Audit of the management of geospatial information services by the Department of Field Support

The Department centralized the provision of geospatial information services but needed to re-evaluate the strategy for service delivery taking into consideration recent developments

31 December 2018
Assignment No. AP2018/615/02
Audit of the management of geospatial information services by the Department of Field Support

EXECUTIVE SUMMARY

The Office of Internal Oversight Services (OIOS) conducted an audit of the management of geospatial information services by the Department of Field Support (DFS). The objective of the audit was to assess the adequacy and effectiveness of the management of these services in meeting the needs of the United Nations. The audit covered the period from 1 July 2016 to 30 June 2018 and included a review of: (a) centralization of geospatial operations; (b) efficiency and effectiveness of support to field missions; (c) work planning, monitoring and evaluation; and (d) management of system contracts. Geospatial information operations within field missions were not included in the scope of this audit.

Geospatial information services include the provision of topographical and base maps as well as spatial and terrain analysis for use in various aspects of United Nations operations. The services were centralized at the United Nations Global Services Centre (UNGSC) in alignment with the Secretary-General’s proposal to consolidate five functions previously performed in field missions and reduce the number of staff in field missions performing these functions. However, some improvements were needed to enhance operational effectiveness.

OIOS made six recommendations. To address issues identified in the audit, DFS needed to:

- Re-evaluate the strategy for providing geospatial information services taking into consideration recent developments;
- Maintain accurate data on the delivery of geospatial information services and periodically analyze and review them against established performance targets for informed decision making;
- Manage users’ expectations on the delivery of critical geospatial information services through a service level agreement or similar document;
- Ensure the dedicated content management and information sharing platform is consistently utilized;
- Update policies, procedures and guidelines on geospatial information services; and
- Systematically document evidence to support the achievement of results included in budget performance reporting.

DFS accepted the recommendations, implemented one of them and initiated action to implement the others.
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ANNEX I Status of audit recommendations

APPENDIX I Management response
Audit of the management of geospatial information services by the Department of Field Support

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of the management of geospatial information services by the Department of Field Support (DFS).

2. Geospatial information includes topographical and base maps, as well as spatial and terrain analysis that are used in locations where terrains have not been previously mapped, or in instances where the base maps are outdated or inaccurate. Such information is critically important to field missions, enabling them to monitor their areas of responsibility, for example, a border, conflict zone, or camp perimeter, either in real-time or over a period of time. Real-time visibility allows ongoing operational assessments, whereas assessments over time provide a context of changing conditions.

3. Geospatial information services capacity is based on a three-tiered framework as described below:

   a) The Geospatial Information Section (GIS) within the Information and Communications Technology Division (ICTD), DFS is responsible for strategic guidance, policy, planning, geospatial solutions and support for global geospatial operations, and to provide geospatial information and services for United Nations Secretariat, including Offices away from Headquarters and the Security Council;

   b) The Client Solutions Delivery Section (CSDS), which until September 2018 was known as the Geospatial Information Service Section (GISS) within the Service for Geospatial, Information and Telecommunications Technologies (SGITT) in the United Nations Global Services Centre (UNGSC), is the main hub providing support to field missions in map production, geospatial analysis and solutions, and data streamlining; and

   c) Field missions are tasked with the day-to-day operations to provide customized services, data collection and terrain analysis within their locations.

4. GIS has also established various partnerships with Member States, academia, international organizations, non-governmental organizations and the private sector, to assist in providing topographic maps, geospatial data and analytical products as well as access to near real-time satellite imagery.

5. As at June 2018, GIS had 8 approved posts (7 international staff and 1 general service) and 2 consultants, whereas CSDS had 18 approved posts (9 international staff and 9 national staff) and 17 consultants. Total GIS expenditures for the fiscal year 2016/17 was $1.65 million and the budgeted costs for the fiscal year 2017/18 were $1.53 million. Total CSDS expenditures for the fiscal year 2016/17 were $1.65 million and the budgeted costs for the fiscal year 2017/18 were $1.6 million. The budget covers staff and operational cost (training and official travel).

