NORTH ATLANTIC COUNCIL
CONSEIL DE L'ATLANTIQUE NORD

07 October 2019

DOCUMENT
C-M(2019)0025-AS1 (INV)

NORTH ATLANTIC COUNCIL

IBAN PERFORMANCE AUDIT ON THE NCIA TIME ACCOUNTING SYSTEM

ACTION SHEET

On 4 October 2019, under the silence procedure, the Council noted the RPPB report and its conclusions, as well as the associated IBAN report, agreed to their public disclosure, and - as recommended by the RPPB - tasked the NATO Communications and Information Organization (NCIO) Agency Supervisory Board as outlined in C-M(2019)0025 (INV).

(Signed) Jens Stoltenberg
Secretary General

NOTE: This Action Sheet is part of, and shall be attached to C-M(2019)0025 (INV).

NHQD144001

26 September 2019	**DOCUMENT** C-M(2019)0025 (INV) **Silence Procedure ends:** **4 Oct 2019 – 15:30**

NORTH ATLANTIC COUNCIL

IBAN PERFORMANCE AUDIT ON THE NCIA TIME ACCOUNTING SYSTEM

Note by the Secretary General

1.   I attach a report by the Resource Policy and Planning Board (RPPB) addressing the performance audit conducted by the IBAN into the Time Accounting System used by the NATO Communications and Information Agency (NCIA).

1.1.   I do not believe that this matter requires discussion in the Council. Unless I hear comments to the contrary by **15:30 hours on Friday, 4 October 2019**, I will take it that the Council has noted the RPPB report and its conclusions, as well as the associated IBAN report, agrees to their public disclosure, and - as recommended by the RPPB - tasks the NATO Communications and Information Organization (NCIO) Agency Supervisory Board to:

- implement measures to ensure data accuracy and quality in time accounting system, based on systematic risk assessments and management oversight;

- review and strengthen internal controls of time accounting and explore and select options for enhanced automated controls;

- review time accounting guidance effectiveness and establish clear roles and responsibilities for managers to enforce time accounting accuracy, discipline and coherence;

- improve customers insight and transparency on actual human resources spent on service delivery and project implementation; and

- ensure adherence to time accounting good practices which includes developing a data governance policy to effectively manage business critical data.

(Signed) Jens Stoltenberg

1 Annex
1 enclosure

Original: English

NHQD142178

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ANNEX to
C-M(2019)0025 (INV)
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PERFORMANCE AUDIT REPORT TO COUNCIL ON THE NATO COMMUNICATIONS AND INFORMATION AGENCY TIME ACCOUNTING SYSTEM

Report by the Resource Policy and Planning Board

Reference:
A.   IBA-A(2019)0019   (IBAN performance audit on NCIA Time Accounting System)

INTRODUCTION

2.   At reference A, the IBAN submitted a performance audit report dealing with issues on the Time Accounting System (TAS) used by the NATO Communications and Information Agency (NCIA).

3.   In accordance with Article 15 of the NATO Financial Regulations, the RPPB is responsible to provide Council with comments and recommendations on the IBAN report.

BACKGROUND

4.   The audit objectives were to assess whether NCIA has mechanisms in place to ensure sufficient quality of data recorded in the TAS and to see if the NCIA time accounting principles and practices compare well with good practices for time accounting, recording and reporting.

5.   The IBAN found that the completeness of TAS data has generally improved since 2015 but that improving the data quality remains a challenge for NCIA. The IBAN also identified inadequate management oversight of TAS data and an incomplete and ineffective control framework. The IBAN found that this poses significant risks that the TAS data is still inadequate as the basis for cost calculations which means that NCIA cannot provide assurance that the invoicing of customers accurately reflects the costs incurred to provide projects and services. The IBAN concluded that given that NCIA is a privileged sole provider of projects and services to NATO, the Agency needs to provide more transparency regarding TAS data and the associated risks.

DETAILS

6.   As part of the performance audit the IBAN recognised that NCIA has made progress in improving the time accounting data quality since 2015 but believes that improvements are still necessary. To address the findings concerning the NCIA time accounting practices and principles, the IBAN made a number of recommendations for the Council to task the NCIO to:

6.1.   implement measures to ensure data accuracy and quality in TAS, based on systematic risk assessments and management oversight;

6.2.   review and strengthen internal controls of time accounting and explore and select options for enhanced automated controls;

6.3.   review time accounting guidance effectiveness and establish clear roles and responsibilities for managers to enforce time accounting accuracy, discipline and coherence;

6.4.   improve customers insight and transparency on actual human resources spent on service delivery and project implementation; and

6.5.   ensure adherence to time accounting good practices which includes developing a data governance policy to effectively manage business critical data.

7.   The RPPB welcomes the steps already taken by NCIA to improve time accounting since 2015 and the actions that have already been taken in response to the IBAN performance audit by the governance bodies responsible for the Agency. The NCIO Audit Committee considered the IBAN report at its meeting on 11 April 2019 and encouraged the Agency to embrace the spirit of the audit recommendations. The Audit Committee directed the Agency to prepare a remedial action plan for consideration at their meeting in October 2019. The NCIO Finance Committee further decided to bring the matter to the attention of the Agency Supervisory Board (ASB) given its essential governance role. At their meeting on 23 May 2019, the ASB endorsed the Finance Committee's recommendations for immediate, tangible improvements on the basis of sharp mitigation actions in order to enforce greater transparency and reliability of the Agency's cost structure.

CONCLUSIONS

8.   The RPPB considers that the IBAN performance audit is both timely and constructive in the context of the Board's current review of the Customer Funded Regulatory Framework which covers the overarching funding principles of the financial operations of NCIA. As a privileged sole provider of projects and services to NATO, an effective TAS is essential for the Agency to ensure that the invoicing of customers accurately reflects the costs incurred to provide projects and services.

9.   In broadly welcoming the IBAN report and its findings, the RPPB believes that Council can be reassured that actions have already been taken in response to the IBAN performance audit by the governance bodies responsible for the Agency. It will be important to ensure that the IBAN recommendations are implemented and the NCIO ASB will have the lead in overseeing these efforts. Following review of the remedial action plan by the NCIO Audit Committee in October 2019 regular updates on the matter will be provided to the NCIO Finance Committee and the ASB.

10.   In line with the extant policy on public disclosure of unclassified IBAN audit reports[1] the Board believes that the IBAN performance audit should be publicly disclosed.

RECOMMENDATIONS

11.   The RPPB invites the Council to:

11.1.   note this report and its conclusions;

11.2.   note the IBAN performance audit (reference A);

11.3.   task the NCIO ASB to implement the IBAN recommendations outlined at paragraph 5; and,

11.4.   agree to publicly disclose the IBAN performance audit together with this report.

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[1]   PO(2015)0052 and C-M(2012)0041

NATO UNCLASSIFIED

IBA-A(2019)0019
18 February 2019

To: Secretary General, International Staff
        Attn: Director of the Private Office

Cc: General Manager, NATO Communication and Information Agency
        Chief of Staff, Allied Command Operations
        Chief of Staff, Allied Command Transformation
        Chairman, Resource Policy and Planning Board
        Financial Controller, ACO
        Financial Controller, ACT
        Acting Financial Controller NCIA
        Head Internal Audit, NCIA
        Director, NATO Office of Resources
        Private Office Registry

Subject: *Performance audit report to Council on the NATO Communications and Information Agency need to increase time accounting data quality and improve efforts to ensure more effective and transparent time accounting principles and practices – IBA-AR(2018)0033*

Along with the submission herewith of its approved report and a Summary Note for distribution to the North Atlantic Council, the Board wishes to draw the Council's attention on the following issue.

In their formal comment letter in appendix 10 of the subject report, NCIA states that "We have reviewed the draft performance audit report (Reference A) and hereby submit our formal comments (Enclosure A). In case not all the factual comments it contains are in end taken into account in the final draft of the report I would be grateful if these could be incorporated into the NCI Agency's formal comments."

It is worth noting that the Board's contradictory clearing process is designed to ensure the final report is free of factual errors and contains the auditee's formal comments on the report's conclusions and recommendations. The Board's final audit report reflects changes from all factual comments that are substantiated and documented by the auditee with evidence.

As a matter of principle, applicable to all auditees, in such instances where a requested change is not substantiated with evidence, no change can be considered. Publishing undocumented factual comments or unsubstantiated requests for factual

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amendments would obviously affect the fairness of the clearing procedure and be misleading for the Nations.

In accordance with Article 15 of the NATO Financial Rules and Regulations, I have referred the documents to the Resource Policy and Planning Board (RPPB) for examination, comments and recommendations.

Yours sincerely,

Hervé-Adrien Metzger
Chairman

Attachment: As stated above.

Summary note to Council on the NATO Communications and Information Agency Need to Increase Time Accounting Data Quality and Implement Effective and Transparent Time Accounting Principles and Practices

Background

The NATO Communications and Information Agency (NCIA) was established on 1 July 2012 as a result of the merger of three NATO agencies. NCIA delivers computer information systems (CIS) to other NATO bodies. The North Atlantic Council (Council) approved the NATO Customer Funding Regulatory Framework (Framework) in July 2015. Because NCIA has no core budgetary funding, the rates charged to customers are based on NCIA's total cost of services with the goal of achieving financial break-even over the planning period. NCIA's management of customer funds, including the setting of accurate contract prices and invoicing of manpower costs, is an essential part of effective resource management in the agency.

The NCIA Time Accounting System (TAS) is the primary tool used by NCIA to record the use of manpower resources, which account for a significant portion of the agency's project and service delivery costs. Ensuring high quality of TAS data is critical to NCIA operations and can impact the prices customers pay NCIA for its services.

Audit objectives

This audit topic was selected as a result of IBAN's annual planning process. We conducted the audit in accordance with Article 14 of our charter. Our specific objectives are as follows:

1. Does NCIA have mechanisms in place to ensure sufficient quality of data recorded in TAS?

2. Do NCIA time accounting principles and practices compare well with good practices for time accounting, recording, and reporting?

Audit findings

The completeness of TAS data has generally improved since 2015. However, improving the data quality remains a challenge for NCIA. Persistent issues with TAS data quality and inadequate mechanisms for assessing the data quality poses significant risks to NCIA and its customers since cost estimates used in billing of customers might not be correct. We also identified inadequate management oversight of TAS data and an incomplete and ineffective control framework. This poses significant risks that TAS data is still inadequate as the basis for cost calculations.

Since NCIA has not conducted any systematic risk or data quality assessments of the data recorded in TAS, estimates are not based on formal risk assessments or measures taken to mitigate the impact of potential data quality issues. Weaknesses in time accounting information and policies could impact the reliability of data derived

from TAS and shared with customers and other stakeholders, including financial reporting. Such weaknesses ultimately affect the trust among NCIA, as a customer funded agency, and its customers, governing bodies and other stakeholders.

NCIA has taken steps to implement a process for the development of the annual customer rates. A central question is whether NCIA in the near future can achieve high level time accounting data, which sufficiently and correctly could inform NCIA's customers and other stakeholders about NCIA's use of resources. This is important because NCIA has to be able to justify the costs associated with, for example, providing projects and services as well as its overall management of resources. The weaknesses in data quality means that NCIA cannot provide assurance that the invoicing of customers accurately reflects the costs incurred to provide projects and services. Therefore, this raises an issue of fairness and equity as estimates used for allocation of costs among NCIA customers might not fairly reflect their share of the overall costs.

NCIA is facing serious data governance challenges, as strong and reliable time accounting data is the basis for several critical business processes. It is essential that the Agency conduct more analytical work on TAS data in order to identify, manage, and mitigate risks. Given the fact that NCIA is a privileged sole provider of projects and services to NATO, it is our assessment that the Agency needs to provide more transparency regarding TAS data and the associated risks. This is necessary to maintain the trust between the Agency, their customers, and other stakeholders.

Recommendations

NCIA has made progress in improving the time accounting data quality since 2015 but improvements are still necessary. To address the findings concerning the NCIA time accounting practices and principles, we recommend that Council task the NCIO to:

1) Implement measures to ensure data accuracy and quality in TAS, based on systematic risk assessments and management oversight.

2) Review and strengthen internal controls of time accounting and explore and select options for enhanced automated controls.

3) Review time accounting guidance effectiveness and establish clear roles and responsibilities for managers to enforce time accounting accuracy, discipline and coherence.

4) Improve customer's insight and transparency on actual human resources spent on service delivery and project implementation.

5) Ensure adherence to time accounting good practices which includes developing a data governance policy to effectively manage business critical data.

