

INTERNAL AUDIT DIVISION

REPORT 2019/080

Audit of the Global Service Desk at the Office of the United Nations High Commissioner for Refugees

There was a need to further strengthen the regulatory framework and monitoring controls over Global Service Desk services provided by the external service provider

27 August 2019 Assignment No. AR2019/166/01

Audit of the Global Service Desk at the Office of the United Nations High Commissioner for Refugees

EXECUTIVE SUMMARY

The Office of Internal Oversight Services (OIOS) conducted an audit of the Global Service Desk (GSD) at the Office of the United Nations High Commissioner for Refugees (UNHCR). The objective of the audit was to assess whether UNHCR was managing and overseeing the provision of GSD services by an external service provider in an efficient and cost-effective manner in accordance with best practices. The audit covered the period from 1 January 2018 to 31 March 2019 and included a review of higher and medium risk areas related to: (a) the regulatory framework underlying the provision of GSD services; (b) management of the external GSD service provider; (c) monitoring and reporting of GSD services; and (d) the performance of trend analyses pertaining to GSD services.

The UNHCR Division of Information Systems and Telecommunications (DIST) had put in place a regulatory framework and monitoring arrangements over the outsourced GSD services. It also introduced, in April 2019: (a) additional measures to assess the quality of GSD services; and (b) specific, measurable, achievable, relevant and time-bound service level agreements (SLAs) and financial consequences for breaching them. However, in order to enhance service delivery, the regulatory framework, management of the external service provider, monitoring and reporting of GSD services, and the performance of trend analyses needed to be further strengthened.

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

- Develop and disseminate guidance on incident management and request fulfilment processes to ensure the appropriate handling of incidents and service requests;
- Strengthen contract management by updating the relevant documents to reflect the terms and conditions agreed by the parties;
- Ensure that the monthly SLA calculations submitted by the external service provider are supported by appropriate and accurate documentation; and implement sufficiently detailed monitoring procedures to review the accuracy of the SLA calculations; and
- Appropriately address the root causes of, and respond to, matters identified through trend analyses to ensure continuous improvement.

UNHCR accepted and promptly implemented all the recommendations.

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Audit of the Global Service Desk at the Office of the United Nations High Commissioner for Refugees

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of the Global Service Desk (GSD) at the Office of the United Nations High Commissioner for Refugees (UNHCR).

2. An Information and Communications Technology (ICT) help desk (or service desk) is a single point of contact for all ICT users who need to resolve problems or issues. The task of the service desk is to provide an immediate response on the spot, or to forward (escalate) the inquiry to someone with more expert knowledge. The service desk is responsible for ensuring that all ICT incidents are registered and resolved (incident management), and that service requests raised by users of ICT services across the organization are fully addressed (request fulfilment).

3. Prior to 5 September 2016, the GSD function at UNHCR was internally provided by the Division of Information Systems and Telecommunications (DIST). Thereafter, UNHCR outsourced its GSD services to an external service provider based in India. The Statement of Work (SOW), which included the provisions and the service level agreements (SLAs) for the GSD services, was signed on 16 May 2016. UNHCR already had a Frame Agreement with the same external service provider since 24 September 2013 (Managed Services Agreement for the Provision of Infrastructure Services); therefore, the SOW was subject to the terms and conditions of that Frame Agreement.

4. The SOW included the following high-level service objectives:

(a) Improve ICT customer service and incident resolution time through expanded service hours and the availability of skilled GSD staff in the areas of standard UNHCR ICT products;

(b) Improve UNHCR's efficiency and effectiveness by maintaining and utilizing knowledge databases and best practices in customer reporting, logging, tracking, and resolving of tickets;

(c) Improve efficiency and effectiveness through early identification and addressing of root causes of technical incidents, before they become trends;

(d) Have the ability to acquire skilled GSD support for new technologies early in their life cycle, while maintaining support for older technologies;

(e) Achieve the service levels specified in the SOW; and

(f) Achieve the target customer satisfaction service levels with the contractor's ability to effectively communicate, efficiently resolve, and appropriately escalate (where necessary) tickets to the next level.

