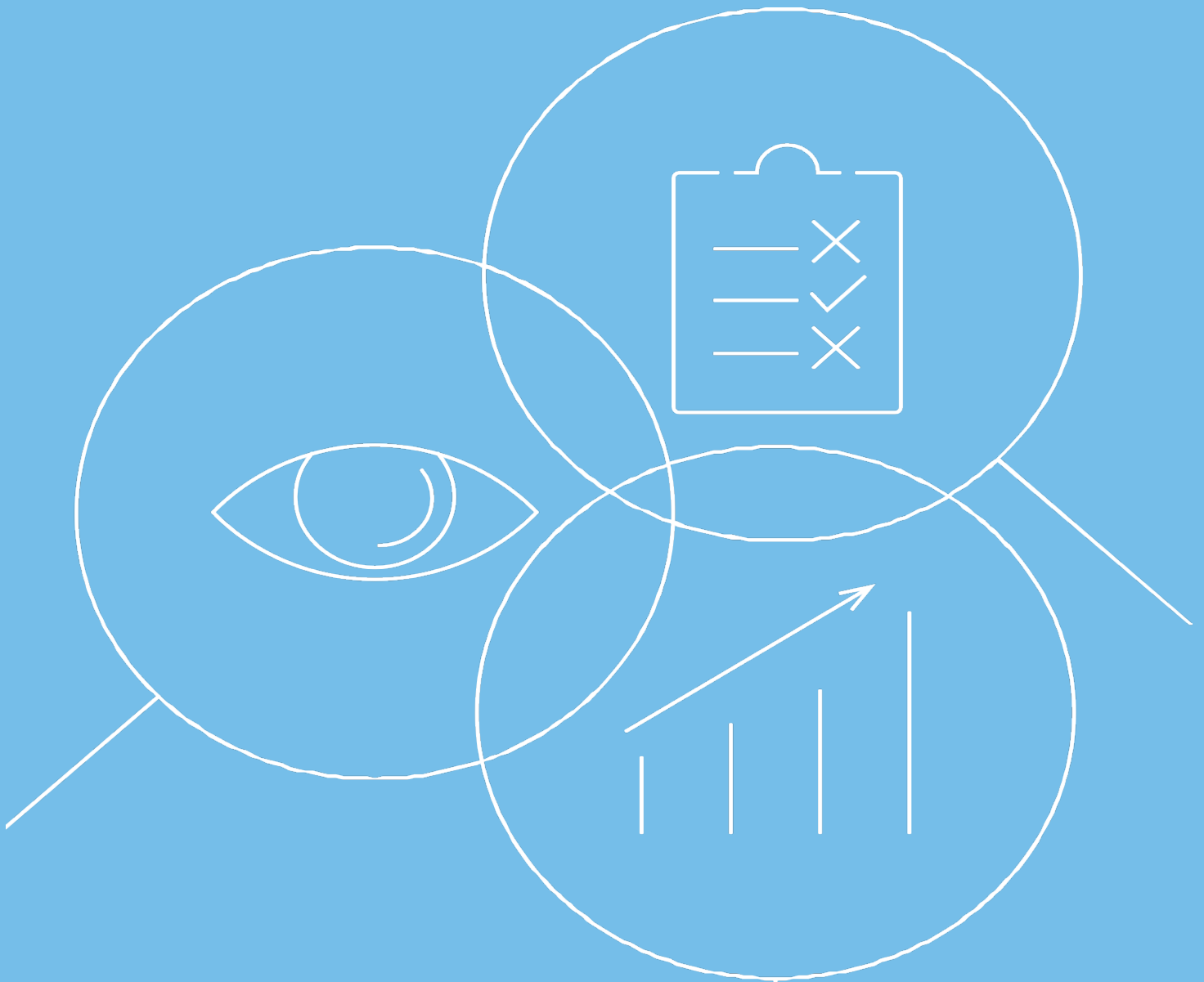


Audit of The Hague Platform Project

Internal Oversight Reports



IOD Ref: IA 2021-02
January 19, 2022
Internal Audit Section

(Parts of the original report were withheld or redacted due to the sensitive and confidential nature of issues raised).