All tasking decisions by Council should clearly identify those responsible to take action and set deadlines for the delivery of the expected outcomes.

In their formal comments, NCIA agreed with the findings, conclusions, and recommendations in our report except for one issue about accuracy and data quality in NCIA TAS. IBAN's response to this issue appears in chapter 6 of the report. IBAN maintain its position, as NCIA has not verified nor substantiated their comments on the quality of the TAS data.

8 February 2019

International Board of Auditors for NATO

The NATO Communications and Information Agency Need to Increase Time Accounting Data Quality and Improve Efforts to Ensure More Effective and Transparent Time Accounting Principles and Practices

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1. Background

1.1 Overview

1.1.1   The NATO Communications and Information Agency (NCIA) was established on 1 July 2012 as a result of the merger of three NATO agencies. The mission of the agency is to deliver computer information systems (CIS) to other NATO bodies. The main locations of NCIA are in Brussels, Belgium and the Hague, Netherlands. NCIA staff work at more than 25 other locations. As of June 2018, NCIA has over 3000 staff (including civilian, military and contract staff). NCIA is a NATO customer funded body. In 2017 the agency generated revenues of EUR 770 million and incurred expenses of EUR 769 million, resulting in a surplus of EUR 1 million. Appendix 1 provides more information on NCIA locations and organisational elements.

1.1.2   NCIA is governed by its Agency Supervisory Board (ASB) composed of a representative from each NATO Nation. The ASB appoints the General Manager of the Agency and oversees the work of the agency. The ASB also submits reports to the North Atlantic Council (Council), issues directives and makes general policy decisions to enable NCIA to carry out its work. Decisions on issues such as policy, finance, organisation and establishment require unanimous agreement. Together the NCIA and the ASB is referred to as the NATO Communication and Information Organisation (NCIO).

1.1.3   The NCIA Time Accounting System (TAS) is the primary tool used by NCIA to record the use of manpower resources, which account for a significant portion of the agency's project and service delivery costs.

1.1.4   Correct cost calculation is important to establish trust between the customer and the agency as NATO's privileged sole capability provider and CIS services supplier. NCIA management, customers, and stakeholders must be assured that the TAS is used as intended for the correct allocation of work hours. It is also essential that proper management oversight and internal controls are in place in order to maintain high data quality to facilitate accountability and transparency of operations. NCIA's management of customer funds, including the setting of accurate contract prices and invoicing of manpower costs, is an essential part of effective resource management in the agency.

Customer Funding Framework

1.1.5   NCIA must adhere to the NCIO Financial Rules and Procedures and the NATO Customer Funding Regulatory Framework (Framework) which forms the basis of NCIA financial operations. Council approved the Framework in July 2015. The Framework covers the overarching funding principles, the definition of customers, customer roles and responsibilities, the roles of stakeholders in the governance of NCIA—including the NCIA ASB, Resource Policy and Planning Board (RPPB), NATO Budget Committee (BC), Investment Committee (IC), and the pricing of NCIA services, among other things.

1.1.6   The Framework provides for the use of funds that allows for an accumulated surplus or deficit on an annual basis. Because NCIA has no core budgetary funding, the rates charged to customers are based on NCIA's total cost of services with the goal of achieving financial break-even over the planning period.

1.1.7   According to NCIA, the full implementation of the Framework, the establishment of a mature catalogue of services, and the consolidation of various legacy computing systems under one Enterprise Business Application were expected to be in place from 2018.

1.1.8   The prices NCIA's customers pay for services and project implementation are termed the service support costs and project implementation costs. The calculation of these costs are based on a model by which NCIA allocates its costs to projects and services and subsequently calculates services rates. To establish the level of effort (or the manpower needed to deliver the service or project) NCIA uses actual data from TAS. More specifically this is the determination of the level of effort required for billable staff to deliver projects and services used in its annual customer rate calculation, and ultimately the price charged to customers. The accuracy and completeness of TAS data is therefore important to ensure correct cost estimation. We further describe NCIA processes for determining customer rates and the role of TAS in Appendix 2.

Previously identified issues with TAS

1.1.9   In 2015, the NCIA Office of the Internal Auditor (IA) conducted an audit related to the time accounting data quality of NCIA. This audit identified significant data quality issues and deficiencies in relation to time accounting practices at NCIA.

1.1.10 NCIA management agreed with the findings in the 2015 IA report. In its current strategic plan, the Agency agreed it was not able to report accurate data on the status of programmes and that project data were not current or accurate. Additionally, NCIA expressed they would work with the NATO Office of Resources and with NATO oversight committees (including the BC, among others) to adapt the NCIA business processes and practices to allow for more business-like decisions by the NCIA.

1.1.11 The International Board of Auditors for NATO (IBAN) 2016 Financial Statement Audit report also identified weaknesses related to the quality of data recorded in TAS in 2015 for NCIA projects. The NCIA ASB agreed to improve TAS recording and management in its response to the 2016 report. In its response to the 2017 follow-up report, the NCIA ASB replied that they would continue to monitor and improve its time accounting processes including improving TAS quality with improved functionality that allows for better internal control.

1.2   Audit objectives

1.2.1   In accordance with Articles 2 and 14 of the IBAN Charter, our performance audit assessed the mechanisms used to ensure the quality of data in TAS used to track staff hours

billed to various NCIA projects and service contracts. Our specific audit objectives were as follows:

1. Does NCIA have mechanisms in place to ensure sufficient quality of data recorded in TAS?

2. Do NCIA time accounting principles and practices compare well with good practices for time accounting, recording, and reporting?

1.3 Audit scope and methodology

1.3.1 The audit scope focused on issues related to NCIA's current time accounting principles and practices, the TAS system, and effects of this on the NCIA business and governance model. The scope also included whether or not NCIA practices align with good practices for managing time accounting systems used by other organisations. As TAS data is essential to the model, the audit focused on cost accounting elements that relates to the use of TAS data (Level of Effort calculations) and potential risks from this use.

1.3.2 We reviewed NATO and NCIA documentation including NCIA operating directives and guidance related to the implementation of the Framework. Further, we studied information on the creation of customer rates and service rates, and on cost accounting information provided to the NCIA ASB and Finance Committee, as well as, information provided to the RPPB, BC, IC, and other relevant bodies including the International Staff (IS).

1.3.3 Our audit encompassed the current processes related to TAS and the ongoing efforts to strengthen internal control mechanisms. The development of the new Enterprise Business Application system is ongoing and we did not assess NCIA's plan for its acquisition or implementation.

1.3.4 We also interviewed officials from NCIA including key staff responsible for TAS data management, Internal Audit officials, and project and line management. We also interviewed officials from Allied Command Operations (ACO), Allied Command Transformation (ACT), Centre for Maritime Research and Experimentation (CMRE), and met with the IS.

1.3.5 For objective 1, we assessed the control mechanisms in place by analysing NATO and NCIA documentation to identify relevant criteria such as the NATO Financial Regulations (NFRs) related to Internal Control. We also reviewed the NCIA TAS standard operating procedure (SOP) and guidelines that describes the roles and responsibilities of NCIA staff.

1.3.6 To assess the quality of data contained in TAS, we used criteria developed by external experts, such as the Data Governance Institute and the UK chapter of the International Data Management Association. Additionally, we relied on the 2013 Committee of Sponsoring Organisations of the Treadway Commission (COSO) framework for evaluating internal controls.

1.3.7 Finally, we analysed TAS data from 2017 and 2018 for a census (reflecting the entire population for a time period) and a judgmental sample (selection of cases based on specific criteria and professional judgment). Appendix 3 provides more detail on the methodology we used in selecting projects for the census and the judgmental sample.

1.3.8 To address audit objective 2, we identified 6 international organisations to include in the identification of good practices including data quality and internal control practices. We interviewed and obtained information about time accounting practices from 4 of the 6 organisations. These organisations included the European Space Agency, the International Civil Aviation Organization, the Organization for Economic Cooperation and Development, and the European Organisation for the Exploitation of Meteorological Satellites. We also considered time accounting standards and practices identified by Supreme Audit Institutions (SAIs).

1.3.9 We excluded the Active Network Infrastructure project from the scope of this review as we plan to conduct a separate performance audit of the Active Network Infrastructure project in 2019.

2. Completeness of TAS data has improved but NCIA needs to ensure better data quality

2.1 In this section, we assessed if NCIA had developed mechanisms to ensure the quality of TAS data. We also assessed if TAS data quality had improved since 2015 and whether adherence to NCIA time accounting guidance had been achieved.

Data quality dimensions

2.2 According to data management standards, data quality consists of six core dimensions: completeness, uniqueness, timeliness, validity, accuracy, consistency. For the purposes of our analyses, we decided to focus on completeness and accuracy. We focused on completeness because it is the first step in assessing critical data. Completeness is a measure of the absence of blank or missing values. After an acceptable threshold of data completeness is achieved, the next step is to assess the most important quality dimensions.

2.3 We determined that accuracy of the TAS data was the second most critical dimension to assess because the accuracy of TAS data is important in order to ensure correct cost estimation of manpower costs. Because not capturing the true manpower costs of services could adversely impact the Agency in operating and sustaining a customer-funded model and achieving strategic goals and objectives. As also noted in the 2015 IA report, the value of TAS data is dependent on its completeness and accuracy.

Staff categories at NCIA

2.4   For planning purposes, all NCIA posts are classified as billable or non-billable. This label is a major factor in the calculation of the annual customer rates which directly impacts the prices NCIA is charging to customers for delivering projects and services.

2.5   There are 3 categories of staff at NCIA whose work hours are recorded in TAS:

- **Billable staff** (direct resources) work on activities that directly contribute to the delivery of a specific project or service. This covers the majority of staff within CIS Support Units, Application Service Lines, Infrastructure Service Lines, CIS Sustainment Support Center (CSSC), Acquisition Directorate, Air and Missile Defence Command and Control Directorate, and some staff in Service Strategy and Demand Management.

- **Non-billable staff** (indirect resources) work on activities that support the functioning of the entire Agency. This includes the majority of staff in Human Resources, Finance, General Services, Executive Management, and Legal staff.

- **Part-billable staff** work on both types of activities.

Completeness of TAS data has improved since 2015 but data quality is still poor

2.6   The completeness and quality of data recorded in the TAS (as a measurement of accuracy) are essential for NCIA resource management and a prerequisite for accurate cost calculation, which is the basis for charging NCIA's customers. A NCIA standard workweek is 38 hours. NCIA Directive for Working Hours and Special Working Arrangements provides a standard of measurement for assessing the quality of TAS data and compliance with Agency time accounting policies. This guidance requires staff to work an average of 38 hours per week in TAS, and to record the actual hours worked—even if it exceeds 38 hours in a given week.

2.7   The NCIA working hours directive states that all staff must work as a minimum the prescribed working hours and record all time worked on agency business including travel time in the TAS and any hours in excess of the standard working hours. The prescribed working hours are 38 each week, to be worked as an average over the year. It says that staff are to record 38 hours per week and 7,6 hours per day on average. Further, according to the working directive staff are not allowed to work habitual overtime.

2.8   Our analyses found that the completeness of TAS data has improved since 2015. We analysed the hours recorded in TAS for 2017 by organisational elements and for the CIS support units at NCIA and found that there were no staff who had not recorded hours in TAS—compared with the 7 percent of NCIA staff who did not record any hours in TAS for 2015.

2.9   The improved completeness of TAS data can be attributed to better management guidance on TAS, the mandatory training of new staff on TAS applications and better communication from managers underscoring the importance of accurate time recording in TAS. These actions may have resulted in the increased discipline for NCIA staff on time accounting completion that led to the improved completeness of TAS data.

2.10   For example, in Demand Management, where the majority of staff are considered billable, we found that the average of staff recording exactly 38 hours increased 61 percentage points in 2017 (from 37 percent in 2015 to 98 percent in 2017). In contrast, 68 percent of staff who worked in Acquisition recorded exactly 38 hours on average in 2017 (from 67 percent in 2015) and 24 percent of staff recorded more than 38 hours on average (from 11 percent in 2015). The majority of Acquisition staff are also billable or work directly on customer projects. Appendix 4 further describes the results of our comparative analyses.

2.11   Despite improvements to the completeness of the data, we also found that there were still staff who recorded fewer than the prescribed 38 hours on average per week. We did not analyse whether or not this discrepancy indicates an inappropriate and inaccurate use of the system. However, we can conclude that this reflects a lack of compliance with NCIA's requirement to work and record an average of 38 hours per week.

