

Annual Report
of
Safety and Risk Officer
Angela Byrne
For Fiscal Year 2022

Technical Standards and Safety Authority

September 2022

Introduction

I am pleased to present the Safety and Risk Officer (“SRO”¹) Annual Report for the fiscal year 2022 (“FY22”).

One of my responsibilities as the SRO is to release an Annual Report to the public. As described in the Memorandum of Understanding (“MOU”) between the Ministry of Public and Business Service Delivery (“MPBSD”) and the Technical Standards and Safety Authority (“TSSA”) the purpose of my report is to provide *“an overview of the CSRO’s activities and operations, highlight key recommendations arising out of any other report issued by the CSRO in the preceding year, and any other matter the CSRO considers relevant to the public”*.³

The intended audience for the report is the general public and it reports on my activities for the period from May 1, 2021, to April 30, 2022.

Overview of SRO Activities for Fiscal Year 2022

As reflected in the FY22 Work Plan approved by the Safety and Regulatory Affairs Committee (“SRAC”) of the Board, my activities continued to build on the theme of data quality identified with my appointment as SRO in October 2019. As in previous years the main deliverable was the SRO Report on the Annual State of Public Safety Report (“PSR”).

The purpose of my review of the PSR was to assess the quality, accuracy, and clarity of select safety data used in the report. My review found that overall, the quality, accuracy and clarity of the in-scope data disclosures presented in the fiscal year 2021 (“FY21”) PSR continued to be strengthened. I provided recommendations to build on work that was underway and improve the quality of the PSR. Management’s response and progress on the recommendations are discussed later in this report.

After the release of my report on the review of the FY21 PSR, feedback was received on the review methodology and the value of the SRO recommendations and steps were taken to improve the approach for the review of the FY22 PSR.

Other deliverables that I completed in the Work Plan for FY22 were:

- The SRO Annual Report FY21, including a report on the Status of Recommendations, and
- The submission of the fiscal year 2023 (“FY23”) Work Plan and Budget for SRAC Approval.

Throughout FY22 I continued to seek feedback on the SRO role and activities and continued to work closely with Internal Audit and Strategic Analytics to avoid duplication, minimize business disruption and leverage appropriate external support as needed. Coordination and collaboration among the roles are viewed as essential to supporting the TSSA journey to an outcome-based regulator.

Follow Up on SRO Recommendations for FY20 and FY21

During FY22 TSSA closed the outstanding recommendation from the SRO review of the FY20 PSR and demonstrated progress on closing recommendations for the FY21 PSR.

¹ The MOU refers to the Chief Safety and Risk Officer or CSRO. TSSA refers to the position as the Safety and Risk Officer or SRO to reflect the assurance focus of the role applied in 2019.

² Ibid

³ “Memorandum of Understanding”, Technical Standards and Safety Authority, October 2019, page 12, <https://www.tssa.org/en/about-tssa/resources/MEMORANDUM-OF-UNDERSTANDING---October-2019.pdf>

Of the seven recommendations provided during the review of the FY21 PSR, four are closed and work continues on the three remaining recommendations. I will continue to monitor progress on the outstanding recommendations throughout fiscal year 2023. An overview of the recommendations and their status is provided in the chart below with further details provided in Appendix A.

FY20 Outstanding Recommendation		
	Recommendation	Status
1.	Audience Definition Seeking feedback from the primary audience of the PSR to strengthen quality and value of the report.	Closed

FY21 Outstanding Recommendations		
	Recommendation	Status
1.	Strengthening Quality and Clarity of the PSR Incorporating feedback from the primary audience in the FY22 PSR.	Closed
2.	Risk of Injury or Fatality (“RIF”) metric Reviewing the RIF metric to confirm its value in tracking performance and overall safety.	Open – An initial review of the RIF was completed in FY22, and work will continue as new safety metrics are introduced in the FY24 strategic plan.
3.	Impact of COVID-19 Pandemic on Comparable Data Helping PSR readers interpret COVID-19 impacts on trend analysis.	Closed
4.	Strengthening Quarterly Quality Reviews Improving timing and processes of regular quality reviews.	Closed
5.	Strengthening Near Miss Occurrences Driving consistency in utilizing and reporting near miss occurrence data.	Open – Guidance on reporting incidents has been published and work continues in addressing incident data quality. In some cases, the inconsistency is a result of the different regulation requirements.
6.	Strengthening Incident Reporting Augmenting disclosures of incidents under investigation and changes to reported data from previous editions of the PSR.	Closed