5. During the course of this audit, on 1 April 2019, UNHCR entered into a new agreement with the external service provider since the Frame Agreement and SOW expired on 31 March 2019.

6. Within DIST, the GSD Unit was headed by a P-4 level staff member located in Budapest who was assisted by two assistants at the G-6 level, based in Budapest and Amman respectively. The external service provider operated out of Pune, India and Bucharest, Romania. As the first line of service, GSD analysts (about 12-15 employees of the external service provider) tried to resolve issues raised by users (in this audit report these are called "tickets", of which there are two types: incidents¹ or requests²). If the problem could

¹ An incident is an unplanned interruption to an ICT service or reduction in the quality of an ICT service.

² A request means a service request that is sent by users to GSD for fulfilment.

not be resolved at that level, it was escalated to the second or third level (second level resolution groups included persons from different UNHCR departments with necessary expertise, while third level resolution groups included programmers, developers and architects of different external service providers).

7. Several standard operating procedures (SOPs) and practice guides served as guidance for GSD analysts to resolve incidents and requests. The external service provider could initiate modifications to these documents with the approval of the Head of GSD.

8. In the period between January 2018 and March 2019, UNHCR was charged \$1.1 million for GSD services that included 49,643 general tickets (resolved or partially resolved by GSD) and 103,905 pass-through tickets (escalated to other resolution groups).

9. Comments provided by UNHCR are incorporated in italics.

II. AUDIT OBJECTIVE, SCOPE AND METHODOLOGY

10. The objective of the audit was to assess whether UNHCR was managing and overseeing the provision of GSD services by an external service provider in an efficient and cost-effective manner in accordance with best practices.

11. This audit was included in the 2019 risk-based work plan of OIOS due to the risks associated with managing and overseeing the provision of GSD services, on which more than 16,000 UNHCR personnel worldwide rely upon.

12. OIOS conducted this audit from February to May 2019 at UNHCR headquarters in Budapest. The audit covered the period from 1 January 2018 to 31 March 2019. Based on an activity-level risk assessment, the audit covered higher and medium risk areas related to: (a) the regulatory framework underlying the provision of GSD services; (b) management of the external GSD service provider; (c) monitoring and reporting on GSD services; and (d) the performance of trend analyses pertaining to GSD services.

13. The audit focused on the first level support, i.e., the procedures that GSD performed, which included the logging, categorizing, prioritizing and resolution (or escalation) of incidents and requests. The audit scope did not include the resolution of tickets escalated to second or third level resolution groups.

14. The audit methodology included: (a) interviews with key personnel; (b) review of relevant documentation; (c) analytical review of data derived from GSD systems; and (d) judgmental sample testing of invoices.

15. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

III. AUDIT RESULTS

A. Regulatory framework

Need to publish and disseminate guidance on incident management and request fulfilment processes

16. OIOS reviewed the regulatory framework for the provision of GSD services under the Frame Agreement and its appendix containing the SOW and noted that, in general, these documents provided a basis for sound service management. However, while a documented process description existed for incident

management, it was not formally approved. In addition, no such document existed for request fulfilment, despite the fact that 74 per cent of the tickets pertained to requests. The management of requests was therefore administered in a fragmented manner, through different instructions and SOPs for different types of requests; for example, an SOP for setting up a telephone conference and an SOP on access to the 'Managing for Systems, Resources and People' (MSRP) enterprise resource planning system.

17. In the view of OIOS, this occurred because of inadequate management attention to ensuring that appropriate and easy-to-access guidance was available on the functioning of the service desk. Without having in place officially accepted and clearly understood guidance, GSD analysts may handle requests and incidents inconsistently, which in turn may lead to dissatisfaction of users.