Accuracy of TAS data is still poor

2.12   In its 2015 report, IA noted insufficient discipline regarding time accounting completion and its significant impact on data accuracy. However, despite improvements to the time accounting completion since 2015, our analyses found that data recorded in TAS is still of poor quality as a high percentage of staff recorded exactly 38 hours per week and may not have recorded the actual hours worked if they exceeded 38 hours.

2.13   In some organisational units (Human Resources or General Services, as examples) it would be reasonable for most staff to work the standard 38 hours per week on average. However, for staff who work on activities that directly contribute to the delivery of a specific project or service, their work hours are more likely to increase (and fluctuate) depending on the needs and timeframes of the project or service being provided. In such cases, NCIA guidance requires staff to record their actual hours worked. However, NCIA has not developed the mechanisms necessary to ensure that this guidance is being adhered to by all staff. Consequently, NCIA cannot certify the quality of TAS data.

2.14   Additionally, our analyses of TAS 2018 Quarter 1 data revealed 16,868 billable hours that should have been recorded in TAS but were not recorded at all. This represents EUR 1.4 million (If multiplied by an average customer rate of EUR 84 per hour). NCIA officials informed us that data records are closed out every 3 months and only designated staff can make edits to the time records after this period. As of June 2018, Quarter 1 time records were closed seemingly without reconciling the missing time records. Although the missing records only represent about one percent of all billable time recorded in TAS for Quarter 1, it reflects a weakness in NCIA's controls that could inadvertently impact data

accuracy and a potential loss of revenue recognition if not accounted for in the year-end close out of projects.

Conclusion

2.15   The completeness of data has generally improved since 2015 because all staff are now recording hours in TAS. However, improving the data quality remains a challenge for NCIA. The Agency has not conducted any analyses of the quality of the data, and therefore they have no evidence-based understanding of the problems they face. Subsequently, the Agency has no roadmap in guiding its efforts to ensure the data quality. Persistent issues with TAS data quality and inadequate mechanisms for assessing the data quality poses significant risks to NCIA and its customers since cost estimates used in billing of customers might not be correct.

3.   More effective internal controls are needed to improve TAS data quality

3.1   In this section, we assessed the time accounting processes and control activities related to TAS as described in the NCIA SOP for TAS. The SOP provides guidance on the tools to be used by those approving time records in TAS and contains the principles and procedures underlying the time accounting process. Appendix 5 describes the SOP's steps in NCIA time accounting process.

3.2   Effective controls address challenges arising from human judgment, misunderstandings, or mistakes. They also address management overrides that allow senior level personnel to override the prescribed policies and procedures, and mitigate collusion or instances where individuals could act collectively to circumvent the controls built into a time accounting process. When considering, designing, and implementing controls the cost and benefits should be assessed. NCIA management in charge of the Internal Control framework, as indicated in Article 12 of the NFRs, "have the responsibility to ensure that internal control arrangements are in place for the delivery of objectives and operational efficiency in all areas of business, not just the financial domain." The COSO 2013 framework on Internal Control states that organisations should focus on control activities that contribute to the mitigation of risks to the achievement of objectives.

Human controls

3.3   NCIA relies primarily on human controls, as opposed to automated controls, to manage its time records in TAS. Overall, we found that NCIA relies on the ability and willingness of managers to detect inaccurate recordings in TAS and that neither the human or automated controls are designed to detect systematic abuse.

3.4   We identified human controls that focused on three areas: segregation between approvers of recorded time, self - approval for certain staff, and processes for managing disputes and erroneous time recording. Based on our assessment of these control activities,

the segregation between approvers of recorded time in TAS partially adheres to COSO principles. More specifically, this control in TAS requires approval and rejection of time sheets for both billable and non-billable staff by more than one approver—with the exception of administrative tasks that are only approved by the timesheet manager as illustrated in figure 1.

Figure 1: Segregation of responsibilities in approval of tasks and timesheets
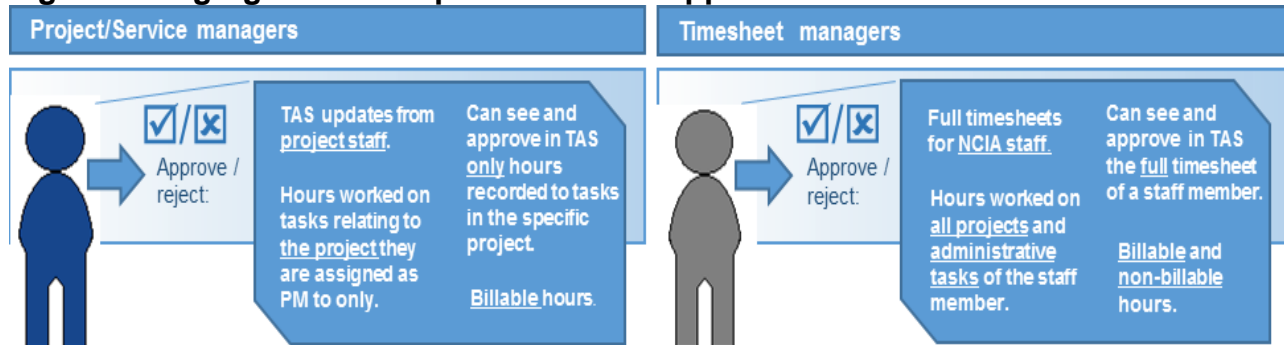
Sources: NCIA TAS SOP and NCIA staff.

3.5   Figure 1 shows that hours recorded to projects and service delivery have double level approval as these hours are approved by both the project and timesheet manager. Administrative hours are approved by the timesheet manager only. This includes approval of timesheets of staff that only performs administrative tasks and thus only record administrative hours. It also includes administrative hours recorded by staff working on projects or services that the project manager does not see nor approve.

3.6   The self-approval of time records allows project managers and others to approve their own hours recorded in TAS to their project before submitting these to their timesheet manager for final approval of their timesheets. However, timesheet managers and senior staff can approve their own timesheets with no additional level of approval except when senior management staff contributes to billable activities. In this case, the project manager approves time recorded by senior management staff to that project manager's project. The project manager may not have an equivalent or higher grade as the senior staff member whose time recording the project manager is approving. While COSO principles require organisations to consider at what level activities are applied—including the segregation of duties—the practice of allowing certain staff to self-approve time records is a weakness in NCIA's control framework if the Agency has not adequately considered the risks of such a practice.

3.7   Finally, NCIA's procedures for resolving disputes and mitigating erroneous time recording in TAS is limited because the process allows managers flexibility in how disputes are resolved and the process is not formalized. For rejected time records, the process allows for either a verbal or email discussion to address adjustments or corrections. Some project managers we interviewed bypass this process by not rejecting the time recorded in TAS. Instead they discuss possible adjustments or corrections verbally with the staff member and then simply approve the time record once the agreed upon changes occur. Since the resolution and approval of the timesheet has taken place in TAS without using the reject

function, as described in the NCIA SOP for TAS, there is no record of edits to the time record in TAS. This limits management's ability to monitor approvals or rejections as they occur. NCIA officials stated that the agency sees this as a pragmatic solution that saves time and effort and that it results in accurate time sheets and therefore, does not consider it an internal control weakness.

Automated controls

3.8   TAS automated controls are primarily designed around read and write privileges that restrict access levels and users ability to enter and/or change recorded time accounting information in the system. As such, they are preventive in nature. Automated controls are usually harder to override than human controls, which often depend on verbal agreements of approvals and rejections. We identified several automated controls in TAS and we determined that most of the automated controls do not support the managers who are implementing human controls and are not sufficient for the purpose of detecting incorrect time records and monitoring the status of time records. The system lacks logical automated controls such as warning functions or pop up reminders that inform staff about future activities or deadlines.

3.9   NCIA officials reported that the system is not designed to detect systematic abuse. The existing automated controls in TAS are only to a limited extent supported by reports or warnings if hours are recorded incorrect. Additionally, the status of time records are only snapshots and once the status changes the record is updated and the prior status of the time record is not retained in TAS. Therefore, the system does not allow managers to retain historical data related to approvals or rejections by project or across the Agency. Such historical data could prove useful to NCIA management as they reassess policies and procedures related to TAS. Appendix 6 provides more details on the human and automated controls we identified.

Conclusion

3.10   Our analyses found that the existing internal controls need to be strengthened so that NCIA has reasonable assurance that the accuracy and validity of TAS data used in its calculation of manpower costs are correct. In our assessment, the current human and automated controls are insufficient to detect and prevent the risk of collusion, overrides, misjudgment and mistakes. Taken together, such risks can lead to inaccurate and incomplete recording of hours, for example between tasks in a project or misallocation of hours between projects with different customers. This includes both unintentional and intentional inaccurate or incomplete recording of hours. NCIA has a validation function in place that monitors and validates NCIA TAS data, but our data quality analysis has shown that it does not capture and ensure compliance and accuracy significantly better than in 2015. Consequently, NCIA management does not have reasonable assurance that their time accounting procedures and controls are effective.

4. NCIA follows good time accounting practices in some areas but should assess and manage data quality risks and demonstrate a higher level of transparency

4.1   In this section, we assessed NCIA time accounting principles and practices against good practices identified for time accounting. Further, we examined if data governance procedures used for managing, monitoring, and protecting TAS data were in place. We also assessed the impact of time accounting data quality and practices on the reliability of NCIA reporting to customers and other stakeholders.

Good practices for time accounting - public international organisations

4.2   To identify good time accounting practices, we surveyed a number of international organisations and analysed time accounting standards and practices identified by SAIs. While the practices we identified are specific to the entities, among the international organisations, there was broad agreement on the practices and the importance of implementing them. In table 1, we compare the current NCIA practices with the good practices we identified.

Table 1: Good practices for more transparent and accountable time recording

Good practices	NCIA practices	
Written guidelines and policies available to all staff.	Yes	
Uses an automated system that records the number of hours worked on projects to external customers.	Limited	
Shortened close out period for staff to record and edit hours worked.	Limited	
The organization has made all signed time sheets visible to all staff.	Yes	Transparent and accountable time recording
Regularly using time accounting data in monitoring and performance reporting to management, governance and steering bodies, or customers.	Limited	
Recording of hours worked is centralized and done by another staff person, such as an administrative staff, and not by the staff themselves.	No	
Supervisors are required to exercise control over employees working at remote sites to ensure that time and accounting information accurately reflects time worked.	Limited	

Source: IBAN Analysis.

4.3   Table 1 shows that NCIA fully adhered to 2 of the 7 good practices and adherence to 4 additional good practices is limited. NCIA has written guidelines and policies accessible to all staff and has made time sheets visible to all staff. However, NCIA has not centralized the recording of hours. The decentralization of time records and reliance on a manual TAS (as opposed to a more automated system), increases the risk of fraudulent or erroneous time records. The cost and benefits of a more centralised time accounting practice should be considered, while considering NCIA characteristics.

4.4   We also found that NCIA supervisory staff have limited tools and guidelines for managing staff in multiple locations. NCIA staff and supervisors reported that supervisors apply extra monitoring in situations where supervisor and team members are not working at the same location. However, there are no formalized or documented guidelines to assist supervisory staff in applying enhanced monitoring in such situations.

4.5   While we found that NCIA had developed written policies and procedures, governing time and attendance requirements, there is no guidance that informs staff on how to use TAS data optimally when estimating resource needs or prepare cost calculations. Consequently, cost estimates are developed on a case-by-case basis leaving the utilization and interpretation of TAS data to the staff involved in the cost estimation. This can lead to significant variance in how estimates are developed and substantiated across the Agency and trust between NCIA and its customers could be affected if transparency, comparability, and standardization are absent from the cost estimation processes. See Appendix 7 to view our entire assessment of TAS practices compared to other international organisations.

Good practices - risk management and data governance standards

4.6   According to internal control standards, accounting standards, and practices identified by SAIs, conducting risk assessments should indicate the risks identified and how they are managed. Further, the COSO framework emphasizes that organisations should consider the potential for fraud in assessing risks to the achievement of organisational objectives.

4.7   NCIA acknowledged its inability to report accurate data on the status of its programmes in the current NCIA Agency Strategic Plan. Given the importance of risk assessments to the achievement of NCIA's strategic objectives, we enquired if the Agency had conducted any systematic risk analyses or data quality assessments related to TAS. NCIA responded that no such analyses were conducted, despite IA reporting on the insufficient quality of TAS data in its 2015 report. The 2015 IA report identified a number of risks related to NCIA Time Accounting. These risks were the following:

- Inadequate decision making and cost management.
- Loss of staff motivation for performing time accounting activities.
- Inadequate workload-work capacity assessment.
- Inadequate revenue recognition and cost-to-complete process.
- Lack of clear identification and overview of contractors/consultants costs.
- Insufficient funding to finance contractors/consultants support.