6. In addition, as at June 2018, there were 12 field missions with 119 approved geospatial information posts (40 international, 32 national and 9 United Nations Volunteers), 17 military personnel and 21 consultants

7. Comments provided by DFS are incorporated in italics.
II. AUDIT OBJECTIVE, SCOPE AND METHODOLOGY

8. The objective of the audit was to assess the adequacy and effectiveness of the management of geospatial information services by DFS in meeting the needs of the United Nations.

9. This audit was included in the 2018 risk-based work plan due to the operational importance of geospatial information in the context of United Nations operations.

10. OIOS conducted this audit from July to September 2018. The audit covered the period from 1 July 2016 to 30 June 2018. Based on an activity-level risk assessment, the audit covered higher and medium risk areas in GIS and CSDS, which reviewed: (a) centralization of geospatial operations; b) efficiency and effectiveness of support to field missions; (c) work planning, monitoring and evaluation; and (d) management of system contracts. Geospatial information operations within field missions were not included in the scope of this audit.

11. The audit methodology included: (a) interviews with key personnel in GIS and CSDS; (b) review of relevant documents, policies and procedures relating to the operations of geospatial information services; and (c) analytical review of service delivery data. Additionally, the audit methodology included a survey of 13 field missions of which nine responses were received, and a review of the results of a survey conducted by SGITT to assess client satisfaction with geospatial information provided.

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

III. AUDIT RESULTS

A. Centralization of geospatial information services

While geospatial information services were successfully centralized, there was a need to re-evaluate the current geospatial information strategy.

13. In the 2014/15 budget (A/68/727) for the United Nations Logistics Base at Brindisi (UNLB), the Secretary-General proposed to: (a) centralize at the UNGSC, five geospatial information service functions that were previously performed in field locations; and (b) reduce footprint in field missions by abolishing posts and establishing additional posts at UNGSC. In its resolution 69/309 of 25 June 2015, the General Assembly requested the Secretary-General to ensure that the centralization efforts also result in a reduction in the resources dedicated to geospatial information systems in field missions and to report thereon in his next report on UNLB.

14. OIOS verified that the five geospatial functions namely: (i) imagery management and processing; (ii) spatial, terrain and environmental analysis; (iii) geospatial application and development; (iv) standardization of processes, products and data models, including enterprise geospatial database set-up and management; and (v) topographic and base mapping development were centralized at UNGSC in 2016 and made available to all field missions, as proposed. In addition, as of October 2016, 48 core geospatial information posts in field missions had been abolished and 11 additional posts established at the UNGSC, including 6 general temporary assistance posts for which UNGSC is currently seeking conversion to regular posts.
15. Since then, several activities related to the transformation had been undertaken, including implementation of a service delivery model, which is a framework to standardize requests and delivery of geospatial information products and services; and improvements to the technical infrastructure, including the implementation of a bandwidth allocation system, a data infrastructure management system and a remote access portal. However, CSDS had not documented a post implementation review, including lessons learned and considerations on the way forward, to ensure sustainability of the centralization.

16. Geospatial information posts in field missions had increased from 72 in 2016 (after the abolishment of the 48 posts following the transformation exercise) to 80 as at 1 April 2018. The net increase of eight posts reflected personnel changes arising from the liquidation of the United Nations Operation in Cote d’Ivoire and the establishment of geospatial functions in five missions due to specific operational demands. In addition, there were 30 individual contractors and military personnel performing GIS functions in field missions. This increase in staff was not mentioned in the report of the Secretary-General on UNLB’s budget for 2018/19 fiscal year, even though the report mentioned the reduced geospatial information footprint in field missions upon completion of the transformation exercise.