(1) The UNHCR Division of Information Systems and Telecommunications should develop and disseminate guidance on incident management and request fulfilment processes to ensure the appropriate handling of incidents and service requests.

UNHCR accepted recommendation 1 and DIST stated that it had developed and disseminated guidance on incident management and request fulfilment processes on 28 June 2019. Based on the action taken by UNHCR, recommendation 1 has been closed.

DIST took action to introduce additional measures to assess the quality of GSD services

18. An acceptable level of customer satisfaction is an important consideration for UNHCR and the external service provider. Accordingly, the SOW stated that establishing and maintaining a high level of service quality is critical to the successful operation of the GSD and in achieving its objectives, and that quality should be assessed through: (i) Customer Satisfaction Surveys distributed to users following ticket closure; and (ii) access to live call monitoring, so that DIST management can audit calls from time-to-time, as requested.

19. Prior to 1 April 2019, 7 out of the 10 SLAs measured the timeliness of the service provided. However, only one SLA, the Average Customer Satisfaction Rating, measured the quality of the service. Also, only 12 per cent of users responded to ticket closure surveys in 2018, which meant that the customer satisfaction levels of the remaining 88 per cent of the users was not known. In addition, the functionality for live call monitoring did not exist and for legal reasons GSD phone calls were not recorded. Therefore, it was not possible to monitor the quality of handling problems raised by users via calls by listening to the recorded calls, which meant that quality aspects did not receive sufficient attention. The feedback of users calling GSD was however taken into consideration through the Customer Satisfaction Survey.

20. On 1 April 2019, two new SLAs were introduced for measuring the quality of the GSD services: (i) Incorrect Assignments, i.e. the number and percentage of incidents incorrectly assigned to an incorrect resolution group, which was aimed at ensuring that the reported incident or request reached the right resolution team at the earliest; and (ii) Incorrect Resolution, which was to ensure that UNHCR staff received the correct resolution to the reported incident or request. Since corrective actions were taken with the introduction of these SLAs, OIOS did not raise a recommendation on this topic.

DIST took action to ensure introduction of specific, measurable, achievable, relevant and time-bound SLAs and financial consequences for breaching them

21. Control Objectives for Information and Related Technology (COBIT) 5 (a business framework for the governance and management of enterprise information technology) requires that organizations define and document criteria to monitor supplier performance aligned with SLAs and ensure that the supplier

regularly and transparently reports on agreed criteria. It further requires SLAs to be specific, measurable, achievable, relevant and time-bound.

- 22. OIOS' review identified the following shortcomings concerning the SLAs, prior to 1 April 2019:
 - The SOW stated that 4 out of the 10 SLAs had been designated as Critical Performance Indicators; i.e., breaching them triggered financial penalties. However, no financial consequences were stipulated in case the external service provider breached any of the remaining six SLAs. It was not clear why DIST had decided that the breach of only four SLAs would entail financial consequences.
 - While tickets raised via calls represented only three per cent of the total number of tickets, 4 out of the 10 SLAs related to tickets raised via calls. In the opinion of OIOS, call-related SLAs were over-represented and, as a consequence, less focus was placed on the tickets raised via emails.
 - The call-related SLAs were calculated based on the information obtained from the Automatic Call Distribution system that the external service provider used for recording call related data, from which DIST received statistics only. Unlike in the case of tickets raised via emails, where DIST had access to the software reports, it had no similar access to the Automatic Call Distribution system and, therefore, could not monitor call related matters. Consequently, it could not determine whether the call related SLAs had been correctly calculated.
 - The SLA for Time to Resolve for low priority tickets required GSD to resolve all these tickets within eight hours. This SLA was never met and was not a feasible target, since the delays occurred at other resolution groups due to technical issues which had not been considered when the SLA was defined.

23. These issues occurred due to the lack of appropriate framework to safeguard UNHCR's interests in monitoring service performance. Some of the SLAs were not realistic or carefully chosen which reduced their effectiveness in improving the operations of the service desk. However, on 1 April 2019, DIST introduced four new SLAs and redefined which SLAs would have financial consequences. The new Agreement and SLAs also addressed the other shortcomings observed, as discussed above, and therefore OIOS did not make a recommendation on this matter.

