



INTERNAL AUDIT DIVISION

REPORT 2019/009

Audit of the Unified Judicial Database
project at the International Residual
Mechanism for Criminal Tribunals

There is need to harmonize the work
processes, revise the functional and
technical requirements, and strengthen
project management to implement the
project successfully

5 March 2019
Assignment No. AT2018/261/01

Audit of the Unified Judicial Database project at the International Residual Mechanism for Criminal Tribunals

EXECUTIVE SUMMARY

The Office of Internal Oversight Services (OIOS) conducted an audit of the Unified Judicial Database project (UJDB) at the International Residual Mechanism for Criminal Tribunals (IRMCT). The objective of the audit was to assess the adequacy and effectiveness of governance, risk management and control processes over the efficient and effective implementation of the UJDB project at IRMCT. The audit covered the period from 1 January 2012 to 31 October 2018.

The UJDB project which started in 2013 was suspended in December 2017 due to differing opinions amongst the stakeholders about the viability of the solution in meeting their requirements. IRMCT needs to harmonize the work processes, revise the functional and technical requirements, and strengthen project management in order to implement the project successfully.

OIOS made four important recommendations. To address the issues identified in the audit, IRMCT needed to:

- Engage the stakeholders affected by the UJDB project and secure their agreement in harmonizing the processes to be automated in UJDB;
- Review and revise, the objectives, functional and technical requirements, and scope of the UJDB project in alignment with the defined harmonized processes to be automated in UJDB;
- Revalidate the business case for the UJDB project and align it with re-defined objectives and requirements; and
- Document clear terms of reference defining the responsibilities, membership and authority of the Project Board of the UJDB project; ensure appropriate representation of key stakeholders on the Project Board; define the oversight mechanism for monitoring the project plan and deliverables; and appoint a Project Manager with adequate project management skills to effectively implement the project.

IRMCT accepted the recommendations and has initiated action to implement them.

CONTENTS

	<i>Page</i>
I. BACKGROUND	1
II. AUDIT OBJECTIVE, SCOPE AND METHODOLOGY	1
III. AUDIT RESULTS	2-6
A. Project management	2-6
IV. ACKNOWLEDGEMENT	6
ANNEX I Status of audit recommendations	
APPENDIX I Management response	

Audit of the Unified Judicial Database (UJDB) project at the International Residual Mechanism for International Criminal Tribunals

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of the Unified Judicial Database (UJDB) project at the International Residual Mechanism for International Criminal Tribunals (IRMCT).
2. The Mechanism consists of a single set of principals – the President, Prosecutor, and Registrar. These principals have responsibility over both branches of the Mechanism and oversee each of the three organs, respectively. The Registry provides administrative, legal policy and diplomatic support services to all organs in both branches of the Mechanism.
3. The UJDB project was conceptualized in 2012 to harmonize the management of, and access to, the judicial records of the former Tribunals – i.e. the International Criminal Tribunal for the former Yugoslavia (ICTY) and the International Criminal Tribunal for Rwanda (ICTR) – as well as the judicial records created by the Mechanism. The objective was to provide a ‘one-stop shop’ for access to the judicial records by internal and external stakeholders. The key stakeholders identified were the Office of the President, Chambers, the Office of the Prosecutor, and Registry. Other stakeholders were the defence teams and the general public. UJDB was also expected to reduce the risks and costs associated with managing multiple non-integrated databases.
4. The UJDB project was initiated in 2013 at an estimated cost of \$466,023 and was expected to be implemented by 2016. However, the solution was not fully implemented, and deployment schedules were revised several times. Eventually, in December 2017, the Registrar decided to suspend the project because of differing opinions amongst the stakeholders about the viability of the solution in meeting their requirements. At the time of suspension, the expenditure incurred on the project was \$1,810,037.
5. Comments provided by IRMCT are incorporated in italics.

