们在其他环节也存在着类似的问题。因此，我们需要进一步优化过程，在"庞大而全面"和"快速而简单"中，寻找一个更适合我公司的平衡点，既能达到高成熟度，又能避免不必要的投入，这是需要我们长期思考，并且反复验证的过程。

通过本次成熟度评估，我看到在项目过程中的可加强改进的点都切到了实处，让参与本次评估活动的所有成员都受益匪浅。根据 EPG 反馈，我认为评估小组对于本次评估活动的组织和安排有序高效，各个弱项的发现均一针见血，直达痛处。包括把编码规范的比喻成饭店炒菜，非常形象，也非常深刻。CMMI 给我们带来的不仅仅是工程管理、项目管理、流程管理及人力管理等各方面的提升，更重要的是它带给了我们一套方法论和思维论，让公司的每一位员工都从中有所收获，不但在工作中能切实感受到它带来的好处，而且可以延伸到生活中，提升个人为人处世的能力。因此，非常感谢评估小组在本次评估活动中，各项工作安排的良苦用心。

整体的评估工作，已经初步告一段，软件与企业的改进过程，是一分钟不能耽搁的，基于评估的结果，我的工作计划中增加了以下内容来进一步保障此次评估给公司带来的帮助：

1、召集公司高层以及 EPG 组长、ATM 成员，来对本次评估做一次完整的回顾与总结会议，让公司高层及中层对此次评估有完整充分的了解，该行动预估在评估整体结束后两周内开始；

2、改进工作是一个持续的工作，我会于 2 月下旬召集一次会议，邀请高层经理及 EPG 参加，主要讨论在此次评估过程后，我们对组织级的过程改进如何优化，并制定 2022 年度的过程改进计划和目标；

3、上述的改进会议及工作，势必将成为我在后续工作中非常重要的一环，我会密切关注过程改进过程中，产生的数据及成效分析等。

最后，再次感谢评估小组带给更多的公司帮助和改进建议，提升各公司成熟度。

2021-1-21

北京国信创新科技股份有限公司

Dear Raghav

First of all, on behalf of the company, I would like to express my most sincere respect and gratitude to the appraisal team for the appraisal conducted for Beijing Guoxin Innovation Technology Co., Ltd. (hereinafter referred to as *the company*).

In 2015, since the company started to improve the process, it is very obvious that CMMI has brought a lot of improvement to the company, from the perspective of methodology, ideas, or growth from the company's development. There are always appraisals which valuable improvement opportunities are proposed to solve the tough problems the company faced today.

The CMMI appraisal phase 2 started on January 15. Thanks again for the strong support of the appraisal team. This appraisal has brought great help to the company. Through the weaknesses found and improvement opportunities made by the appraisal teams, some deficiency in the process improvement of the company are very accurately revealed. In my opinion, from the weaknesses that have been found, the improvement opportunities can 100% represent the real states of the company's current engineering practices. From this appraisal, I believe that there are some of the following lessons learned:

1. In the practice process of high maturity, quantitative management is particularly important. The acquisition and analysis of data can help us more accurately identify the real situation of various processes of the company. During the appraisal process, some improvement opportunities in quantitative management were proposed, including updating the frequency of organizational QPPO and PPB, and the project's standard for QPPO, etc. These improvement opportunities are very worthy of our attention and study;

2. The coding quality and coding standard of software products are the core and lifeblood of a software company. During this appraisal, we clearly aware that there is still a lot of room for improvement in terms of coding standard. The company will take this aspect as the top priority of follow-up improvement, conduct comprehensive optimization, and ensure the overall quality of follow-up software development;

3. The development of the company is inseparable from the cultivation of talents. During the appraisal process, we found a series of problems caused by insufficient personnel ratio and insufficient training investment to the management of the company. Talent is the foundation of a company, and the effective investment of talents is not a cost but a benefit. Therefore, in the follow-up improvement process, we should not only optimize the organizational structure, but also emphasize training in technology, business and project management, and establish a better enterprise knowledge sharing system to support the better development of the company;