B. Management of the external service provider

There was a need to strengthen contract management arrangements with the external service provider

24. The SOW with the service provider stated that UNHCR should be charged, on a monthly basis, based on the volume of tickets of each type managed by the GSD according to the pricing information in the SOW and in its Appendix D (Service Volumes/Pricing). The SOW further stated that the monthly invoice should include accurate and detailed ticket volumes and records of outbound telephone calls and their charges.

25. As per the minutes of a meeting held on 5 April 2017, DIST and the external service provider agreed to increase the volume baseline for the pass-through tickets by 53 per cent and decrease it for the general tickets by 23 per cent, so the new baselines would better reflect the actual ticket numbers. Furthermore, the charge rates were decreased by 15 per cent for pass-through tickets and increased by 24 per cent for general tickets. In the same meeting it was agreed that the external service provider would calculate the monthly service fees for each month based on both the new and the old charging tables and would invoice the lesser amount. However, OIOS' review of the invoices for the period from January 2018

to March 2019 indicated that during this period the new charge rates were applied for all invoices. OIOS also found, that the corresponding section of the SOW was not amended, which resulted in lack of clarity on the rates to be applied. DIST stated that while there was no formal acknowledgement of acceptance by UNHCR, it had subsequently provided a tacit approval to move to the new rates and baselines. It acknowledged however that an amendment should have been made to the SOW to reflect this agreement. DIST added that the comparison of the rates for the period from April 2017 to March 2019 showed that an amount of \$13,309 was actually saved by DIST following the application of the new rates.

26. Furthermore, the invoices did not include the ticket volumes and the outbound call volumes and their charges and, therefore, invoices were not in line with the SOW.

(2) The UNHCR Division of Information Systems and Telecommunications should strengthen contract management by updating the relevant documents to reflect the terms and conditions agreed by the parties.

UNHCR accepted recommendation 2 and stated that since 1 April 2019, DIST had signed a new Master Agreement with the service provider which includes the formal agreed rates in the SOW. DIST had strengthened the controls to ensure that for the future, the contract would reflect all the terms and conditions agreed. Based on the action by UNHCR, recommendation 2 has been closed.

C. Monitoring and reporting on GSD services

There was a need to ensure accurate and complete performance reporting on the provision of GSD services

27. The Frame Agreement stated that the monthly SLA reports should include a performance report in respect of external service provider's performance for each agreed service level that requires reporting in the monthly SLA reports. The Frame Agreement also stated that if a monthly SLA report lacks the agreed details and accuracy for UNHCR to determine whether the external service provider has met or failed to meet an agreed service level, then UNHCR could provide written notice of that to the external service provider, which should contain reasonable detail of the deficiencies in the subject monthly report.

28. In 2018, the external service provider submitted all the monthly SLA reports to DIST. These reports were supposed to include supporting documents showing how the SLAs were calculated. However, for six SLAs, in 46 out of 72 cases, instead of the actual calculations, only reports generated through the software were included as supporting documents. DIST should have communicated to the external service provider that the supporting documents provided were not sufficient for effective monitoring, and that additional steps needed to be taken (for example, removing duplicates and monthly quality control findings) and proper calculations made to get the final SLA results.

29. Furthermore, the report sent by the external service provider as a supporting document for the Time to Resolve SLA calculations for October 2018 contained errors. For example, the date of resolution was earlier than the date of acceptance for 172 tickets, whilst 23 tickets had a negative resolution time, i.e., the time between acceptance and resolution minus clock stop time was negative.