- Customer's rates and project support costs rates not correctly developed.
- Some financial risk analysis has been conducted by the agency, such as in connection with the annual Customer Rates development and approval.

4.8   While data quality assessments are only one component of a risk assessment, the risks that IA and NCIA senior management identified in their reports, were primarily the result of insufficient data quality and the inability to report accurate data to customers and other stakeholders. As shown above, several types of risk can be associated with poor data quality.

4.9   NCIA currently has no data governance policy. Without such a policy, NCIA lacks a mechanism for standardizing data processes and procedures for enterprise data (or Agency-wide data) and for monitoring and safeguarding critical data. Additionally, it makes it difficult to define the accountabilities for data stewardship activities. According to data management good practices, organisations should implement a data governance policy. As noted throughout this report, TAS data is critical to several activities and is used widely within and external to the organisation. The Data Governance Institute defines the universal goals of a data governance programme or policy as follows:

1. Enable better decision-making.
2. Reduce operational friction.
3. Protect the needs of data stakeholders.
4. Train management and staff to adopt common approaches to data issues.
5. Build standard, repeatable processes.
6. Reduce costs and increase effectiveness through coordination of efforts.
7. Ensure transparency of processes.

Transparency and reporting

4.10   In the previous sections, we identified significant issues with TAS data quality. The shortfalls are important, as TAS data is critical to several NCIA activities, but mainly the use of TAS data in estimating the workforce resources needed to deliver projects and services to NATO customers. The project cost calculations are important to NCIA's reporting on breakeven, revenue earned, and future forecasts. TAS data is also used to inform the business and financial plans of the Agency and data is utilized as part of NCIA executive management reporting, including the monthly operations reporting which provides status to NCIA management.

4.11   NCIA has not achieved the level of transparency with respect to reporting on the services delivered and the attendant costs to be achieved required by the Framework. This is evidenced by NCIA's own acknowledgement, in its current strategic plan, of inaccurate and misleading project plans and the loss of trust between itself, the Nations, and its customers.

4.12   As part of our review, we received written responses and interviewed officials from IS, ACO, and ACT to better understand the relationship between NCIA and their customers. NCIA and their customers have formalized processes in place to facilitate the

implementation of projects. However, some ACT and ACO officials stated that the lack of transparency regarding the actual NCIA manpower estimates used for delivering projects and services makes it difficult for them to assess if the amount of manpower involved and billed to customers are fair and reasonable. Manpower issues may be discussed at the quarterly project review meeting, but no systematic access to TAS data is provided to the customers.

4.13   The Framework was reviewed in 2017 by the RPPB and while no major changes were made, a more comprehensive evaluation is planned to take place in 2019. The RPPB review in 2017 concluded that none of the intended objectives of the Framework in terms of value for money for its customers and effectiveness have yet been achieved. In June 2018, the BC reported that NCIA has now taken steps to develop a process for the development of the annual customer rates.

Conclusion

4.14   TAS data from previous years can be used as basis for estimating future resource needs, including estimates for the future costs of a project or service provided to NATO customers. Since NCIA has not conducted any systematic risk or data quality assessments of the data recorded in TAS, estimates are not based on formal risk assessments or measures taken to mitigate the impact of potential data quality issues. Therefore, NCIA has not implemented good practices in the areas of risk assessment and data quality governance. Weaknesses in time accounting information and policies could impact the reliability of data derived from TAS and shared with customers and other stakeholders, including financial reporting. Such weaknesses ultimately affect the trust among NCIA, as a customer funded agency, and its customers, governing bodies and other stakeholders.

5.   Conclusion and recommendations

5.1   Conclusion

5.1.1   We found that NCIA made some improvements in the data quality since 2015. All staff are now recording hours in TAS and the data is therefore more complete. However, our analysis of 2017 TAS data found that the quality of data is still poor because a very high percentage of staff is recording exactly 38 hour a week which may indicate that they are not recording the exact number of hours they work. NCIA has not conducted any analyses of the TAS data or risk assessment of the data. Therefore, they do not have a proper basis for improving the data quality. We also identified inadequate management oversight of TAS data and an incomplete and ineffective control framework. This poses significant risks that TAS data is still inadequate as the basis for cost calculations.

5.1.2   NCIA provides limited information on time accounting to their customers, although customers and other stakeholders have expressed concerns about the actual NCIA hours spent delivering projects and services. A central question is whether NCIA in the near future can achieve high level time accounting data, which sufficiently and correctly could inform

NCIA's customers and other stakeholders about the use of resources providing with projects and services. This is important because NCIA has to be able to justify the costs associated with, for example, providing projects and services, as well as its overall management of resources. The weaknesses in data quality means that NCIA cannot provide assurance that the invoicing of customers accurately reflects the costs incurred to provide projects and services. Therefore, this raises an issue of fairness and equity as estimates used for allocation of costs among NCIA customers might not fairly reflect their share of the overall costs.

5.1.3   Additionally, we conclude that NCIA has now taken steps to implement a process for the development of the annual customer rates. NCIA's adequate implementation of this process (which includes the NCIA ASB's oversight) will be critical components in the successful establishment of a repetitive, understandable, and transparent process for the calculation of the annual customer rates as stated in the Framework.

5.1.4   We conclude that NCIA is facing serious data governance challenges, as strong and reliable time accounting data is the basis for several critical business processes. It is essential that the Agency conduct more analytical work on TAS data in order to identify, manage, and mitigate risks. Given the fact that NCIA is a privileged sole provider of projects and services to NATO, it is our assessment that the Agency needs to provide more transparency regarding TAS data and the associated risks. This is necessary to maintain the trust between the Agency, their customers, and other stakeholders.

5.2   Recommendations

5.2.1   NCIA has made progress in improving the time accounting data quality since 2015 but improvements are still necessary. To address the findings concerning the NCIA time accounting practices and principles, we recommend that Council task the NCIO to:

1) Implement measures to ensure data accuracy and quality in TAS, based on systematic risk assessments and management oversight.

2) Review and strengthen internal controls of time accounting and explore and select options for enhanced automated controls.

3) Review time accounting guidance effectiveness and establish clear roles and responsibilities for managers to enforce time accounting accuracy, discipline and coherence.

4) Improve customer's insight and transparency on actual human resources spent on service delivery and project implementation.

5) Ensure adherence to time accounting good practices which includes developing a data governance policy to effectively manage business critical data.

5.2.2   All tasking decisions by Council should clearly identify those responsible to take action and set deadlines for the delivery of the expected outcomes.

6.   Comments received and the IBAN position

NCIA comments

6.1.   We received formal comments from NCIA and the full text is in Appendix 10.

6.2.   In general, NCIA agreed with the findings, conclusions, and recommendations in our report except for one issue about accuracy and data quality in NCIA TAS. NCIA states that it has already taken actions to establish and implement good practices in order to improve time accounting. It further states that some of the Board's recommendations will be addressed as part of the on-going implementation of the NCIO Internal Control Framework and the Enterprise Business Application (EBA), which are expected to strengthen the existing controls.

6.3.   In the formal comments NCIA also states that the report underlines the good practices already established and implemented by NCIA. NCIA further comments that the report does not make any reference to the complexity of TAS and the fact that NCIA is the only major NATO entity to account for staff time. NCIA also states that TAS provides significant granularity on the use of staff resources and how this effort is delivering to customers, which aids transparency and accountability.

6.4.   Finally, NCIA did not support our conclusion that the accuracy and data quality of TAS is still poor. NCIA asserted that these conclusions are based upon an incomplete analysis and are not supported by NCIA analysis. NCIA also states that the main reason for these IBAN conclusions is that many staff have been perceived as booking less than the 38 hours average that is required across the year. NCIA also states that it is correct that many staff do record less than 38 hours in many weeks, but this is compensated by additional hours in other weeks, plus, the conditioned hours at some NCIA locations is 37.5 or less. NCIA therefore found that it is correct that the average for these staff is less than 38. NCIA also found that the analysis also needs to consider staff who work part-time and shift work, which also results in an average less than 38. NCIA stated that these factors, when taken fully into consideration, the result is a lower instance of staff that are not in compliance with NCIA guidance.

IBAN position

6.5.   IBAN finds it positive that NCIA is working to strengthen its time accounting going forward, including internal controls. We recognise that time accounting can be complex, but under the current customer funding conditions, NCIA time accounting of a high standard is pivotal as NCIA is NATO's sole CIS provider. In relation to the NCIA comment on how TAS currently aids transparency and accountability, it is our position that as only very limited

information from TAS is shared with customers, it leaves further room for enhancing transparency and accountability through the sharing of data from NCIA TAS.

6.6.   NCIA states, as described in section 6.4, that the main reason IBAN is concluding that data quality is poor is because some NCIA staff are recording less than 38 hours on average over the period of a year. This is incorrect, because in section 5.1.1 of the overall conclusion of this report, we conclude that the quality of data is still poor because a very high percentage of staff is recording exactly 38 hours a week, which may indicate that they are not recording the exact number of hours they work. Further, IBAN's overall conclusion of this report is substantiated by a methodological approach that included three different types of analyses. We analysed the completeness of TAS data, the accuracy of the data, and the compliance of TAS data with NCIA's NCIA Working Hours Directive (See Appendixes 3 and 4). We recount these three analyses in more detail in the sections below. For these reasons, TAS data quality is still poor:

- In section 2.8, we found that the completeness of TAS data had improved since 2015. We analysed the hours recorded in TAS for 2017 and determined that there were no staff who had not recorded hours in TAS—compared with 7 percent of the NCIA staff who did not record any hours in TAS for 2015.

- In the report, section 2.11, we found that there were still staff who recorded fewer than the prescribed 38 hours on average per week over the year. This includes billable staff. NCIA states in its comments that staff recording less than the required 38 hours on average and staff not working 38 hours in some weeks compensate for this by additional hours in other weeks. We recognise that NCIA allows for flexibility so that staff in one week may work fewer than 38 hours and in subsequent weeks work more than 38 hours. However, when this is the case, staff should still average at least 38 hours a week over the period of a year to be compliant with NCIA's requirements. If staff work and/or record less than 38 hours on average over the year, they are not compliant with NCIA's own requirement.

- In section 2.12, our analyses found that a high percentage of staff recorded exactly 38 hours per week on average, which may indicate that they are not accurately recording the exact number of hours they work.

- Additionally, in section 2.14, our analyses of TAS 2018 Quarter 1 data revealed 16,868 billable hours that should have been recorded in TAS but were not recorded at all. NCIA officials informed us that TAS records are closed out every 3 months, but as of June 2018, Quarter 1 time records were closed seemingly without reconciling the missing time records. While the missing records are a small percentage of the overall billable time recorded in TAS for the period, this reflects a weakness in NCIA's controls that could impact data accuracy and completeness if not resolved.

6.7.　　As noted by NCIA in its comments, there are staff who work part-time hours and shift work. We agree that average calculations may hide disparities in the data for certain categories of employees. However, our analyses of 2017 TAS data showed that the percentage of the workforce who work part-time or are shift workers is not significant to impact the results of the analyses.

6.8.　　Finally, we note that NCIA has not conducted any comprehensive analyses of TAS data since the 2015 Internal Audit Report. The improvements stated by NCIA have not been verified nor substantiated by any data analyses.

6.9.　　For the reasons stated above the Board maintain its conclusions and recommendations presented in this report.

NCIA organisation locations and organisational elements

The NATO Communications and Information (NCI) Agency was established on 1 July 2012 as a result of the merger of the NATO Consultation, Command and Control Agency (NC3A), the NATO ACCS Management Agency (NACMA), the NATO Communication and Information Systems Services Agency (NCSA), the Active Layered Theatre Ballistic Missile Defence (ALTBMD), Programme Office and elements of NATO Information and Communication Technology Management (HQ ICTM).

The Agency's Headquarters are in Brussels, Belgium, where the General Manager is based. The NCI Agency has over 25 locations in Europe, North America and South-East Asia in support of customers and NATO operations. The Agency's central elements are split between Brussels, Mons and The Hague. Table 2 below lists the agency's organisational elements.