II. AUDIT OBJECTIVE, SCOPE AND METHODOLOGY

6. The objective of the audit was to assess the adequacy and effectiveness of governance, risk management and control processes over the efficient and effective implementation of the UJDB project at IRMCT.
7. This audit was included in the 2018 risk-based work plan of OIOS due to the risk that potential weaknesses in implementation of the UJDB project could adversely affect the achievement of its objectives.
8. OIOS conducted this audit in October 2018. The audit covered the period from 1 January 2012 to 31 October 2018. Based on an activity-level risk assessment, the audit covered risk areas relating to management of the UJDB project.
9. The audit methodology included: (a) interviews with key personnel; (b) review of relevant documentation; (c) analytical review of data; and (d) walkthroughs and test of controls.
10. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

III. AUDIT RESULTS

Project management

Need to engage the stakeholders to ensure agreement in harmonizing of processes

11. Business process harmonization is a process-led implementation that helps to standardize processes to enable a solution design that addresses common objectives, leads to the optimization of ICT costs and reduces implementation failures.

12. IRMCT had conducted some harmonization of processes as part of the merger of the two former Tribunals (ICTY and ICTR). However, the years of working as separate entities meant that the two former Tribunals had evolved their own working practices (e.g., case filing) which needed to be harmonized before consideration of a technological solution. Without harmonization of the processes to be automated by UJDB, it was difficult to define a set of coherent and structured requirements that would be acceptable to all stakeholders and satisfy their needs through the acquisition/development of a mutually acceptable solution.

13. The absence of fully harmonized working practices facilitated by UJDB resulted in inadequate buy-in, stakeholder discontentment and delay in implementation. Additionally, the assessment of available options in determining the ICT solution for the stated objectives/processes was inadequate. The evaluation and selection of the ICT solution was not aligned with the Mechanism's ICT strategy and the ICT infrastructure landscape. To implement the project as intended, IRMCT needs to engage the stakeholders to secure agreement in harmonizing the processes to be facilitated by UJDB in order to achieve the project's objectives.

(1) The International Residual Mechanism for Criminal Tribunals should engage the stakeholders affected by the Unified Judicial Database (UJDB) project and secure their agreement in harmonizing the processes to be automated in UJDB.

IRMCT accepted recommendation 1. Recommendation 1 remains open pending receipt of documentation showing that it has been implemented.

Need to review and revise project objectives and requirements

14. Requirements gathering process is an essential part of any project and provides an understanding of what a project will deliver (i.e. functional and technical requirements) based on clearly defined objectives. The main output of the process is a statement of requirements that defines the requirement specification, and a description of the environment in which the system will work. The contents should be signed off by critical stakeholders.

15. Critical to the successful implementation of the UJDB project were: (a) clearly defined objectives; (b) adequate evaluation of the various options; (c) timely identification of functional/technical requirements required for preparation of the business case; and (d) timely involvement of subject matter experts in the initial stages of the process to document all the requirements, conduct detailed analysis, and define the interfaces with other systems or applications. In this regard, OIOS noted a number of gaps as explained below.

16. The project objectives were unclear (i.e. unified database or records management system, or implementation of an integrated system to support the processes of the two branches and the Mechanism)

and caused incomplete documentation of functional and technical requirements. Consequently, there were inconsistent descriptions of the project objectives across several key project documentations (i.e. options appraisals, functional requirements, and request for proposal document), and also led to constant changes to the project scope and requirements.

17. Not all critical stakeholders were included in the requirements gathering process (i.e., Office of the Prosecutor, Chambers, Information Technology Support Section) from the onset. Some stakeholders joined the project after the initial functional requirements gathering phase in 2013. OIOS noted that although a further statement of functional requirements was documented in February 2015, at which time all stakeholders were consulted, this was done after the decision to select Hewlett Packard Record Manager 8.1 (HPRM8) as the technological solution, when it was too late to match the missing requirements to the solution. Inadequate involvement of critical business users in the definition of requirements (i.e. input into the ‘look and feel’ of the system) led to the following:

(a) There were constant revisions to the original objective of the project to accommodate constantly changing requirements and different stakeholders from the former ICTR and ICTY wanting the solution design to capture their respective working practices.