17. GIS stated that the evolution of geospatial technology had increased the effectiveness of support to day-to-day operations and informed decision making for various operational requirements at the United Nations. This had led to a drastic increase in demand for geospatial services in many sectors including police, security, electoral assistance, logistics and environment. GIS further stated that in order to provide meaningful geospatial information services in peace operations the presence of geospatial information experts in the field was important as they were uniquely placed to collect daily and strategic operational requirements and to validate and analyze geospatial information. Additionally, the role of geospatial information experts in UNGSC was to address mid-to-long-term requirements but it was not well positioned to support day-to-day operations.

18. These developments have resulted in a departure from the impetus of the 2016 centralization initiative. In addition, GIS explained that the future vision and role of geospatial information services needed to be developed within the context of the global Information and Communications Technology (ICT) strategy and the Field Technology Framework reflecting the impact from the current management reform as well as evolution of technology and operational demands. Therefore, there was a need to re-evaluate the strategy for providing geospatial information services, and if necessary, provide an update to the General Assembly.

(1) DFS should re-evaluate the strategy for providing geospatial information services taking into consideration recent developments and the results of a post implementation review of the centralization exercise, and update the General Assembly as needed.

DFS accepted recommendation 1 and stated that the updated vision and strategy of geospatial information services for United Nations Secretariat, including field missions, would be prepared in line with new ICT Strategy and Field Technology Framework. Recommendation 1 remains open pending receipt of the updated strategy.
B. Support to field missions

While field missions appreciated the support provided, improvements were needed for more effective service delivery.

(a) Analysis of service requests and timeliness of CSDS service delivery

19. The UNLB 2017/18 budget (A/71/828) indicated that the mandate of CSDS was expanded to provide continuous operational support to all peacekeeping missions and offices within the Centre’s scope of service, especially those with no or limited geospatial capacities.

20. According to CSDS, field missions made 590 requests for its services/products during the 2016/17 fiscal year, and 758 requests during 2017/18. Service requests included image acquisition and/or analysis, ground water exploration and printing of posters.

21. CSDS had not established a mechanism to analyze data related to requests and delivery of geospatial information services such as trends in the nature and number of requests generally and by mission and other users of its services and the timeliness of responses or provision of services for informed decision making and to identify any areas for improvement. In addition, it had not set performance targets for the various services in its service catalogue.

22. OIOS review and analysis of work orders for 2017/18 was hindered by weaknesses in the data including inaccurate or missing information. For example, dates of request and delivery were unavailable for some entries, while for others the dates were inaccurate as the completion dates were before the dates of request. Therefore, OIOS could not determine or validate the timeliness of the service delivery.

23. CSDS stated that the Service Management Unit, based in the United Nations Information and Communications Technology Facility, Valencia had conducted a review of the timeliness of service delivery in iNeed. However, OIOS noted that the monthly service management report produced by the Unit reviewed the timeliness of incidents resolved within deadlines. These included disaster recovery and business continuity and data replication incidents and monitoring of field mission local area network devices. The report did not specifically monitor the timeliness of geospatial information services delivery.

(2) DFS should develop and implement a mechanism to maintain accurate data related to the provision of geospatial information services by the Client Solutions Delivery Section in UNGSC and periodically analyze and review them against established performance targets for informed decision making and to identify areas for improvement.

DFS accepted recommendation 2 and stated that geospatial information services had been integrated within the Global Service Centre business service catalogue and the first dashboard showing an analysis of service requests and timelines against key performance indicators (KPIs) was available. OIOS’ review of documentation provided by DFS indicated that KPIs had not yet been incorporated in the UNGSC Service Catalogue and the dashboard did not show an analysis of the timeliness of processing service requests against performance targets. Recommendation 2 remains open pending receipt of this information.
24. In reviewing the 2013/14 budget performance (A/69/839/Add.9) for UNLB, the Advisory Committee on Administrative and Budgetary Questions recommended that the Secretary-General should be requested to conduct a customer satisfaction survey with regard to geospatial information services.