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LIST OF ACRONYMS

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|-----------------|---|
| ADTF | Architecture and Design Task Force |
| API | Application Programming Interface |
| CI/CD | Continuous Integration/ Continuous Deployment |
| CMU | Cloud Management Unit |
| GDD | Global Design Database |
| GIPP | Global Intellectual Property Platform |
| HBO | Hague Back Office |
| HDPS | Hague Development and Promotion Section |
| HEP | Hague Externalization Project |
| HISD | Hague Information Systems Division |
| HOS | Hague Operations Service |
| HPP | Hague Platform Project |
| HRMD | Human Resources Management Department |
| IB | International Bureau |
| ICT | Information and Communication Technology |
| ICTD | Information and Communication Technology Department |
| IOD | Internal Oversight Division |
| IP | Intellectual Property |
| IT | Information Technology |
| MVP | Minimum Viable Product |
| PCT | Patent Cooperation Treaty |
| PID | Project Initiation Documentation |
| PMO | Project Management Office |
| PO | Purchase Order |
| PRINCE2® | PRojects IN Controlled Environments |
| PTD | Procurement and Travel Division |
| TOM | Target Operating Model |
| TOR | Terms of Reference |
| WIPO | World Intellectual Property Organization |

EXECUTIVE SUMMARY

1. The Hague Registry undertook The Hague Platform Project (HPP) over the course of 2017 and 2018, to among others, address the increasing workload and complexities of The Hague Information Technology (IT) core system and respond to the growing business needs of clients. This project would modernize the core back-office IT system of The Hague, with a new system based on modern Microservices technology. The Internal Oversight Division (IOD) notes a number non-compliant practices, inefficiencies, and communication and accountability failures that are further detailed below.
2. The HPP was initially launched as a 12 months project. In 2017, the project timeline was extended to two years when the scope was expanded. The expected completion date for the project was December 2018. The HPP End Project Report indicates that the project was completed within the revised timeline i.e., December 2018. However, a review of relevant project documents shows the project was formally closed in March 2019 i.e., three months after the reported completion time. The delay in completing the project was triggered by, among others, the postponement of the go-live date after issues in data migration. Further, the project did not have the requisite resources and budget to seamlessly transition into operations following the go-live.
3. At the time the HPP was initiated in November/December 2016, no budget was set for the project in the Program and Budget 2016/17. The project was financed by transfers of accrued savings and loans from other business areas within the Organization. Notably, from November 2016 to March 2017, a total of 550,900 Swiss francs was spent on project resources, and the process to procure these resources and associated costs were incurred before the formal appointment of the Project Board and approval of the Project Initiation Documentation (PID). Therefore, by approving the PID, the Project Board was effectively formally and retrospectively putting a stamp of approval on the costs for the HPP that were incurred before it was established. This is not sound management practice and not in compliance with project management budgeting procedures and practices.
4. The initial budget of the project was not clearly defined at the outset and there were inconsistencies in the project financial information. For example, the PID shows that the initial budget of the project was 4.23 million Swiss francs, but according to the End Project Report, approved by the Project Board in March 2019, the initial project budget was 5 million Swiss francs.
5. Furthermore, during the project implementation, the HPP team made projections and forecasts that were not aligned to the available budget. For example, in the first quarter of 2018, the HPP projected, using an experience-driven budget forecasting, that 8.42 million Swiss francs was required to complete the project. This projection included an updated estimate of 5.34 million Swiss francs for phase two of the project, which was initially estimated at 1.48 million Swiss francs in March 2017. It is clear that budget forecasting and monitoring was flawed.
6. The updated budgetary requirement for phase two of the project represented an increase of 3.86 million Swiss francs i.e., 261 per cent compared to the initial cost estimate which formed the basis for the 2018/19 Program and Budget. These fluctuations in cost estimates were driven by, among others, lack of effective project planning characterized by an imprecise estimation of costs and efforts to deliver the envisaged scope, a resource plan not linked to time-phased deliverables, and not having clear strategies on key deliverables e.g., data migration strategy. This prompted the Office of the Controller to seek reassurances that the cost estimates were based on the most cost-conscious approach.

7. To manage budget overruns, an “exceptional” process for allocating the budget was put in place by the Office of the Controller who also requested the Procurement and Travel Division (PTD) to negotiate a fixed price contract with the supplier. Whilst these interventions were crucial in managing the budget overruns, they may have contributed to delays in allocating the project budget, which in turn affected project efficiency. The total project expenditure at closure, amounted to 6.64 million Swiss francs.

8. IOD noted project management issues and deviations from the PRjects IN Controlled Environments (PRINCE2®) methodology that were both systemic and specific to the HPP. This is despite having a project management team and board that was composed of members trained and certified in PRINCE2® and Agile frameworks. For instance, the project included a project sponsor role, whose role is not defined in the PRINCE2® framework. This role may have created some initial communication and accountability challenges within the project team structure. Further, to ensure effective segregation of duties, the project executive is accountable for the project while the senior supplier is responsible for, among others, developing and delivering the project products. However, in the HPP, the executive was accountable for the project and responsible for the delivering the new Hague platform. Taking on these dual roles resulted in a conflict of roles and responsibilities, while creating an uneven balance in the project as it could have put IT in a driving role instead of the business.