(b) It is best practice during the design, acquisition/implementation of an ICT solution to involve the ICT function as subject matter experts in the initial stages of the project management, the acquisition/implementation process, documentation of the technical requirements, and also to provide input on how the proposed solution will fit into the ICT infrastructure. However, there was limited collaboration between the Project Team and the Information Technology Services Section (ITSS) from the onset, which led to non-documentation of technical requirements (i.e., application information security requirements, technical design documents, and change control procedures) and a lack of assessment of the infrastructure requirements.

(c) In 2015, the results of a study conducted in 2013 to assess the requirements of the Mechanism for a judicial filing and case management database was used as a basis for developing the functional requirements and was one of seven criteria in the evaluation conducted to select one of four options. OIOS’ review indicated that the study lacked sufficient details as a basis for identification and evaluation of the proposed options. The study was also limited in scope and only considered the Judicial Database system (JDB) in use at ICTY and the TRIM system used by ICTR. Consideration was not given to other options (such as ‘do nothing’, acquire or build a new system).

(d) The options evaluation should be based on: (i) desirability - the degree to which each option meets the strategic objectives and priorities of stakeholders; (ii) viability - the degree to which each option is financially viable and sustainable; and (iii) feasibility - the degree to which each option can be implemented. OIOS noted that in 2015, the Mechanism also procured the services of a contractor to assess existing systems (JDB and TRIM) currently in use by the former Tribunals and two other options (e.g. do nothing; acquire or build a new system) against the expected requirements and work load of the Mechanism and make recommendations on the scope and function of a unified system for the Mechanism. The report of the options appraisal was critical to the decisions made by the ICT Committee and the Project Board in reaching the decision to select the chosen solution (i.e. HPRM8). However, in OIOS’s opinion, the software selection decision was not based on a set of complete requirements that adequately informed the decision to select the chosen solution and the following gaps were noted with regards the methodology used by the contractor in the conclusion reached:

- The contractor included two other options (acquire or build a new system and leave the existing databases in place but create a unified user interface). However, the purpose of engagement specified in the report only referred to a comparison of the existing systems of the former Tribunals;

- The assessment was conducted using seven defined criteria including: costs; ongoing support costs; expected completion date; extent of meeting user requirements, compatibility with the ICT strategy; compatibility with United Nations record keeping requirements; and assessment of risks associated with each option. However, in OIOS' opinion, the options appraisal was not a fair comparison of the various options, which was based on assumptions and hypothetical data and was not substantiated with evidence. Also, the methodology used to derive the data for each option was not defined;
- Details of how each option matched the specified user requirements were not provided (e.g. mapping of functional requirements to the options, and related costs);
- Due consideration was not given to the fourth option (i.e. leaving the existing databases in place but creating a unified user interface) which may have been acceptable to all stakeholders, since it was deemed to have fully met user requirements. However, in OIOS' opinion, the referenced support costs were not fully substantiated;
- The assessment of user requirements alluded to implementation of a semantic search that will cost \$100,000 for one solution and \$50,000 for another solution without evidence of how the data was derived; and
- Considering that the Mechanism was required to adequately manage sensitive and classified information, the risks associated with remote access to such information by third party vendors (for maintenance and support) were not considered as criteria when evaluating the various options.

18. These were caused by constant revisions to project objectives and inadequate stakeholder involvement in the requirements gathering process. To take the project forward, IRMCT needs to restate the project objectives and requirements in alignment with the harmonized processes to be automated in UJDB.

(2) The International Residual Mechanism for Criminal Tribunals should review and revise the objectives, functional and technical requirements, and scope of the Unified Judicial Database (UJDB) project in alignment with the defined harmonized processes to be automated in UJDB.