25. Since 2016, CSDS has been included in the scope of annual customer surveys conducted by SGITT, which generally gave positive responses. CSDS also conducted a survey of satellite imagery acquisition and management services in 2017 comprising 18 participants, including United Nations Headquarters (UNHQ) and field missions. Thirteen responses were received. Survey questions included how the respondents acquired satellite imagery, their budgets for satellite imagery and the benefits of outsourcing imagery acquisition service to UNGSC. While overall ratings were positive, in one question relating to the challenges experienced whilst using UNGSC’s satellite imagery acquisition services, eight respondents indicated a slow administrative process.

26. OIOS also conducted a survey of 13 field missions and received 9 responses, which were generally positive. They indicated that GIS/CSDS had adequately communicated their scope of services; the scope and quality of services provided were good; and the services were provided timely. Nevertheless, a respondent commented that support for imagery acquisition needed to be streamlined as it was taking a long time. This response was consistent with the responses received by the surveys conducted by CSDS and SGITT. Another respondent noted that support in urgent and/or emergency situations was not timely.

27. While the slow administrative process pertaining to the acquisition of imagery services was noted in several surveys, there was no evidence of a follow-up review of the process and consideration of any corrective action. CSDS stated that in every instance it strived to provide timely service to field missions; however, it was not always possible in urgent situations, given the time difference and/or the nature of the request. For example, imagery acquisitions could be delayed due to weather conditions. However, CSDS had not systematically communicated these issues to missions or managed service delivery expectations through a service level agreement, for example, for its critical services.

(3) DFS should take steps to manage the expectations of users of services provided by the Client Solutions Delivery Section in UNGSC by communicating, inter alia, expected delivery times for critical services in a formal document such as a service level agreement.

DFS accepted recommendation 3 and stated that geospatial information services had been integrated within the Global Service Centre business catalogue. DFS also provided an example of a service level agreement. OIOS’ review of these documents indicated that delivery times for critical geospatial information services had not been specified. Recommendation 3 remains open pending receipt of the updated UNGSC Service Management catalogue that defines the delivery times for critical services, and examples of service level agreements that include such information.

28. CSDS implemented the United Nations GeoPortal, a content management solution for storing and active sharing of maps and other contents to avoid duplication of efforts and waste of resources.

29. GeoPortal was additionally meant to keep CSDS aware of geospatial information activities in field missions and to provide support and guidance when required. However, OIOS noted that the GeoPortal was only used extensively by CSDS to store and share its products, while GIS and the field missions used other media, including individual servers for storage contrary to the objective of the Portal. As a result, GIS and
CSDS did not have direct visibility of the field missions’ work to identify potential duplications or perform quality control where required.

(4) DFS should take actions to ensure that the content management and information sharing platform, United Nations GeoPortal, is fully utilized by all geospatial information service components to effectively share information and enhance the visibility of work performed by respective components.

DFS accepted recommendation 4 and stated that GIS and CSDS would work with appropriate authorities to develop suitable guidance and policy on access to the United Nations GeoPortal in line with the vision and strategy of geospatial information services for the United Nations field missions. The United Nations GeoPortal will continuously be improved for effective geospatial information services support to United Nations Secretariat and field missions. Recommendation 4 remains open pending receipt of the guidelines and policy documents regarding access and use of the United Nations GeoPortal.