9. Further, IOD noted that the governance structure was fragmented, with instructions being received from multiple sources, including the IP Portal Board (Steering committee) and the Office of the Director General. Thus, the project reporting lines were not streamlined to enhance transparency and effective communication within the team and with other relevant stakeholders.

10. The review of the HPP closure was based on a revised version of the PID, issued in October 2018, i.e., five months before the closure of the project. This updated version of the PID contained some significant changes, such as revised scope, expected benefits, and project product descriptions. This review deviated from PRINCE2® methodology, which recommends evaluating a project based on the project’s original intent as defined by the PID used to gain authorization for the project during the initiation stage (i.e. PID approved in March 2017).

11. IOD also noted a turnover of key personnel at significant stages in the project. For example, the project manager was changed after eight months and there was no documented handover. There were changes in the lead architects, and the data migration expert was relieved of his duties four months before the planned go-live. In addition, experienced staff who supported and maintained the legacy system had limited involvement in the HPP or their involvement exponentially reduced as the project progressed into the latter stages.

12. The data migration strategy and approach were not well planned and executed. In particular, the strategy was not consolidated until September 2018, a few months before the go-live date. The time and effort for the data migration were not estimated appropriately, and there was a budget overrun on the activity. For instance, 288,109 Swiss francs was allocated to the activity but the actual expenditure was 427,000 Swiss francs (48 per cent over expenditure). As a result, the system went live with a focus on operations but with incomplete data, resulting in increased service requests. Post go-live, a number of service requests related to data quality or blocked data were raised in The Hague Registry and this had an impact on the operations of the platform and on other stakeholders.

13. While the new Hague platform was implemented with an appropriate technology stack, which makes the system adaptable to cater to the current and future needs of The Hague Registry, there are however implications of higher maintenance and support costs, and lack of

requisite skill sets within the Registry that are associated with the stack and its sustained use. Further, the platform introduced novel technologies to the Organization's IT landscape.

14. Currently, The Hague relies largely on external providers and temporary staff for core IT support and maintenance. In 2019/2020, the non-personnel costs within The Hague Information System Division (HISD) amounted to almost two million Swiss francs which are relatively high and could result in non-sustainability on the platform in the long term. These costs were in respect to roles assigned exclusively to HISD. Therefore, there was no cost sharing or optimization of resources with other related business areas in the Organization.

15. As it stands, the HISD has limited means of retaining valuable IT skills and expertise in The Hague system. There is a risk of turnover of temporary staff and/or personnel from the external provider, including continued and undue dependency on these resources. This may hamper HISD's efforts to support The Hague system effectively. The internal resources in the Division do not possess the requisite specialized knowledge and practical expertise that the external resources possess. Therefore, a decision is required to consolidate the current IT structure and resources of the Hague Registry with a view of stabilizing operations in the long-term. This should prioritize internalization of key technical positions to the extent possible, and the use of internal resources to the Organization and other measures to reduce the dependency on external suppliers and the related high maintenance and support costs that are currently being incurred.

16. Equally, it would be beneficial for the Organization to consider establishing communities of practice comprising of competent personnel with the requisite skills and technical expertise in relevant World Intellectual Property Organization's (WIPO) processes/standards. The personnel may be loaned/attached to projects such as the HPP, on a short-term or long-term basis. In addition, they may provide useful and valuable insights to project teams on significant and technical aspects of projects, e.g., systems design and development. This would require the consolidation of a pool of expertise under a central point such as Information and Communication Technology Department (ICTD) that would serve the Organization.

17. To conclude, inadequate planning, several changes in scope, budgeting and timelines, less than optimal financial management that contributed to budget overruns, lack of clear strategies on critical aspects such as data migration and transition, affected the HPP implementation adversely. Furthermore, a governance structure that created parallel reporting lines with instructions from different sources impeded effective communication, alienated some board members and other stakeholders, and affected collaboration and accountability.

18. In addition, internal resources lacked the requisite skills and knowledge in the new solution which has resulted in continued costly and heavy reliance on external providers, thus affecting sustainability. Finally, while the technology stack can deliver, however, some novel technologies used in lieu of existing choices add to the IT landscape and affect optimization of costs, economies, and opportunity to share resources and tools.

19. IOD makes nine recommendations to help address the above issues. Considering the significant portfolio of projects including the Capital Master Plan projects, and the timeline since the last audit of the area, IOD will conduct an audit of Project Management in the near future to, among others, ensure that some issues raised in the HPP review are isolated cases, and assess the evolution of the project management framework and related risks.