IRMCT accepted recommendation 2. Recommendation 2 remains open pending receipt of documentation showing the revised objectives, functional and technical requirements, and scope of the UJDB project that is aligned to the harmonized processes to be automated in UJDB.

Need to revalidate the business case

19. ST/AI/2005/10 on ICT initiatives requires that a high-level business case (HLBC) should be prepared in accordance with relevant ICT standards. These standards generally require the preparation of a formal and complete business case, including the rationale and justification for proceeding with the initiative, requirements, costs, expected benefits, feasibility studies, appraisal of various options, human resources requirements, outline project plan, risk assessment, and benefits realization.

20. A business case is a 'live' document that should be revalidated periodically to ensure that the project is on track and confirm the viability of the project objectives. Although a HLBC was prepared and approved by the ICT Steering Committee, it had not been validated after critical milestones to confirm the continued

viability of the project. There was no evidence that the business case was reviewed or updated since November 2015.

21. The business case did not align with the functional requirements and with the strategic priorities (short, medium and long-term) of the Mechanism. For example, the business case specifically mentioned that archiving was not part of the project, whereas the functional requirements were significantly influenced by the Mechanism's archiving requirements.

22. Inconsistencies were noted between the HLBC approved by the ICT Steering Committee and the detailed business case presented to United Nations Headquarters. In addition, there were inconsistencies in project timelines described in the business case. For instance, one section of the business case defined the project closure period as October 2015, whereas another section indicated the closure as October 2016.

23. Discussion with members of the ICT Steering Committee indicated that ongoing support cost was a critical factor in selecting the preferred solution. OIOS noted that the business case mentioned that ongoing support costs weighed in favour of option 1 (upgrade the ICTR TRIM system and convert the ICTY JDB to the UHDB-HPRM8 solution at a cost of \$25,000). However, the options matrix stated otherwise, indicating that option 2 (continue to use and/or modify the ICTY's JDB system by converting ICTR records at a cost of \$20,000) was cheaper. Further, the Project Team had indicated that there were no licensing costs associated with using option 1, even though the project cost defined for asset valuation included licensing costs of \$61,338. OIOS is of the view that the decision made by the ICT Steering Committee may have been influenced by incorrect assumptions.

(3) The International Residual Mechanism for Criminal Tribunals should revalidate the business case for the Unified Judicial Database project and align it with re-defined objectives and requirements.

IRMCT accepted recommendation 3. Recommendation 3 remains open pending receipt of evidence of revalidation of the business case and its alignment with re-defined objectives and requirements.

The Project Board was ineffective

24. The Project Board should be an oversight body represented by key stakeholders with clear terms of reference to ensure that the project remains aligned with the Organization's strategic priorities by providing direction, decision-making and allocation of resources. It is best practice to use a RACI model¹ to define the roles and responsibilities of the Project Board/Team and the Project Manager for project related processes.

25. UJDB's Project Board did not operate as expected. The following gaps were noted:

(a) The establishment of the Project Board was not formalized with documented terms of reference and its composition did not include all critical stakeholders from the onset.

(b) Roles and responsibilities, key decision points, milestones, and level of effort required for completing the project were not defined. The Project Board did not provide the required oversight and coordination to ensure that stakeholder expectations are met.

(c) The Project Manager did not have the required skills and experience to manage the project effectively.

¹ RACI: R-Responsible; A- Accountable; C- Consulted; I=Informed

(d) The Chief Information Technology Officer (CITO) was named as project executive sponsor in the business case, even though she had no operational responsibilities at the Mechanism. The Project Executive was responsible for resolving issues and approving changes to the project. However, there was no evidence that issues were escalated to the CITO that affected the project’s scope, timing, and cost.

(e) There was no evidence of a quality assurance process consisting of quality standards, criteria, review and acceptance procedures, and monitoring indicators.