(d) Consideration of drones as a centralized service

30. OIOS noted that efforts were being made by UNGSC to explore the use of drones as a centralized service. This was in line with the Report of the Expert Panel on Technology and Innovation in United Nations Peacekeeping (December 2014), which stated that “Unmanned Aerial Systems or Unmanned Aerial Vehicles (drones) represent the kind of technology that no mission should do without. They are simply too useful a tool to pretend otherwise” and called on the United Nations to “make better use of sensor technologies and aerial visualization, including Unmanned Aerial Systems, satellite imagery, cameras and radar in border monitoring activities.” DFS’ Field Technology Framework (Issued in April 2018 for operational guidance and budgeting purposes) highlighted the use of drones and that work was underway to establish ‘drones as a service’ in missions. The Secretary-General’s strategy on New Technologies (June 2018) noted that in Malawi, “the United Nations has established the world’s largest drone test corridor for humanitarian applications”. Drones are being used in three missions for mapping, terrain contouring, road assessment, and ground water exploration. The audit noted positive considerations were being made to introduce this technology to further the service delivery for geospatial information services.

There was a need to update guidelines, policies and procedures

31. Policies and procedures are an essential part of organizational controls necessary to ensure that operational activities are carried out in an appropriate, consistent and efficient manner. GIS at Headquarters was responsible for the development and update of guidelines, policies and procedures.

32. OIOS noted that several guidelines, policies and procedures were outdated, including the Geographic Information System Operation Manual for United Nations Peacekeeping Operations (April 2003), which was intended to serve as a primary source of the most current available information on geospatial information service operations for all personnel who plan, supervise/manage, implement, and conduct geospatial information service and related support. The Manual had not been updated since its issuance to reflect current methodologies, standards and technologies guiding geospatial information operations, and to reflect the consolidation of geospatial information services, the role of geospatial information services at UNHQ, CSDS at Brindisi and in field missions.

33. Additionally, other guidelines had not been finalized, including the draft guidelines on: Geographical Information Training and Development for GIS personnel at UNHQ and in field missions (no issue date, and a review date of January 2013), the Cartographic Section Geographic Information Services Spatial Data, Models, Information and Product Sharing for Cooperation (issue date June 2009, a
review date January 2011), Start-up of Joint Geographical Information Services (issue date not indicated, a review date of January 2010). Furthermore, standard operating procedures had not been reviewed on their review dates, namely: Geographic Information Services Budget Guidelines 2012-2013 (issue date July 2011, review date June 2012) and Cartographic Section, Geographic Information Services – File Transfer Protocol (issue date March 2009, review date January 2010).

(5) DFS should update guidelines, policies and procedures on geospatial information services within specified timelines.

DFS accepted recommendation 5 and stated that GIS would, in close coordination with CSDS and field missions, update the guidelines, policies and procedures on geospatial information services with agreed timelines. Recommendation 5 remains open pending receipt of the updated guidelines, policies and procedures.

C. Work planning, monitoring and evaluation

CSDS needed to systematically document support for performance reporting

34. The regulations and rules governing programme planning, the programme aspects of the budget, the monitoring of implementation and the methods of evaluation (ST/SGB/2018/3) require programme managers to translate objectives into programmes and work plans, specifying the responsibilities and tasks of those who are to implement them, as well as maintain records on their accomplishments.

35. The GIS Section Chief initially derived the Section work plan from the results-based budgeting (RBB) framework, and incorporated as necessary, feedback received from the Section staff. The GIS 2016/17 work plan, which was shared with staff, listed the RBB indicators of achievement and the products and/or services to achieve the results.

36. OIOS selected 10 of the 60 outputs listed in the work plan to review evidence of completion of the work plan and related indicators of achievement. Documentary support for the outputs was provided as requested. They showed evidence of cooperation with partners such as an open source initiative based on free software and taking advantage of expertise from Member States, academia and the private sector.

37. The Chief, CSDS developed the Section work plan taking into consideration the UNGSC and FTS/SGITT work plan’s actions and activities. The work plan was then shared with the CSDS Unit Chiefs and their feedback/input was incorporated to the CSDS final work plan, which was shared with all the Section’s staff. CSDS and GIS work plans were coordinated through video conferences/meetings and shared with each other.

38. The 2016/17 CSDS work plan listed 54 outputs, of which 8 were selected for review. The deadline for all 54 outputs was specified as 31 March 2017. CSDS explained that, similar to GIS, as a service provider it was dependent on requests for services from field missions, and that the services were provided throughout the reporting period.