FY21 Outstanding Recommendations

7. Strengthening Quality and Timeliness of Incident Reporting	Negotiations and collaboration with Spills Action Centre (“SAC”) to improve incident reporting.	Open - Ongoing capacity issues at SAC have delayed execution of agreement.
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Overview of SRO Activities for Fiscal Year 2023

The Fiscal Year 2023 Work Plan strives to provide the greatest value while minimizing costs. The Work Plan continues to focus on the review of the PSR and the main deliverable for the year is the SRO Report on the Annual State of Public Safety Report FY22.

Other deliverables in the Work Plan for FY23 are:

- The SRO Annual Report FY22, including a report on the Status of Recommendations (to be delivered with this report),
- The submission of the FY24 Work Plan and Budget for SRAC Approval.

Evolution of the Safety and Risk Officer Role

With the refocusing of the SRO responsibilities in 2019, my work over the last few years has concentrated on providing assurance as to the reliability of the Public Safety Report. The TSSA’s response to my recommendations to strengthen quality, accuracy, and clarity of data in addition to management’s efforts to leverage the value of the PSR have led to significant improvements over the version of the PSR reviewed by the Auditor General in 2018.

The Data Governance initiative and changes in technology are improving the consistency and reliability of data used in decision-making and in reporting of metrics in the PSR. Quality assurance processes are now built into regular operations and that combined with greater reliance on the data to inform decisions allows for data integrity issues to be spotted as they occur.

The PSR is no longer a “stand alone” exercise but one that is integrated with regular operations and moving towards a reflection of the activities of an outcome-based regulator.

Assurance is a significant investment and ensuring that it is providing the most value is critical. As automation and processes stabilize and become embedded in daily operations the value of assurance diminishes. Early evidence of this trend was apparent in the SRO review of the FY21 PSR as most observations were not a surprise to the Strategic Analytics personnel or Statutory Directors. The results from the SRO review of the FY22 PSR continue to support this trend.

There is an opportunity to review the current level of assurance to ensure the benefits received are commiserate with the costs. It is likely that as processes and technology continue to be strengthened the current level of assurance may be scaled back to a less intense level or shift to periodic spot checks in place of rigorous assurance reviews.

With TSSA’s transformation to an outcome-based regulator (“OBR”), the importance of the PSR grows as it evolves as the public face in reflecting the OBR direction. Aligned with the transformation, steps have been taken to increase collaboration with industry partners. Discussions as to the value of the PSR for the industry is leading to a review of TSSA publicized metrics to determine what would be of most value. This

investigation into the metrics is being implemented in tandem with a review of the metrics that TSSA needs to inform its risk-based decisions. This direction is consistent with other outcome-based regulators that publicly report on fewer, relevant indicators supported by plain language commentary that explain their significance.

The SRO's mission is to provide the Board of Directors with an independent review of the public safety responsibilities assigned to the TSSA. Responsibilities include independent assurance, reporting and advisory activities. As the assurance responsibilities of the SRO shift, there is an opportunity to review the role to ensure it is providing maximum value. There are opportunities to provide value in activities related to independent reporting and advisory activities. One example is the support of the SRO position as TSSA continues its journey to a modern outcome-based regulator. Soliciting the SRO independent perspective on the effectiveness of TSSA's evidence informed operational model and decision making will provide assurance to government and the public that activities are moving TSSA closer to its goal.

An important element in evaluating the SRO role to ensure it is providing value, is the performance framework for the position. As evaluation criteria shifts from indicators of volume or completion of activity to indicators demonstrating SRO value, direction for the evolution of the role to provide the greatest value will become apparent.