(f) Issues and risk logs were not recurring agenda items presented to the Project Board for consideration. There was no evidence that issues arising during project implementation were addressed decisively with formalized solutions.

26. The UJDB project team did not document a change management strategy to provide necessary information to stakeholders on change and impact, and to ensure user acceptance and support. Further, there was inadequate communication to ensure that stakeholders understood the project scope and treated it as a shared initiative as opposed to a ‘forced’ one.

27. Project management during the system analysis and design phase was inadequate. The system integrator agreed to deliver a solution that met the stated requirements (“As-Is”), with workarounds and limited customization. However, the system integrator did not: (a) conduct a system analysis that included documenting the current state data and system maps; (b) map the solution to the “As-Is” and “To-Be” processes; (c) prepare a gap analysis; and (d) identify solutions to mitigate the identified gaps.

28. Although a deployment plan was documented, the project was not adequately managed during the deployment phase. The deployment plan did not describe the approach to facilitate effective deployment of the solution into use (such as locations, number of users, roll back and data migration plans, hardware and infrastructure requirements, testing methods, and customer acceptance and training requirements). Testing plans, test scenarios and evaluation criteria were not documented.

29. IRMCT needs to address these deficiencies in order to bring the UJDB project back on track.

(4) The International Residual Mechanism for Criminal Tribunals should: (i) document clear terms of reference defining the responsibilities, membership and authority of the Project Board of the Unified Judicial Database project; (ii) ensure appropriate representation of key stakeholders on the Project Board; (iii) define the oversight mechanism for monitoring the project plan and deliverables; and (iv) appoint a Project Manager with adequate project management skills to effectively implement the project.

IRMCT accepted recommendation 4 and provided evidence that it has been implemented. Based on the action taken by IRMCT, recommendation 4 has been closed.

IV. ACKNOWLEDGEMENT

30. OIOS wishes to express its appreciation to the management and staff of IRMCT for the assistance and cooperation extended to the auditors during this assignment.

(Signed) Eleanor T. Burns
Director, Internal Audit Division
Office of Internal Oversight Services

STATUS OF AUDIT RECOMMENDATIONS

Audit of the Unified Judicial Database (UJDB) project at the International Residual Mechanism for International Criminal Tribunals

Rec. no.	Recommendation	Critical ² / Important ³	C/ O ⁴	Actions needed to close recommendation	Implementation date ⁵
1	The International Residual Mechanism for Criminal Tribunals should engage the stakeholders affected by the Unified Judicial Database (UJDB) project and secure their agreement in harmonizing the processes to be automated in UJDB.	Important	O	Receipt of documentation showing that the recommendation has been implemented.	30 June 2019
2	The International Residual Mechanism for Criminal Tribunals should review and revise the objectives, functional and technical requirements, and scope of the Unified Judicial Database (UJDB) project in alignment with the defined harmonized processes to be automated in UJDB.	Important	O	Receipt of documentation showing the revised objectives, functional and technical requirements, and scope of the UJDB project that is aligned to the harmonized processes to be automated in UJDB.	30 June 2019
3	The International Residual Mechanism for Criminal Tribunals should revalidate the business case for the Unified Judicial Database project and align it with re-defined objectives and requirements.	Important	O	Receipt of evidence of revalidation of the business case and its alignment with re-defined objectives and requirements.	30 June 2019
4	The International Residual Mechanism for Criminal Tribunals should: (i) document clear terms of reference defining the responsibilities, membership and authority of the Project Board of the Unified Judicial Database project; (ii) ensure appropriate representation of key stakeholders on the Project Board; (iii) define the oversight mechanism for monitoring the project plan and deliverables; and (iv) appoint a Project Manager with adequate project management skills to effectively implement the project.	Important	C	Action completed.	Implemented

² Critical recommendations address critical and/or pervasive deficiencies in governance, risk management or control processes, such that reasonable assurance cannot be provided with regard to the achievement of control and/or business objectives under review.