4. Details contribute to success. Project management is a combination of a series of interlocking processes. The results of each process will affect the other processes. Therefore, the management of each process must dive into the details, rather than scratching the surface. In this appraisal, the appraisal team found some details such as insufficient configuration review checklists, uncounted QA man-hours, and incomplete records of version updates. Though these details are not enough to affect the progress of an entire project, but they actually affect the overall management of the company. The improvement of the level has created a great obstacle. As the saying goes, a thousand miles of dykes collapse in the ant's nest, and over time, it will affect the company's business goals and strategic goals, so these suggestions are also worthy of our attention;

5. Innovation is the driving force of the company's development. In this appraisal, we also realized that the company is lacking in the introduction of new technologies and new tools. Avoiding risks and considering the current input-output ratio are indeed the main factors that companies consider when making decisions, but in order to maintain technological leadership and long-term development, companies should invest more in technological innovation and tool update;

6. Standards guide behavior. In a high-maturity company, the behavior of its employees will have uniform norms, so a mature and new OSSP standard process system is essential. Since the company's EPG members are all part-timers, although our entire set of system documents is regularly updated, it lacks a comprehensive review. Therefore, some problems such as outdated specifications, inconsistent template formats, and incomplete quantitative data were also found in this appraisal. In the subsequent improvement process, we will also arrange special personnel to sort out the standard process system documents as a whole;

7. In this appraisal, one improvement opportunity from the appraisal team: "In the QA NC records, information of the effort QA spent for each NC is missing. For example: In the case QA takes 1 month to find 1 NC with negligible risk, it is not reasonable. By collecting this kind of effort helps to link the performance of QA and the risk of its NCs. " This is such a good warning to me. We pay too much attention to the behavior, but ignore the essence of the behavior. Process improvement is not improvement for the sake of improvement, but for being better. I believe we have similar problems in other areas. Therefore, we need to further optimize the process to find a balance point that is more suitable for our company between "big and comprehensive" and "quick and simple", which avoid unnecessary investment. This requires a long-term reflection on self and repeatedly verifying the process.

Through this appraisal, I can see that the points that the appraisal teams wanted to make is understood by all members joining in this appraisal. And all members who participated in this appraisal have benefited a lot. According to the EPG feedback, I think the appraisal team organized and arranged the appraisal activities in an orderly and efficient manner. The findings were all right to the pain point. Including the analogy to compare coding standards with cooking in a restaurant, which is very vivid and profound. What CMMI has brought us is not only the improvement of engineering management, project management, process management and human management, but more importantly a set of methodology and thinking method, so that every employee of the company gain something from it. Not only can you feel the benefits it brings in your work, but it also extend to your life and improve your capability to deal with the world. Therefore, I would like to thank the appraisal team for their hard work in this appraisal activity.

Though the overall appraisal is coming to its end. The improvement process of software in the company cannot be delayed for a minute. Based on the appraisal results, I have added the following contents to my work plan to further ensure the help this appraisal are brought to the company.:

1. Convening the company's senior management, EPG team leader, and ATM members to conduct a complete review and summary meeting of the appraisal, so that the company's senior and middle management have a complete and full understanding of the appraisal. The action is expected to be completed at the end of the appraisal. within the next two weeks;

2. The improvement work is a continuous work. I will convene a meeting in late February and

invite senior managers and EPGs to participate, mainly to discuss how to optimize the process improvement at the organizational level after this appraisal process, and formulate the 2022 annual process improvement plans and objectives;

3. The above improvement meeting and work will inevitably become a very important part of my follow-up work. I will pay close attention to the data and effectiveness analysis generated during the process improvement process.

Finally, I would like to thank the appraisal team again for bringing such good helps and improvement opportunities to the companies and improving the maturity of the company.

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2021-1-21
Beijing Guoxin Innovation Technology Co., Ltd.