39. As evidence of the RBB indicators of achievement, CSDS maintained a spreadsheet titled, SGITT – CSDS key performance indicators. The spreadsheet contained a list of all the planned indicators of achievement, with outputs specifying the number of monthly deliverables. However, the number of outputs that were reported as completed was not supported. For example, OIOS selected the indicator of achievement, ‘delivery of all requested imagery acquisition, maps and analytics within agreed deadline 99.90 per cent of the time’, and reviewed the months of July 2016 and February 2017, which had actual
deliveries of 17 and 8 outputs listed respectively. However, the support for these months showed 24 and 11 outputs respectively. Discussions with the Chief, CSDS noted that the process for documenting support for the indicators of achievement was not systematic during the reported period and was being streamlined. Considering these comments, the review of evidence supporting reported achievements was suspended.

(6) DFS should take action to ensure that the Client Solution Delivery Section of UNGSC systematically documents evidence supporting the achievement of results presented in budget performance reporting

DFS accepted recommendation 6 and stated that geospatial information services were provided through the iNeed service management tool. Based on information provided by DFS which shows that iNeed included sufficient details on geospatial information service and work orders for the period April through December 2018, recommendation 6 has been closed as implemented.

CSDS took adequate steps towards the implementation of a scalability model

40. General Assembly resolution 69/307, requested the Secretary-General to develop a scalability model for UNLB, to establish correlation between workload and the support capacity required.

41. UNLB established a working group that was developing the scalability model for UNLB as a whole, in which CSDS was represented. The working group produced a progress report in February 2018, which detailed the steps taken so far and the deliverables. A detailed report with recommendations for consideration of the UNGSC Director would be provided at the conclusion of their deliberations.

42. While the overall UNLB scalability model was being developed, CSDS, had also developed an internal scalability model based on a three-step process comprising: (a) producing a list of services, products and activities, and the time needed by each unit to complete them; (b) establishing staff time targets for completing each activity; and (c) distributing extra workload through staff augmentation. This included a systems contract with Trigyn for ICT support services, and services provided by the United Nations Office for Project Services under financial agreements and by the United Nations International Computing Center under service delivery agreements. OIOS concluded that CSDS had implemented adequate steps towards the achievement of a scalability model.

D. Management of system contracts

Systems contracts were established and managed for geospatial information services

43. The role of GIS in systems contracts included acting as requisitioners of geospatial information services and therefore: developing technical requirements; conducting technical evaluations of proposals from potential vendors; assisting with price negotiations; and completing vendor appraisals for contract renewals. GIS also acts as liaison between field missions and the Procurement Division on monitoring not-to-exceed (NTE) amounts by obtaining estimated usage of the contracts from field missions and informing missions when NTE was near depletion.

44. For the audit period, five systems contracts (with total NTE $11,200,000) were available to provide geospatial information services. OIOS reviewed documentation related to GIS system contracts, including contract agreements with vendors, amendments, vendor appraisals, correspondence between Procurement Division and the GIS focal person for systems contracts and concluded that GIS was performing its role in the management of systems contracts adequately. This resulted in establishing adequate NTE for contracts and controls over their use, and timely renewal of systems contracts.
IV. ACKNOWLEDGEMENT

45. OIOS wishes to express its appreciation to the management and staff of DFS 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 management of geospatial services by the Department of Field Support