30. The DIST review of the monthly GSD reports also did not include review of the appropriateness of SLA calculations. OIOS recalculated the SLAs on a sample basis and found the following exceptions:

• **Time to assign**: For January, February, May, June and August 2018, the external service provider reported that 95.94, 96.11, 96.41, 96.38 and 97.59 per cent of the tickets respectively were assigned in less than 15 minutes. OIOS calculated the figures as 94.04, 94.18, 91.59, 91.71 and 91.37 per cent for the aforementioned months and, consequently, the SLA was not met during

these months. The reasons for the differences were: (i) erroneous calculation for tickets that were assigned on the following or later day than the creation day; and (ii) the external service provider considering the "15 minutes' criterion" having been met for tickets where the time for assignment was within 15 minutes 30 seconds (with the time being rounded to whole minute), whilst the SOW stated that tickets should be assigned in "less than 15 minutes". For example, in 371 tickets assigned, the time for assignment was between 15 minutes and 15 minutes and 30 seconds, i.e., more than 15 minutes) but these cases were incorrectly considered as resolved within 15 minutes.

- **Time to accept:** OIOS' calculations of the time that GSD used to accept tickets showed different results for 131 tickets in February 2018 and 75 tickets in March 2018 compared to the calculations made by the external service provider. The main reason for the differences was that the external service provider had reported "0" minutes for accepting tickets whenever the software did not work properly, which in the opinion of OIOS was inappropriate as such a practice artificially reduced the average time.
- **Time to resolve**: The monthly GSD report for January 2018 showed that 95.23 per cent of the C4 and C5 tickets³ were resolved within four hours and 98.52 per cent within eight hours. Based on OIOS calculation, the former was met only for 92.3 per cent of the tickets, and the latter was met only for 96.07 per cent of the tickets.
- **Time to respond**: This SLA was met, according to the external service provider's calculations, in January and October 2018. The reports showed that the response was made for 96.35 per cent of the tickets within the target of 45 minutes in January and for 96.11 per cent in October. As per OIOS calculations, the rate was 93.43 per cent in January and 91.48 per cent in October and, therefore, the SLA target was not met. There were 11 tickets for January alone, where the external service provider reported the SLA as having been met, although OIOS noted that the time to respond was more than 45 minutes in each case.
- **First Contact Resolution Rate**: 11 duplicate tickets in January 2018 and 45 tickets in February 2018 that were not solved within first contact should have been left out of the monthtly SLA report and excluded from the SLA calculations.

31. Since GSD services were outsourced, the monitoring mechanisms of DIST as the first line of defense did not operate as intended, as described above. The root causes of the shortcomings were that there were no written procedures for monitoring GSD services and the monthly SLA calculations were not subject to proper review by DIST. OIOS understands that in second half of 2018 only a limited level of review was performed on the monthly GSD reports due to the heavy workload at DIST resulting from the implementation of the new software. However, some of the errors identified in this audit had occurred already before the implementation of the new software.

(3) The UNHCR Division of Information Systems and Telecommunications should: (i) ensure that the monthly Service Level Agreement (SLA) calculations submitted by the external service provider are supported by appropriate and accurate documentation; and (ii) implement sufficiently detailed monitoring procedures to review the accuracy of the SLA calculations.

UNHCR accepted recommendation 3 and stated that DIST had been provided with appropriate and accurate documentation by the external service provider to support the monthly calculations. Also, the monthly SLA calculations for April and May had been validated and found to be correct. Based on the action taken by UNHCR, recommendation 3 has been closed.

³ C4 and C5 tickets are low priority tickets as their impact and/or urgency level is medium or low.

D. Trend analysis

Need to conduct robust trend analyses

32. COBIT 5 requires regularly tracking, analyzing and reporting incident and analyze trends to provide information for continual improvement by addressing underlying root causes.

33. The number of tickets raised in relation to MSRP, which is one of UNHCR's core software applications, had increased significantly after April 2018. During 2018, 11,248 tickets were raised in relation to MSRP passwords alone. When DIST realized the high number of MSRP-related tickets, it negotiated a price discount with the external service provider for April, May and June 2018 in the amount of \$24,000. However, the high number of tickets continued in the second half of 2018, and appropriate steps were not taken to identify and address the root causes.