Table 2: Agency organisational elements

| |
|---|
| Acquisition |
| Air Command and Control |
| Ballistic Missile Defence |
| CIS Support Unit |
| Directorate of Application Services |
| Directorate of Infrastructure Services |
| Chief Operating Officer |
| Directorate of Service Operations |
| Financial Controller |
| Service Strategy |
| Support |
| Demand Management |

Source: NCIA

Overview of customer funding and TAS impacts

The prices NCIA's customers pay for services and project implementation are termed the service support costs and project implementation costs. The calculation of these costs are based on a model by which NCIA allocates its costs to services and subsequently calculates services rates. TAS actuals from previous years can be used in the calculation of service rates for the current year.

Once a service is measured and quantified in terms of required effort the total service support effort is calculated by applying the *Customer Rates,* which are approved by Nations. TAS actuals are primarily used for defining billable days for the military staff, civilian staff, and individual work contracts (IWCs) and are factored into the financial statement data incorporated into the customer rate calculation as actual costs. Added to this calculation is the cost of procuring and running CIS services for NCIA's own purposes, referred to as the external CIS costs. This methodology and specific data elements are described further in Figure 2.

Figure 2: NCIA service support cost calculation
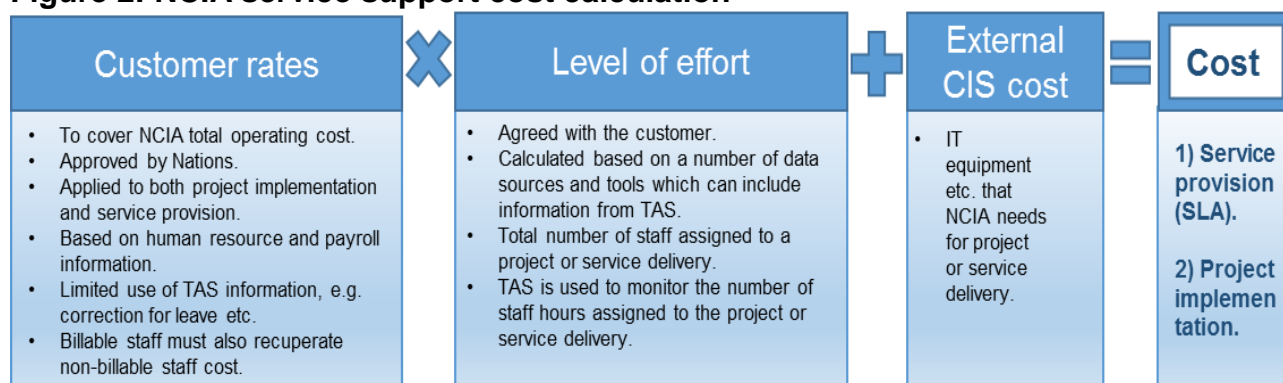
Source: NCIA and NATO documentation

Figure 2 shows that to establish the level of effort (or the manpower needed to deliver the service or project) NCIA uses actual data from TAS. The accuracy and completeness of TAS data is therefore important in order to ensure correct cost estimation. Additionally, figure 2 illustrates that when costs charged to NCIA customers is calculated based on the methodology agreed by Nations, direct use of information from NCIA TAS is used to correct for days of annual leave, training, administrative work and other minor factors such as handover, takeover, and sick leave. Thus, it plays a limited role in the calculation of customer rates.

The customer funded nature of NCIA means it must recover all of its costs from the work and services it provides to customers:

Customer Rates: In March 2018, NCIA published its Customer Rates Principles and Methodology document. According to NCIA, the purpose of this document is to define the principles and methodology for the complete compilation of the Annual Customer Rates of

the NCI Agency. Once endorsed by the Agency Supervisory Board (ASB) and approved by the Budget Committee (BC), this document shall be issued as an Agency Directive.

- o The Agency Customer Rates are set annually and represent the per-capita labour price for all direct (billable) Agency staff. Through the Customer Rates, NCIA recovers all its manpower costs (exception for the Interim Workforce costs) and all expected operating running costs.

Impact of TAS: TAS data is primarily used for defining billable days for the military staff, civilian staff, and individual work contracts (IWCs). The number of billable days for each differs because the commitments are different and this number is used to calculate the daily and hourly rates.

Project Service Costs: In 2018, NCIA developed its service cost calculation methodology. The methodology described in this document was developed by NCIA to support the implementation of the fully Costed Customer Service Catalogue and the agency intends to use this methodology for the calculation of the 2019 Service Rates.

- o In its mission to deliver services to its customers NCIA incurs two types of costs which are referred to as "Service support" cost and "External CIS" cost.
- o Together, they constitute the total costs for the delivery of services to customers and are vital for the calculation of service rates.
- o Service support is typically expressed and measured in terms of Full Time Equivalents (FTEs). On an annual basis, the equivalent of one FTE equates to one staff member working on a full-time basis on one or more services. Staff record their time in TAS by hour and these hours are translated into FTEs. The number of FTEs (or level of effort) per service and per grade are then multiplied by the customer rate to calculate the service support costs.

Impact of TAS: NCIA service support efforts (or FTEs) must be allocated to the services provided according to their effort and contribution to support and maintain a specific service. To achieve this, NCIA uses TAS to enable the planning, allocation, and recording of effort or FTEs against the services it provides.

TAS data analyses approach

A. Census (Quantitative analyses)

Background
The NCIA IA conducted an audit related to the Time Accounting Data Quality of NCIA. This audit was performed during the period from September 16 to December 4, 2015. The audit identified shortfalls primarily in three areas:

Time accounting process: IA noted that the current time accounting process across NCIA was inadequate and that the required time accounting guidance was not documented, sufficiently clear, well understood by all staff and adequately communicated.

People: IA noted insufficient discipline regarding time accounting completion and its significant impact on data accuracy. For example, 7 percent of all Agency staff were not completing time sheets while 39 percent of staff were recording exactly 38h/week on average over the period of the year.

Technology: IA found that the time accounting application was not adequately configured to support various aspects of the agency business activities as performed in its locations. For example, there was no sufficient "granularity in admin lines", contractor/consultant's support is not adequately configured, and actual activities were not always matching the TAS lines/tasks leading to the TAS application being perceived as cumbersome and not easy to use.

Data collection process
IBAN requested TAS data from 2017 and 2018 (Quarter 1) and for the data to be provided in Excel format. We also met with NCIA officials to better understand the data fields and their meanings. During this meeting, we were provided with an overview of the TAS functionality for reporting purposes and how the data could be manipulated for the purposes of our analyses. We also discussed our planned comparative analyses based on the 2015 IA report and how we could filter the data for comparison with the data fields or elements analyzed by IA. We noted any data limitation issues raised by the NCIA officials with whom we met.

Population size and sampling approach
- The 2017 population of TAS data is 849 projects.
- The 2018 (including Quarter 1 and 2) total population of TAS data is 703 projects. For the purposes of our comparative analyses, we only wanted to compare time records that were finalized and could not be further edited by staff members. To achieve this, we filtered the data using the "Time_Month" filter and selected the first 3 months of the year – January, February, and March (or Quarter 1).
  - Therefore, our population for the comparative analyses was 653 projects – these included projects from Q1 2018 only.
- **The total population for the census for both years = 1,502 projects**

Criteria and data analysis (Quantitative)
Criteria: NCIA Time Accounting Guidance Documents

a) Time Accounting Guidance "How to use the Time Accounting System" and NCIA Agency Directive AD 02.11 Working Hours and Special Working Arrangements (effective 1 July 2017) establishes policies and procedures with respect to working hours, special working arrangements such as overtime, shift hours, night work and on-call hours, and time accounting within the NCI Agency. This guidance contains: "Specific Work Arrangements in TAS" (Time Accounting System):
   o This guidance requires staff to work an average of 38 hours per week in TAS, and to record the actual hours worked—even if it exceeds 38 hours in a given week.
   o The Agency policy states that all hours worked should be reported. Therefore, it would be unusual to report exactly 7.6 hours on every day or a total of exactly 38 hours every week.
   o These "Specific Work Arrangement" are also describing requirements for Part-time work, Work on a roster / shift, "On-call" time and TDY time.

b) In addition, Agency Directive 06.01.01 Portfolio, Programme and Project Management (P3M) framework states "the Agency staff are required to submit their weekly timesheets in the Time Accounting System (TAS) in a timely manner."

c) TAS Standard Operating Procedure SOP 06.06.01 describes the approach to be taken within the Agency to record the time that staff have worked on projects, services and other non-billable activities.

Overview of TAS data and analyses from 2017 and 2018
Data Population:
- TAS data from 1 January to 31 December 2017
- TAS data from 1 January to 31 March 2018

Unit of analysis: hours recorded in TAS for 2017 and 2018 Quarter 1 (1 January to 31 March 2018).
- Staff who on average recorded exactly 38h/weeks;
- Staff who did not record any hours;
- Staff who on average recorded< 38h/week; and
- Staff who on average recorded>38h/week.

Comparative analyses: The audit team compared the results of the 2015 IA report analyses with our analyses based on 2017 and Quarter 1 2018 data. The following analyses was conducted:

A. Analyses of hours recorded in TAS for 2017: Across all Agency organisational elements (Directorates, Supporting functions etc.). Including Acquisition, Finance, Support, and Demand Management.

B. Analyses of billable staff hours recorded in TAS for 2017 by type of employment (military vs. civilian)

C. Analyses of billable staff hours recorded in TAS for 2017 by CIS Support Units (CSUs);

D. Analyses of billable staff hours recorded in TAS for 2017 and 2018 Quarter 1 (January 2018 – March 2018) recorded on administrative lines or not at all.

Limitations
The 2017 and 2018 Quarter 1 staff hours recorded in TAS were already finalized (closed out and could not be edited by staff) and will not reflect issues or concerns in real time.

B. Judgmental sample design (Qualitative Analyses)

Purpose: The purpose of the judgmental sample is to supplement the statistical analysis in relation to the implementation of the time accounting process as described in the NCIA Standard Operating Procedure and to identify any potential challenges. It further served to explain how Agency staff apply NCIA TAS data when they estimate cost ultimately charged to customers.

Data Collection Process: The projects selected for the judgmental sample were derived from the 2017 and 2018 TAS Data provided to the audit team by NCIA officials, as noted above.

Population Size and Sampling Approach: We identified a total of 51 projects for the judgmental sample from the 2017 and 2018 TAS data provided by NCIA. The 51 projects identified included fixed, reimbursable, and one internal project. Of these, we selected 14 projects for the first round of project file reviews – 6 reimbursable and 6 firm fixed price projects and 2 projects whose project type were not identified based on the TAS data.

- There were a total of 7 projects randomly selected from 2017 TAS data.
- There were a total of 7 projects randomly selected from 2018 TAS data from both quarter 1 and quarter 2.

Criteria for selection and analysis (Qualitative)
Risk Based Selection Criteria: Risk based selection criteria were employed based on the findings from the NCIA IA 2015 report. The primary selection criteria were:
- Based on IA's analyses of billable staff's actual hours (excluding leave) across organisational elements, we selected the organisational elements who had the greatest deviation (above and below) from the 70 percent average of billable staff actual hours reported on customer projects. We also selected a second organisational element (Acquisition) below the average besides Support to better reflect an organisational element within greater than half of their staff resources are billable. We selected Support, Acquisition, and Ballistic Missile Defense organisations based on these criteria.

- We also prioritized our selection by:
  o Project type: As noted above, we selected a combination of firm-fixed price projects and cost- reimbursable projects.

     ○ Customer: We also considered projects for the NCIA customers (ACO and ACT) to better assess how TAS data are utilized when entering into agreements with NATO customers.

Additional qualitative questionnaires

In addition, we asked NCIA to provide answers to a questionnaire for 5 projects. The questionnaire focused on their use of TAS data when estimating costs. This questionnaire informed our review of official NATO and NCIA cost calculation documentation and interviews with NCIA staff. The projects chosen included major service level agreements, and project implementation. The team received answers from 4 of the requested projects.

Data analysis (Qualitative)

For the projects included in our sample, we relied on the following methods:

- Reviewed project documentation including:
  - Type B Cost Estimate for NATO Security Investment Programme projects
  - Requirement Statement Document provided to NCIA by customer
  - Project Management Plans and/or agreed full-time equivalent work (or level of effort) breakdown provided to customer by NCIA
  - NCIA Project Highlight Reports
  - Interim Project Review documentation
  - Revised Project Management Plans reflecting change requests (if applicable)
- Reviewed project planning documentation in the EPM, related to the planning milestones and timeframes for the project.
- Conducted structured interviews with NCIA officials including Project Managers and Service Line Managers, as applicable.

Limitations

We cannot extrapolate our findings to the entire population (or to all projects in TAS) because our sample is not representative. We only included selected projects in TAS from fiscal year 2017 through Quarter 2 2018.