<table>
<thead>
<tr>
<th>Rec. no.</th>
<th>Recommendation</th>
<th>Critical¹/²</th>
<th>C/ O³</th>
<th>Actions needed to close recommendation</th>
<th>Implementation date</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>DFS should re-evaluate the strategy for providing geospatial information services taking into consideration recent developments and the results of a post implementation review of the centralization exercise, and update the General Assembly as needed.</td>
<td>Important</td>
<td>O</td>
<td>Provision of updated geospatial information services strategy.</td>
<td>31 March 2020</td>
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<tr>
<td>2</td>
<td>DFS should develop and implement a mechanism to maintain accurate data related to the provision of geospatial information services by the Client Solutions Delivery Section in UNGSC and periodically analyze and review them against established performance targets for informed decision making and to identify areas for improvement.</td>
<td>Important</td>
<td>O</td>
<td>Provision of updated UNGSC Service Management catalogue incorporating KPIs, and the first dashboard showing an analysis of service requests and timeliness of response against established KPIs.</td>
<td>30 June 2019</td>
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<tr>
<td>3</td>
<td>DFS should take steps to manage the expectations of users of services provided by the Client Solutions Delivery Section in UNGSC by communicating, inter alia, expected delivery times for critical services in a formal document such as a service level agreement.</td>
<td>Important</td>
<td>O</td>
<td>Provision of updated UNGSC Service Management catalogue that defines the delivery times for critical services, and examples of service level agreements that include such information.</td>
<td>30 June 2019</td>
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<td>4</td>
<td>DFS should take actions to ensure that the content management and information sharing platform, United Nations GeoPortal, is fully utilized by all geospatial information service components to effectively share information and enhance the visibility of work performed by respective components.</td>
<td>Important</td>
<td>O</td>
<td>Provision of guidelines and policy documents regarding access and use of United Nations GeoPortal.</td>
<td>31 March 2020</td>
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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.

³ C = closed, O = open
### STATUS OF AUDIT RECOMMENDATIONS

Audit of the management of geospatial services by the Department of Field Support

<table>
<thead>
<tr>
<th>Rec. no.</th>
<th>Recommendation</th>
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<th>C/O³</th>
<th>Actions needed to close recommendation</th>
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<td>5</td>
<td>DFS should update guidelines, policies and procedures on geospatial information services within specified timelines.</td>
<td>Important</td>
<td>O</td>
<td>Provision of updated guidelines, policies and procedures.</td>
<td>31 March 2020</td>
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<td>6</td>
<td>DFS should take action to ensure that the Client Solution Delivery Section of UNGSC systematically documents evidence supporting the achievement of results presented in budget performance reporting.</td>
<td>Important</td>
<td>C</td>
<td>Action completed.</td>
<td>Implemented</td>
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APPENDIX I

Management Response
TO: Ms. Muriette Lawrence-Hume, Chief, New York Audit Service, Internal Audit Division
OIOS

DATE: DEC 2 1 2018

THROUGH: SC DE:

FROM: Lisa Butenheim, Assistant Secretary-General for Field Support

REFERENCE: 2018.UNHQ.AR-BOL.MEMO.140251.2

SUBJECT: Draft report on an audit of the management of geospatial information services by Department of Field Support (Assignment No. AP2018/615/02)

1. I refer to your memorandum, dated 10 December 2018, regarding the above-mentioned audit. Please find attached our comments on the findings and recommendations in Annexes I and II.

2. Thank you for the opportunity to comment on the draft report. We stand ready to provide any further information that may be required.

CC: Cynthia Avena-Castillo
Background

1. The Department of Field Support (DFS) suggests that paragraph 3(a) be rephrased as follows: “The Geospatial Information Section (GIS) within the Information and Communications Technology Division (ICTD), DFS is responsible for strategic guidance, policy, planning, geospatial solutions and support for global geospatial operations, and to provide geospatial information and services for United Nations Secretariat, including the offices away from Headquarters and the Security Council;”

Audit Results

2. DFS suggests that the first sentence of paragraph 14 be rephrased as follows: “OIOS verified that the five geospatial functions missions namely...”.