(4) The UNHCR Division of Information Systems and Telecommunications should appropriately address the root causes of, and respond to, matters identified through trend analyses to ensure continuous improvement.

UNHCR accepted recommendation 4 and stated that the Service Desk was notifying the responsible Resolver Group when a high number of incidents are detected for a single issue. Subsequent follow up ensures resolution. Based on the action taken by UNHCR, recommendation 4 has been closed.

IV. ACKNOWLEDGEMENT

34. OIOS wishes to express its appreciation to the management and staff of UNHCR 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 Global Service Desk at the Office of the United Nations High Commissioner for Refugees

Rec. no.	Recommendation	Critical ¹ / Important ²	C/ O ³	Actions needed to close recommendation	Implementation date
1	The UNHCR Division of Information Systems and Telecommunications should develop and disseminate guidance on incident management and request fulfilment processes to ensure the appropriate handling of incidents and service requests.	Important	C	Action completed.	Implemented
2	The UNHCR Division of Information Systems and Telecommunications should strengthen contract management by updating the relevant documents to reflect the terms and conditions agreed by the parties.	Important	C	Action completed.	Implemented
3	The UNHCR Division of Information Systems and Telecommunications should: (i) ensure that the monthly Service Level Agreement (SLA) calculations submitted by the external service provider are supported by appropriate and accurate documentation; and (ii) implement sufficiently detailed monitoring procedures to review the accuracy of the SLA calculations.	Important	С	Action completed.	Implemented
4	The UNHCR Division of Information Systems and Telecommunications should appropriately address the root causes of, and respond to, matters identified through trend analyses to ensure continuous improvement.	Important	C	Action completed.	Implemented

 3 C = closed, O = open

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.

APPENDIX I

Management Response

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	The UNHCR Division of Information Systems and Telecommunications should develop and disseminate guidance on incident management and request fulfilment processes to ensure the appropriate handling of incidents and service requests.	Important	Yes	Dep Director CSS	28 June 2019	Implemented. Evidence provided to OIOS on 28.06.2019.
2	The UNHCR Division of Information Systems and Telecommunications should strengthen contract management by updating the relevant documents to reflect the terms and conditions agreed by the parties.	Important	Yes	Dep Director CSS	31 July 2019	Since 1 April 2019 there is in place a new Master Agreement signed with external service provider which includes in the SOW the formal agreed rates. DIST has strengthened the controls to ensure that for the future the contract will reflect all the terms and conditions agreed. The new contract includes the following provision: ARTICLE 39. CONTRACT MODIFICATIONS: 39.1. Any modification to this Agreement, including to its annexes or schedules (a "Contract Modification") shall require a written amendment signed by authorized representatives of the Parties. For the avoidance of doubt, any changes to the Services or any Deliverables to be

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.

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
						provided under a SOW shall not be deemed to be a Contract Modification requiring an amendment, so long as it has been authorized in accordance with a Change Control Procedure. The enforcement of the aforesaid provision will be closely monitored.
3	The UNHCR Division of Information Systems and Telecommunications should: (i) ensure that the monthly Service Level Agreement (SLA) calculations submitted by the external service provider are supported by appropriate and accurate documentation; and (ii) implement sufficiently detailed monitoring procedures to review the accuracy of the SLA calculations.	Important	Yes	Head of Service Desk	31 July 2019	 i) Appropriate and accurate documentation is provided by the external service provider to support the monthly calculations. ii) Monthly SLA calculations for April, and May have been validated and found to be correct. June are due mid of July.
4	The UNHCR Division of Information Systems and Telecommunications should appropriately address the root causes of, and respond to, matters identified through trend analyses to ensure continuous improvement.	Important	Yes	Head of Service Desk	30 June 2019	Service desk is notifying the responsible Resolver Group when a high number of incidents are detected for a single issue. Subsequent follow up to ensure resolution.