Results of comparative analyses of TAS data

In figures 3 to 6 below, we compared the hours recorded in TAS from 2015 to 2017 by organisational elements.

In figure 3 below, we compared the hours recorded by staff in the organisational units Acquisition, Finance, Support, and Demand Management.

Figure 3: Data quality for Acquisition, Finance, Support, and Demand Management
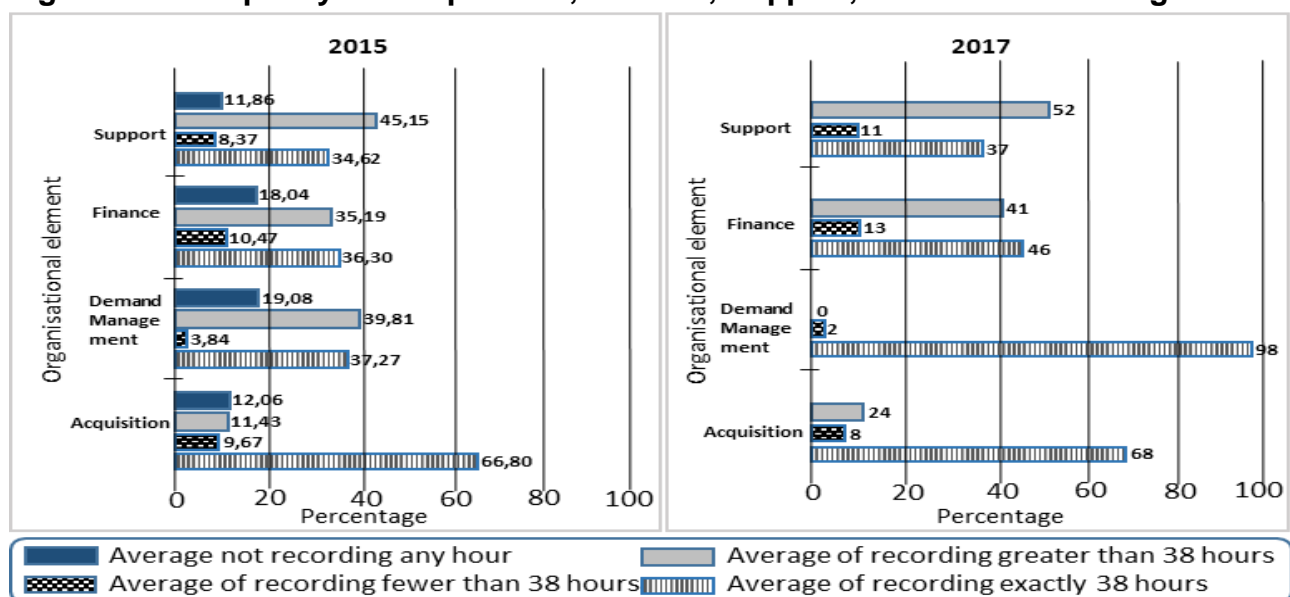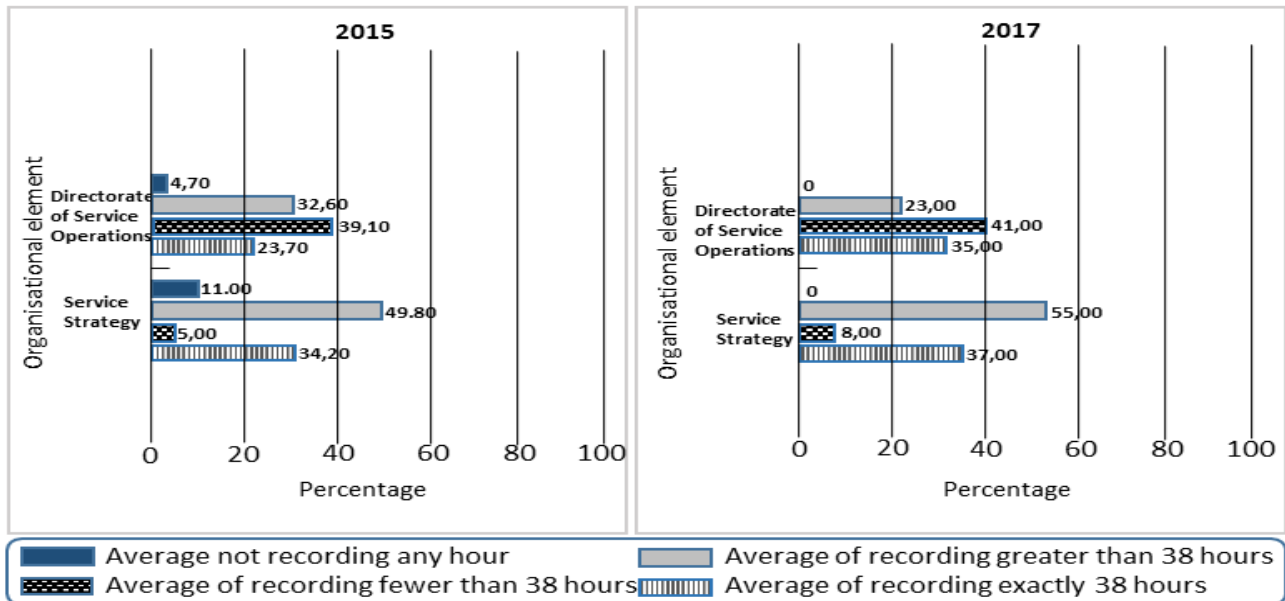

Source: IBAN Analysis of 2017 NCIA TAS Data.
Note: In 2017, staff recorded more than zero hours across all organisational elements.

As shown in figure 3, we found that the average of staff recording exactly 38 hours on average for Demand Management increased in 2017 by 61 percent points (from 37 percent in 2015 to 98 percent in 2017). NCIA informed us that this is linked to the perception of non-billable staff that their work is not directly related to a billable project. However, based on the 2017 data, two-thirds of Demand Management staff were billable staff and directly related to a billable project. Therefore, NCIA's response is not applicable in this instance.

In figure 4 below, we compared the TAS data quality for Service Strategy and Directorate of Service Operations organisational units in 2015 and 2017.
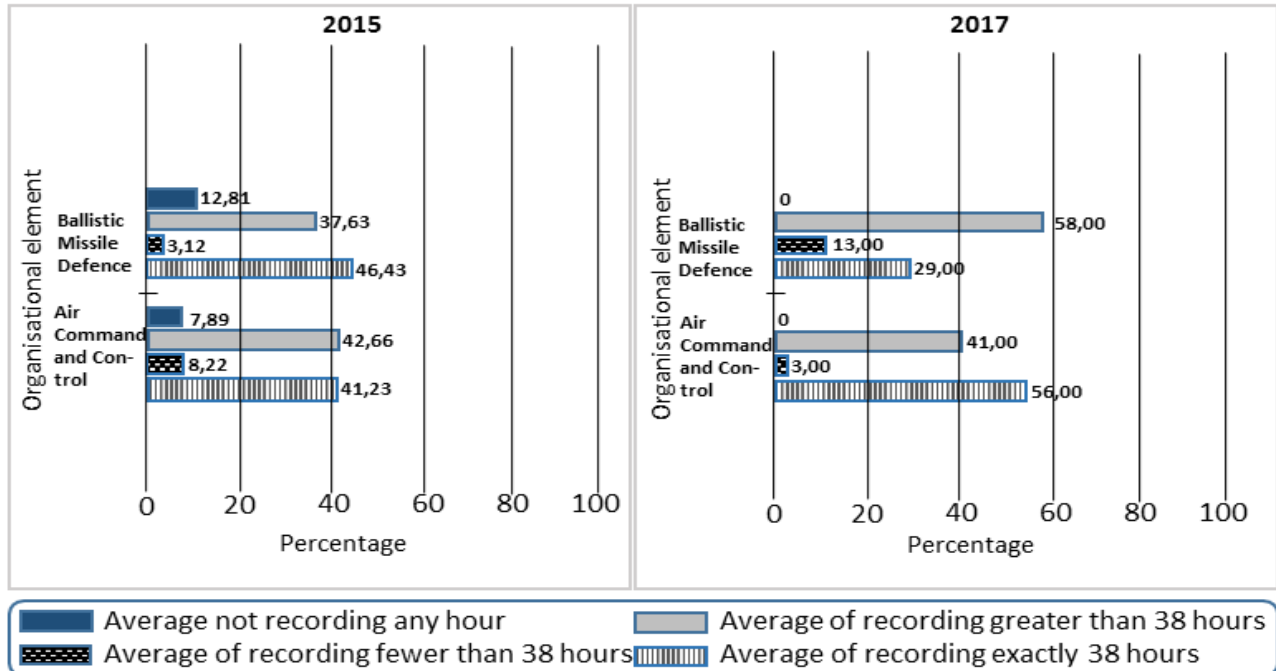
Figure 4: Data quality for Service Strategy and Directorate of Service Operations

2015

Organisational element

Directorate of Service Operations
- 4,70
- 32,60
- 39,10
- 23,70

Service Strategy
- 11.00
- 49.80
- 5,00
- 34,20

Percentage (0 20 40 60 80 100)

2017

Organisational element

Directorate of Service Operations
- 0
- 23,00
- 41,00
- 35,00

Service Strategy
- 0
- 55,00
- 8,00
- 37,00

Percentage (0 20 40 60 80 100)

Legend:
- Average not recording any hour
- Average of recording greater than 38 hours
- Average of recording fewer than 38 hours
- Average of recording exactly 38 hours

Source: IBAN Analysis of 2017 NCIA TAS Data.

As shown in figure 4, our analyses found the average of staff recording fewer than 38 hours increased for Service Strategy from 5 percent in 2015 to 8 percent in 2017. Similarly, for Directorate of Service Operations the average of staff recording fewer than 38 hours on average increased about 2 percent from 2015 to 2017 (from 39 percent to 41 percent). Additionally, we found that the Directorate of Service Operations' average of recording exactly 38 hours on average increased in 2017 by about 11 percent compared with 2015 (from 24 percent in 2015 to 35 percent in 2017). For both organisational elements, compliance with the NCIA working directive polices reduced in 2017.

NCIA informed us that it was probably due to lack of training for new staff explaining the importance of work time being recorded in TAS. However, during the course of our audit, officials told us that all new staff receive a TAS welcome email with guidance and additional guidance is available on the Agency Wiki. New staff are also trained by their line management with support from the Project Support Office, according to NCIA officials. Given the training that staff receive and the resources available to them, it is fair to assume that the lack of compliance is less likely to do with training and is more attributable to a lack of management oversight and direction with respect to TAS.

In figure 5 below, we compared the TAS data quality for Air Command and Control and Ballistic Missile Defence organisational units in 2015 and 2017.

Figure 5: Data quality for Air Command and Control and Ballistic Missile Defence

2015

Ballistic Missile Defence
- 12,81
- 37,63
- 3,12
- 46,43

Air Command and Control
- 7,89
- 42,66
- 8,22
- 41,23

2017

Ballistic Missile Defence
- 0
- 58,00
- 13,00
- 29,00

Air Command and Control
- 0
- 41,00
- 3,00
- 56,00

Legend:
- Average not recording any hour
- Average of recording greater than 38 hours
- Average of recording fewer than 38 hours
- Average of recording exactly 38 hours

Source: IBAN Analysis of 2017 NCIA TAS Data.

As shown in figure 5, our analyses found that the average of recording fewer than 38 hours increased for Ballistic Missile Defence in 2017 increased from 3 percent in 2015 to 13 percent in 2017. For Air Command the average of recording exactly 38 hours on average increased from 41 percent in 2015 to 56 percent in 2017.

NCIA officials stated that Air Command and Control and Ballistic Missile Defence are funded based on their number of staff, rather than their workload, so management guidance was to record only 38 hours on average as billable. Consequently, staff assumed that any additional hours worked did not need to be recorded in TAS. Officials indicated that the Ballistic Missile Defence's funding process is transitioning to a new model that will base Ballistic Missile Defence's budget on its workload. Once completed, staff will record their actual hours in TAS. While NCIA's response may address the 15 percent point increase in Air Command staff recording exactly 38 hours on average in 2017, their response does not address the issue our analyses raises with respect to staff recording fewer than the requisite 38 hours on average in Ballistic Missile Defence considering the number of staff in BMD (including contractors and consultants) more than doubled from 2015 to 2017 (from 37 to 86 total staff). If funding is based on their number of staff, Ballistic Missile Defence should have received additional funding in 2017 that would have enabled staff to work at least the required 38 hours on average per week or more hours as needed.