³ Important recommendations address important (but not critical or pervasive) deficiencies in governance, risk management or control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

⁴ C = closed, O = open

⁵ Date provided by IRMCT in response to recommendations.

APPENDIX I

Management Response

Dear Kumar,

1. Reference is made to your 11 February 2019 memo transmitting the draft report on an audit of the Unified Judicial Database program at the IRMCT. Thank you for the opportunity to comment, as well as for the extension of time granted for responding.

2. You would note in the attached Appendix I that the IRMCT accept all the recommendations. In our response, we provided some comments, which I note below.

3. We believe that recommendation four has been implemented. While we would take no issue with the report noting the historical deficiencies of the previous UJDB project and its oversight, we have already undertaken a number of steps to remedy that situation. The Registrar appointed a new Project Board in July of 2018 (please see the attached appointment memo), expanding its membership, and also appointed a project team and manager. Further, the Project Board has been provided with a Terms of Reference, and the Project Manager has been provided with a document outlining her responsibilities (both also attached).

4. As such, we believe that we have already implemented each of the four elements of recommendation four:

- “(i) document clear terms of reference defining the responsibilities, membership and authority of the Project Board of the Unified Judicial Database project...” We believe that the Terms of Reference for the new Project Board clearly define the responsibility and authority of the Project Board.
- “(ii) ensure appropriate representation of key stakeholders on the Project Board...” The membership was expanded to include representatives from ITSS, External Communications, and the Immediate Office of the Registrar.
- “(iii) define the oversight mechanism for monitoring the project plan and deliverables....” The Project Board’s TOR clearly identifies the oversight role they will play in overseeing the work of the Project Team.
- “(iv) appoint a Project Manager with adequate project management skills to effectively implement the project...” The Registrar’s chosen Project Manager, Ms. Angeline Takawira, has sufficient experience in managing complex IT projects, as demonstrated by her recent and successful implementation of the Digital Preservation System in the Mechanism Archives and Records Section, a complex, multi-million dollar project.

5. Finally, I would like to take this opportunity to thank the audit team for their professionalism and thoroughness, and for the continued support we receive from OIOS, both in The Hague and Arusha, as well as from New York and Nairobi.

With kind regards,

David

Management Response

Audit of the Unified Judicial Database project at the International Residual Mechanism for Criminal Tribunals

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	The International Residual Mechanism for Criminal Tribunals should engage the stakeholders affected by the Unified Judicial Database (UJDB) project and secure their agreement in harmonizing the processes to be automated in UJDB.	Important	Yes	Registrar	30 June 2019	
2	The International Residual Mechanism for Criminal Tribunals should review and revise the objectives, functional and technical requirements, and scope of the Unified Judicial Database (UJDB) project in alignment with the defined harmonized processes to be automated in UJDB.	Important	Yes	Registrar	30 June 2019	
3	The International Residual Mechanism for Criminal Tribunals should revalidate the business case for the Unified Judicial Database project and align it with re-defined objectives and requirements.	Important	Yes	Registrar	30 June 2019	
4	The International Residual Mechanism for Criminal Tribunals should: (i) document clear terms of reference defining the responsibilities, membership and authority of the Project Board of the Unified Judicial Database project; (ii) ensure appropriate representation of key stakeholders on the Project Board; (iii) define the oversight mechanism for monitoring the project plan and	Important	Yes	Registrar	Already implemented. Please see the comments in the memorandum.	

¹ Critical recommendations address critical and/or pervasive deficiencies in governance, risk management or control processes, such that reasonable assurance cannot be provided with regard to the achievement of control and/or business objectives under review.

² Important recommendations address important (but not critical or pervasive) deficiencies in governance, risk management or control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

Management Response

Audit of the Unified Judicial Database project at the International Residual Mechanism for Criminal Tribunals

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
	deliverables; and (iv) appoint a Project Manager with adequate project management skills to effectively implement the project.					