Recommendation 4

3. DFS request that the Department’s comments in recommendation 4 be rephrased as follows: “DFS accepted recommendation 4 and stated that GIS and CSDS would work with the appropriate authorities...”.
Management Response

Audit of the management of geospatial services by the Department of Field Support

<table>
<thead>
<tr>
<th>Rec. no.</th>
<th>Recommendation</th>
<th>Critical¹/ Important²</th>
<th>Accepted? (Yes/No)</th>
<th>Title of responsible individual</th>
<th>Implementation date</th>
<th>Client comments</th>
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<tr>
<td>1</td>
<td>DFS should re-evaluate the strategy for providing geospatial information services taking into consideration recent developments and the results of a post implementation review of the centralization exercise, and update the General Assembly as needed.</td>
<td>Important</td>
<td>Yes</td>
<td>Director, ICTD</td>
<td>First quarter of 2020</td>
<td>Updated vision and strategy of geospatial information services for United Nations Secretariat, including United Nations field missions, will be prepared in line with new Information and Communication Technology Strategy and Field Technology Framework.</td>
</tr>
<tr>
<td>2</td>
<td>DFS should develop and implement a mechanism to maintain accurate data related to the provision of geospatial information services by the Client Solutions Delivery Section in UNGSC and periodically analyze and review them against established performance targets for informed decision making and to identify areas for improvement.</td>
<td>Important</td>
<td>Yes</td>
<td>Directors, ICTD and GSC</td>
<td>Implemented</td>
<td>The integration of geospatial information services within the Global Service Centre (GSC) business service catalogue has been completed. The first dashboard showing an analysis of service requests and timelines against key performance indicators is available and will be provided to OIOS under a separate cover.</td>
</tr>
<tr>
<td>3</td>
<td>DFS should take steps to manage the expectations of users of services provided by the Client Solutions Delivery Section in UNGSC by communicating, inter alia, expected delivery times for critical services in a formal document such as a service level agreement.</td>
<td>Important</td>
<td>Yes</td>
<td>Directors, ICTD and GSC</td>
<td>Implemented</td>
<td>The integration of geospatial information services within the GSC business service catalogue has been completed. An example of service level agreement (SLA) is available and will be provided to OIOS under a separate cover.</td>
</tr>
<tr>
<td>4</td>
<td>DFS should take actions to ensure that the content management and information sharing platform, United Nations GeoPortal, is fully utilized by all</td>
<td>Important</td>
<td>Yes</td>
<td>Directors, ICTD and GSC</td>
<td>First quarter of 2020</td>
<td>Suitable guidance and a policy on access to the United Nations GeoPortal will be developed in line with the vision and strategy of geospatial information</td>
</tr>
</tbody>
</table>

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 management of geospatial services by the Department of Field Support

<table>
<thead>
<tr>
<th>Rec. no.</th>
<th>Recommendation</th>
<th>Critical / Important</th>
<th>Accepted? (Yes/No)</th>
<th>Title of responsible individual</th>
<th>Implementation date</th>
<th>Client comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>geospatial information service components to effectively share information and enhance the visibility of work performed by respective components.</td>
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<td>services for the United Nations Secretariat, including United Nations field missions. The United Nations GeoPortal will continuously be improved for effective geospatial information services support to United Nations Secretariat and field missions.</td>
</tr>
<tr>
<td>5</td>
<td>DFS should update guidelines, policies and procedures on geospatial information services within specified timelines.</td>
<td>Important</td>
<td>Yes</td>
<td>Director, ICTD</td>
<td>First quarter of 2020</td>
<td>DFS’ comments are reflected in the report.</td>
</tr>
<tr>
<td>6</td>
<td>DFS should take action to ensure that the Client Solution Delivery Section of UNGSC systematically documents evidence supporting the achievement of results presented in budget performance reporting.</td>
<td>Important</td>
<td>Yes</td>
<td>Directors, ICTD and GSC</td>
<td>Implemented</td>
<td>Geospatial information services are provided through the iNeed service management tool. Evidence will be provided to OIOS under a separate cover.</td>
</tr>
</tbody>
</table>