In figure 6 below, we analyzed the data quality for the Directorates of Applications Services and Infrastructure Services.

Figure 6: Data quality for Directorate of Application Services and Directorate of Infrastructure Services
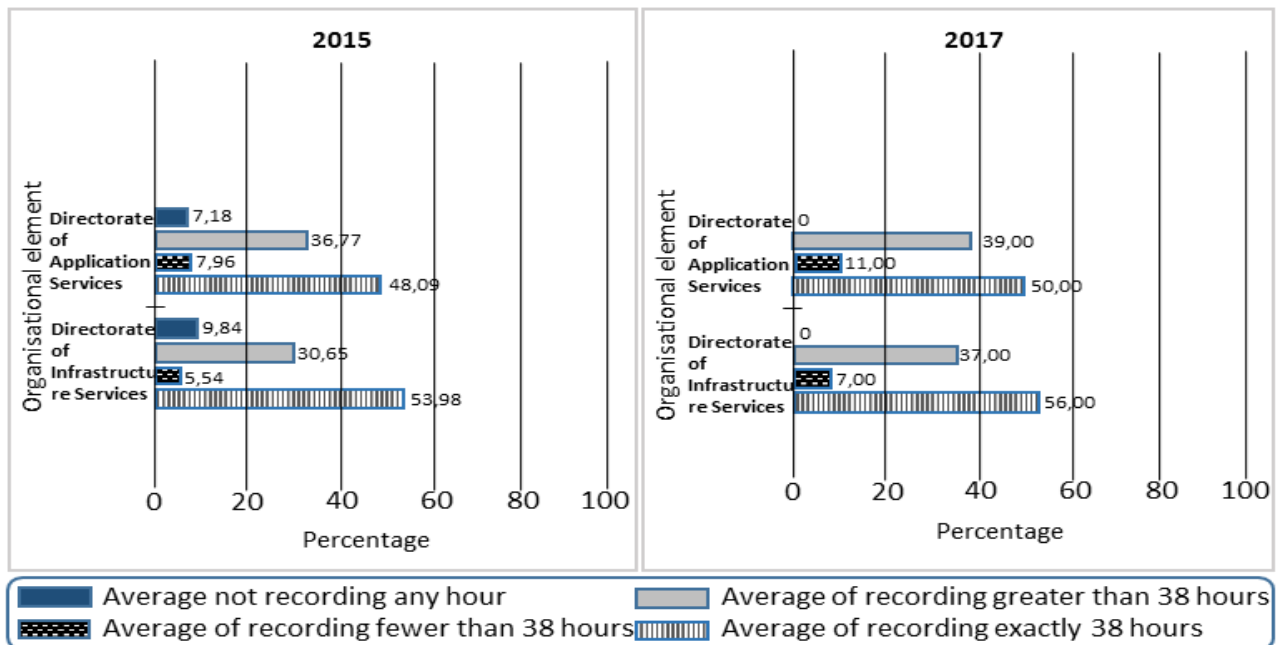
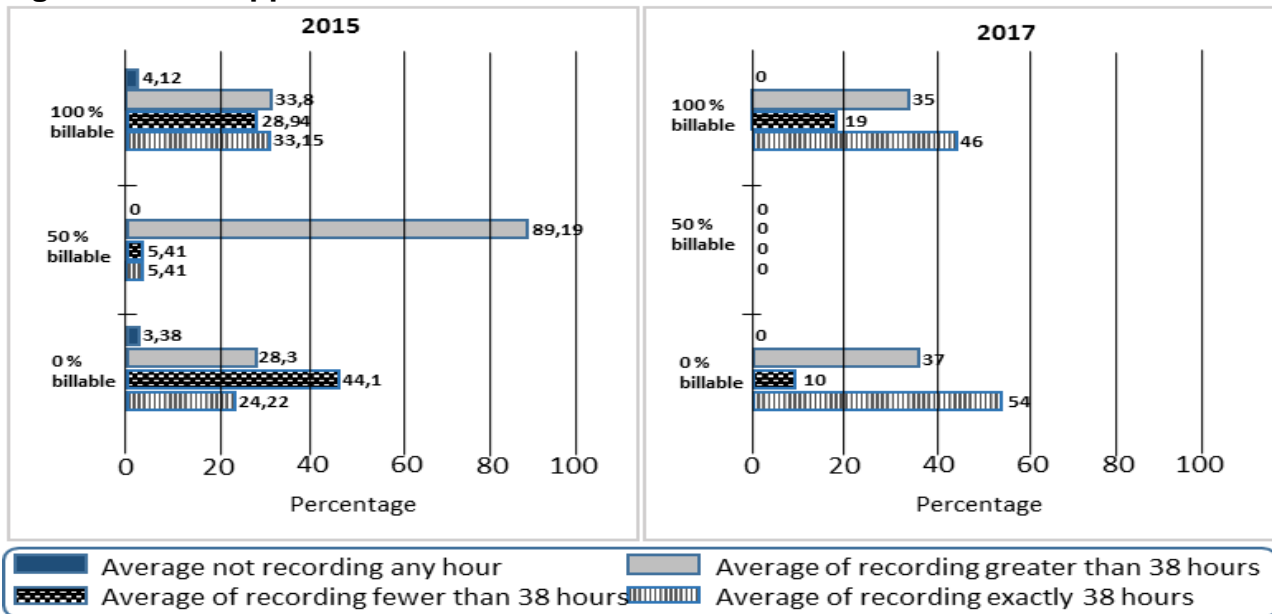

Source: IBAN Analysis of 2017 NCIA TAS Data.

As shown in figure 6, our analyses found that staff averages in the Directorates of Application Services and Infrastructure Services increased for all 3 categories. Most notably, the Directorate of Infrastructure Services increased 6 percent points in the average percentage of staff recording greater than 38 hours on average (from 31 percent in 2015 to 37 percent in 2017).

NCIA stated that increased workload within the Directorate of Infrastructure Services resulted in many staff working more than 38 hours on average. Our analyses of 2017 TAS data indicated a 67 percent increase over 2015 in the total number of staff in the Directorate of Infrastructure Services (from 448 in 2015 to 747 in 2017, an increase of 299 staff members –including contractors and consultants). It is reasonable to assume that staff levels were increased to better manage the increased workload. However, it is the responsibility of NCIA management to ensure that all staff members have been adequately trained on the TAS system and the time recorded in TAS accurately reflects hours worked.

Additionally, the average of recording fewer than 38 hours on average increased by 3 percent points in the Directorate of Application Services (from 8 percent in 2015 to 11 percent in 2017). NCIA explained that a greater number of part-time staff and shift workers in 2017 is the reason why there is an increase of staff in the Directorate of Application Services recording fewer than 38 hours on average. Our analyses of 2017 TAS data indicated a 20 percent increase of all staff (including contractors and consultants) in the Directorate of Application Services. As noted above, irrespective of the staff category all staff should be consistently trained on TAS and understand its importance.

In figure 7 below, we compared the average of recording hours in TAS for 2015 and 2017 for billable and non-billable staff in CIS Support Units.

Figure 7: CIS Support Unit billable versus non-billable

Source: IBAN Analysis of 2017 NCIA TAS Data.
Note: 0 means non-billable, 50 means 50% billable, 100 means 100% billable. In 2017, there were zero staff members who were 50 percent billable.

As shown in figure 7, we found that for billable staff, the average of recording exactly 38 hours on average increased 13 percent points (from 33 percent in 2015 to 46 percent in 2017). Also, for billable staff the average of recording fewer than 38 hours on average decreased by 10 percent points (from 29 percent in 2015 to 19 percent in 2017).

For non-billable staff the average of recording exactly 38 hours on average increased from 24 percent in 2015 to 54 percent in 2017. Additionally, we found for non-billable staff the average of recording fewer than 38 hours on average decreased from 44 percent in 2015 to 10 percent in 2017.

NCIA officials attributed these changes to an increased understanding of TAS and greater management oversight to ensure compliance with NCIA guidance. Our analyses of 2017 TAs data indicated that the overwhelming majority of staff were 100 percent billable. NCIA's explanation further illustrates the weakness in management oversight in ensuring compliance to NCIA guidance across all organisational elements and for all staff hours and may indicate that management places more importance on staff time recorded for billable hours.

TAS standard operating procedure (SOP)

TAS is an off the shelf product which is part of an Electronic Project Management (EPM) solution. NCIA established a process to ensure that hours worked are recorded accurately and to the correct projects or task lines. The process was first described in 2016 by NCIA in a SOP and contains the main element of NCIA's time accounting practices. It includes control activities to be implemented by those involved in monitoring and approving hours recorded. The process is illustrated in Figure 8 below.

Figure 8: NCIA Time accounting process
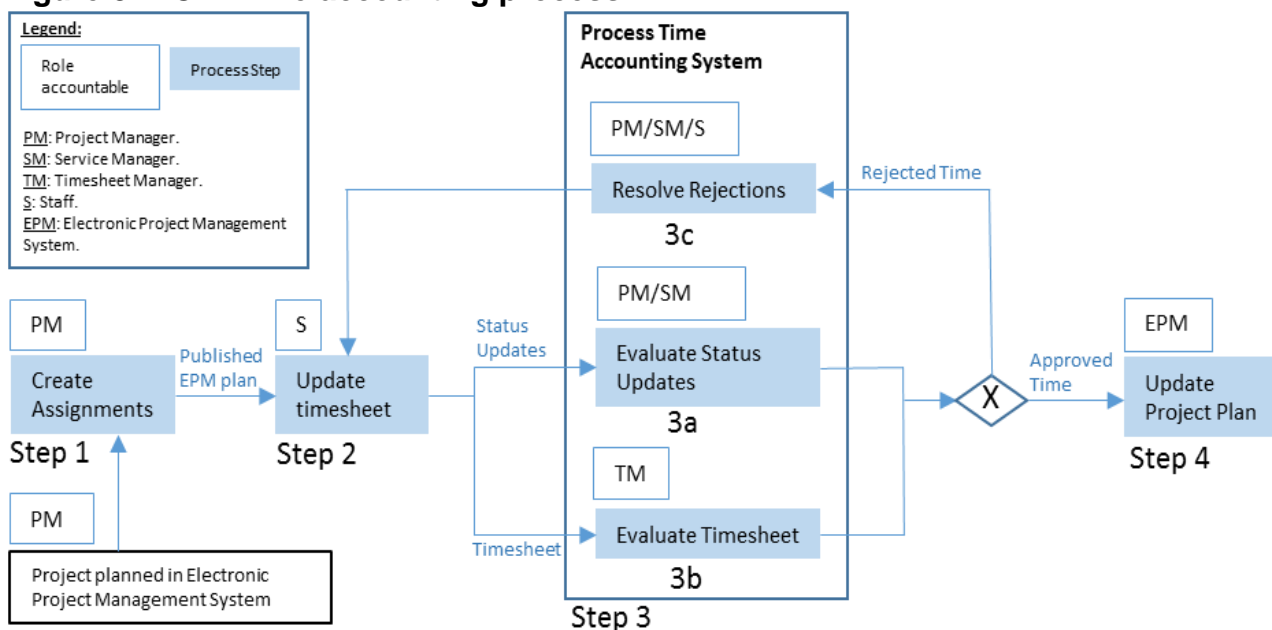
Source: NCIA.

Figure 8 shows that the NCIA time accounting process consists of 4 steps:

- Step 1: Create assignments: The project or service manager creates assignments by allocating staff members to activities within the project or service plan in EPM. The project or service manager then issue a project plan which enables assignments to appear in staff timesheets in TAS.

- Step 2: Update timesheet: Staff updates TAS timesheet and enters all hours worked against project or service tasks and administrative tasks. Staff then submits TAS timesheet for approval.

- Step 3a: Evaluate status updates: The project or service manager is required to validate that the time recorded to tasks is correct. The project and service managers only approves (and can only view in TAS) hours recorded to task lines for the projects or service project, that they are responsible for.

- Step 3b: Evaluate timesheet: The timesheet manager approves, or rejects, the completed timesheet for staff members. This includes hours recorded for projects and administrative tasks.

- Step 3c: Resolve rejections: This action is initiated by an e-mail or verbal communication to the staff member. This is the responsibility of the project, service, or timesheet manager.

- Step 4: Update project or service plan: The EPM system automatically updates the project or service plan when status updates are approved.

TAS control activities: Human and automated controls

We identified and assessed the following human and automated controls.

Human controls in TAS:

Human controls are used to control, monitor, and approve work hours recorded in TAS.

- <u>Segregation between approvers of recorded time</u>: This human control mainly consists of approval and rejection of time sheets by more than one approver (segregation between project, service, and timesheet managers). There is an approval hierarchy. Figure 1 shows how monitoring and approval of billable staff and non-billable staff time records is segregated. Hours recorded to projects and service delivery have double level approval as these hours are approved by both the project and timesheet manager. Administrative hours are only approved by the timesheet manager. This includes approval of timesheets of staff that only performs administrative tasks and thus only record administrative hours. It also includes administrative hours recorded by staff working on project or services, which the project manager does not see nor approve.

- <u>Self-approval of hours recorded in TAS</u>: Self-approval occurs systematically for project managers and timesheet managers as part of the process. Project managers approve their own hours recorded in TAS to their project before submitting these to their timesheet manager for approval of their full timesheets. In addition, timesheet managers approve their own timesheets with no additional level of approval. Finally, middle management and senior staff approve their own timesheets even if they work on projects or services provided to customers.

- <u>Resolving disputes and erroneous time recording</u>: Project and/or timesheet managers can reject the recorded hours submitted for approval in TAS. Some project managers follow the formal process and use the reject function, while other project managers choose to resolve the issue verbally or by e-mail, and then have the team member correct the number of hours recorded before they finally approve the hours recorded without using the reject function.

Automated controls in TAS:

TAS automated controls are primarily designed around read and write privileges that restrict access levels in the system. As such, they are preventive in nature. Automated controls are usually harder to override than human controls, which often depend on verbal agreements of approvals and rejections. However, automated controls can also be overridden through inappropriate sharing of sensitive information like passwords.

We identified the following controls described below:

- Assignment of tasks: The project manager must assign the individual staff member to an assignment before staff can record to the assignment. NCIA's central programme office assigns the project managers are assigned centrally.

- Flagging: The project manager can select who can record time to the project at any given time.

- Creation of project specific tasks and administrative task lines in TAS: Only the project manager can create project specific task lines in TAS to which billable staff record their hours. Staff can add administrative lines to their timesheet themselves from a centrally managed pre-defined list.

- Limitations to time sheet access: Staff can only access their own timesheets.

- Close out: Close out happens after three months. Changes after three months require a special request and approval process.

- Logical controls and automated warning functions: The system lacks logical automated controls such as warning functions or pop up reminders that inform staff about future activities or deadlines. NCIA officials reported that the system is not designed to detect systematic abuse.

**Summary of good time accounting practices
from international organisations and SAIs**

Background
The team sought to get a better understanding of how other public international organisations and national public entities utilized time accounting systems in the provision of services and implemented time accounting standards and practices. The practices we identified are for consideration and the feasibility (including the benefits and costs) of implementing a new practice should always be considered.

Methodology
The team surveyed time accounting and cost accounting literature, publically available information on the time accounting standards and practices of the selected international organisations, and information sent to IBAN by the international organisations. Based on this information the team created a questionnaire which was sent to the organisations to obtain their perspectives, experiences, and time accounting practices.

The international organisations were not selected based on a customer funding criteria. They were selected because they are public international organisations that utilize time registration or accounting systems to record work hours on projects, their knowledge of good practices related to the management of time registration or accounting systems that impact business decisions, type of activities and operations, common funding budgetary structure, and decision making arrangements. Among the international organisations there was broad agreement on the practices and the importance of implementing them. Apart from identifying their time accounting practices we did not assess the performance of the selected entities.

International organisations and SAIs
The team interviewed and or received questionnaires from the following international organisations:
- European Space Agency (ESA)
- International Civil Aviation Organization (ICAO)
- Organization for Economic Cooperation and Development (OECD)
- European Organisation for the Exploitation of Meteorological Satellites (EUMESTAT)

The team also reviewed reports on the time accounting standards and practices of public sector entities identified by the following SAIs.
- Office of the Auditor General of Canada
- National Audit Office of the United Kingdom of Great Britain and Northern Ireland
- U.S. Government Accountability Office

As part of our survey work, we also searched the websites of the following SAIs for related reports: the Danish National Audit Office, the French Supreme Audit Office (Cour des Comptes), the German Supreme Audit Office (Bundesrechnungshof), the Netherlands Court of Audit, and the Office of the Auditor General of Norway. Relevant information was incorporated into our selection of good practices. Table 3 provides details of our analysis

based on the good practices we identified through international organisations and time accounting standards identified by select SAIs.

Table 3: NCIA Practices compared to good time accounting practices

Good practice	NCIA current status
Guidelines and policies: Written policies and procedures governing time and attendance and use of time accounting system made available to all staff.	**Fully Met (YES)** NCIA currently has a standard operating procedure along with multiple guidelines to lead staff in the direction of correct time accounting. This is available to all staff on the NCIA intranet.
Automation: Uses a system that records the number of hours worked on projects to external customers. This has the benefit that the clocked hours are automatically added in the system. This way data is automatically available for financial management, and allows for easy sharing of information across the organization. Automation can decrease the risk of manipulation or mistakes.	**Partially Met (LIMITED)** Hours are manually recorded and approved in NCIA TAS. TAS can be pre-populated with the hours estimated to perform a task.
Shortening the close out period: One organisation decreased its closeout phase from 30 to 12 days from January 2019. Another organisation is allowing staff less time to complete their time sheet to reduce the risk that staff would feel comfortable postponing recording of hours worked. The risk of imprecise recording increases as time passes.	**Partially Met (LIMITED)** Currently NCIA has a close out period of 3 months. NCIA is currently focusing on decreasing the closeout period to 2 months.
Visibility and transparency: The organization has made all signed time sheets visible to all staff.	**Fully Met (YES)** NCIA staff can access NCIA TAS and use it for purposes internal to NCIA such as official reporting, planning etc. NCIA does not share information from TAS across NATO.
Reporting on performance: Using time accounting data in monitoring and performance reporting (to management, governance and steering bodies, or other stakeholders).	**Partially Met (LIMITED)** NCIA utilises TAS data for time recording, workforce planning, project planning, and official reporting—this may include executive management reporting containing performance metrics.
Centralised recording of hours worked: Recording of hours worked is done by the administrative support unit and thus not by the staff. This creates an extra layer of control.	**Did not Meet (NO)** NCIA has decentralized recording of hours worked. This includes both staff that work on projects and staff working on administrative tasks. Double level of control is instituted for staff recording hours worked to projects with customers. For project managers and staff working on administrative tasks there is only a single level of approval. In addition, for project managers, timesheet managers, and senior level staff there is some self-approval.
Control in relation to multiple locations: As a basis for approving time accounting data, supervisors are required to obtain reasonable assurance that employees working at remote sites are working when scheduled and that time and accounting information accurately reflects time worked and absences from scheduled tours of duty.	**Partially Met (LIMITED)** NCIA staff and supervisors have reported that supervisors apply extra monitoring in situations where supervisor and team members are not working at the same location. However, there are no formalized or written down guidelines or tools to assist supervisory staff in monitoring in such situations.

Sources: IBAN surveyed international organisations and selected practices identified by SAIs.

Description of TAS data

The TAS data used in Appendix 4 and referred to throughout the report consists of the following.

Table 4: Composition of staff by organisational elements in 2017 and quarter 1 2018

Agency Organisational Elements	2017 TAS Data		2018 Quarter 1 TAS Data	
	Total Number of Staff (includes civilians and military staff)	Total Number of Consultants/Contractors	Total Number of Staff (includes civilians and military staff)	Total Number of Consultants/Contractors
Acquisition	59	24	56	17
Air Command and Control	245	45	228	41
Ballistic Missile Defence	35	51	31	45
CIS Support Unit	868	42	739	40
Directorate of Application Services	368	110	336	92
Directorate of Infrastructure Services	563	184	504	164
Chief Operating Officer**	65	3	64	4
Directorate of Service Operations	310	28	252	30
Financial Controller	53	19	48	20
Service Strategy	61	19	59	17
Support	196	41	189	39
Demand Management	3	0	0	0
Grand total	2826	566	2506	509
Combined total	3392		3015	

Source: IBAN Analysis of 2017 and 2018 TAS Data.
** Note: The COO was previously referred to as Demand Management (DM) in the 2015 IA report. DM is now encompassed in the COO office. In 2017, contractors accounted for 20 percent of NCIA staff and 17 percent of NCIA staff in 2018.

Abbreviations

ACO	Allied Command Operations
ACT	Allied Command Transformation
ASB	Agency Supervisory Board
BC	Budget Committee
CMRE	Centre for Maritime Research and Experimentation
COSO	Committee of Sponsoring Organisations of the Treadway Commission
CIS	Computer Information Services
EPM	Electronic Project Management
EUR	Euro
GAO	United States Government Accountability Office
HQ SACT	Headquarters Supreme Allied Commander Transformation
IA	NCIA Office of the Internal Auditor
IBAN	International Board of Auditors for NATO
IC	Investment Committee
IS	International Staff
NCIA	NATO Communications and Information Agency
NCIO	NATO Communication and Information Organisation
NFR	NATO Financial Regulations
RPPB	Resource Policy and Planning Board
SAI	Supreme Audit Institution
SOP	Standard Operating Procedures
TAS	Time Accounting System

Formal comments received from NATO Communications and Information Agency (NCIA)

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General Manager

Boulevard Léopold III
B-1110 Brussels, Belgium

Telephone: +32 2 707 8200
Fax: +32 2 707 8474

NCIA/IA/2019/07607
25 January 2019

To: Mr Henrik Berg Rasmussen, International Board of Auditors

Subject: **Factual Clearance and formal Comments to the International Board of Auditors for NATO (Board) Draft performance audit report to Council on the NATO Communications and Information Agency Need to increase time accounting data quality and improve efforts to ensure more effective and transparent time accounting principles and practices – IBA-AR(2018)0033**

Reference(s): A. IBA-AR(2018)0033 dated 04 December 2018

Dear Mr Berg Rasmussen,

NCI Agency is the only major NATO entity to use time accounting and while we continue to improve the relevant practices, we suggest more NATO entities employ it in order to provide granularity on the use of staff resources which in turn aids transparency and promote accountability.

NCI Agency appreciate the detailed audit on the need to increase time accounting data quality and improve efforts to ensure more effective and transparent time accounting principles and practices. We have reviewed the draft performance audit report (Reference A) and hereby submit our formal comments (Enclosure A). In case not all the factual comments it contains are in end taken into account in the final draft of the report I would be grateful if these could be incorporated into the NCI Agency's formal comments.

The NCI Agency has already taken actions to establish and implement good practices in order to improve time accounting data quality. It is NCI Agency's goal to continue to move forward in this regard. Some of the recommendations will be also addressed as part of the on-going implementation of the NCIO Internal Control Framework and EBA which are expected to strengthen the existing controls.
The Agency's Point of Contact for this matter is █████████████████████████
██████████████████████████

Yours sincerely,

Kevin J. Scheid

General Manager

Enclosure: A. Formal comments on the Draft performance audit report

NATO Communications
and Information Agency

Agence OTAN d'information
et de communication

Avenue du Bourget 140
1140 Brussels, Belgium

www.ncia.nato.int

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FC
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Annex A: Formal comments on the Draft performance audit report to Council on the NATO Communications and Information Agency Need to Increase time accounting data quality and improve efforts to ensure more effective and transparent time accounting principles and practices – IBA-AR(2018)0033

There are good general recommendations and valid criticism of areas that require further improvement. However, the report underlines the good practices already established and implemented by the NCI Agency. In addition, the report does not make any reference to the complexity of the time accounting system (TAS) and the fact that the NCI Agency is the only major entity to account for staff time within NATO. The Agency's TAS provides significant granularity on the use of staff resources and how this effort is delivering to Customers which aids transparency and accountability.

NCI Agency does not support the conclusion that the accuracy and data quality of TAS is still poor. These conclusions are based upon an incomplete analysis and are not supported by NCI Agency analysis. The main reason for these IBAN conclusions is that many staff have been perceived as booking less than the 38 hours average that is required across the year. It is correct that many staff do record less than 38 hours in many weeks, but this is compensated by additional hours in other weeks, plus, the conditioned hours at some NCIA locations is 37.5 or less. Therefore it is correct that the average for these staff is less than 38. The analysis also needs to consider staff who work part-time and shift work, which also results in an average less than 38. These factors, when taken fully into consideration, result is a lower instance of staff that are not in compliance with NCIA direction. Therefore the quality and accuracy are significantly better than the report has concluded.