Conclusion

SRO activities in FY22 continued to build on the theme of data quality with the completion of the main deliverable of the SRO Review of the FY21 PSR. Other deliverables completed were the SRO Annual Report FY21 and the submission of the FY23 Work Plan and Budget for SRAC Approval. Collaboration and coordination continued to flourish with Internal Audit and Strategic Analytics and allows for enhanced clarity and transparency.

In response to the recommendations from my review of the FY21 PSR, TSSA continues to demonstrate consistent action and commitment to the continuous improvement of the PSR. This despite significant transformation and systems changes. I will continue to follow up to close the remaining items as action is completed.

The Fiscal Year 2023 Work Plan strives to provide the greatest value while minimizing costs. The Work Plan continues to focus an assurance lens on the PSR and the main deliverable for the year is the SRO Report on the Annual State of Public Safety Report FY22.

With the redefined role of the SRO the evolution continues. As operational practices stabilize in the delivery of the PSR, there may be benefit in the SRO working collaboratively with the Board and Management in planning a fiscal year 2024 program which optimizes the value of independent assurance, reporting and advisory on public safety responsibilities assigned to TSSA.

Appendix A – Details of Follow Up on SRO Recommendations for FY20 and FY21

The following section provides details of the recommendations and the status of management’s action plan.

Update on FY20 Outstanding Recommendation

At the end of FY21, one recommendation from my review of the FY20 PSR remained open. Details are as follows:

Recommendation #1: Audience Definition

It is recommended that steps be taken in FY21 to clearly identify the primary reader for the PSR and actively solicit their feedback to confirm the objectives of the PSR and audience needs are being met.

Rationale

As the quality and value of a report can only be determined by the intended readers it is critical to ensure a primary audience is identified and that their feedback is sought. When that clarity is missing it will continue to be a challenge to deliver a report in an appropriate format with the correct level of information. There is a risk that the needs of the audience are not satisfied and the quality and value of the report in the eyes of the reader are diminished.

TSSA Response and Action

TSSA acknowledges that the State of Public Safety Report is produced with multiple audiences in mind and that having a clear main audience would help improve the focus.

Action: By FY21 Q4, TSSA will determine the main audience for the State of Public Safety Report. Once the audience is defined, in FY22 a plan will be developed to focus the report to that audience for the FY23 edition of the report.

Status – Closed

During FY21 management identified two primary audiences for the Public Safety Report, as follows:

- Government of Ontario (through Ministry of Public and Business Service Delivery (MPBSD), and
- Authorization Holders (regulated parties).

The ability to focus the content to regulated entities was evident in the language and content in the Case Studies and Director’s messages in the FY21 edition of the PSR.

During FY22 TSSA held focus groups with Advisory Councils and met with MPBSD to gather feedback on the clarity and value of the PSR. Key enhancements were identified to improve the clarity of content and increase the value of the PSR to the primary audiences.

Update on FY21 Recommendations

Recommendation #1: Strengthening Quality and Clarity of PSR

In seeking feedback from the identified targeted audiences of the PSR it is recommended that TSSA confirm that changes made in FY21 enhanced the quality and clarity of the report for the readers.

Rationale

Reader comments on the impact of changes made for FY21 will provide important guidance for continuing with current changes and providing suggestions for future improvements.

TSSA Response and Action

TSSA concurs that seeking feedback from the identified targeted audience will enhance the quality and clarity of the report for the readers.

Action: TSSA will conduct meetings to gather input and feedback from MPBSD and Advisory Councils on the impact of the FY21 changes to the report as well as other areas.

Status – Closed

TSSA conducted meetings to gather input and feedback from MPBSD and Advisory Councils on the impact of the recent changes to the report as well as other areas. The feedback was generally positive and recognized that recent changes have improved the clarity of the report: specifically, the inclusion of case studies; the use of visuals and infographics and the Director’s messages.

MPBSD and Advisory Councils provided suggestions that could further enhance the Public Safety Report. TSSA has carefully reviewed all the feedback received and incorporated key enhancements in the FY22 edition of the report such as improved consistency of the format for each program area, plainer language in describing the meaning and calculation of the Risk of Injury and Fatality metric, and clearly identifying data availability limits.

Recommendation #2: Risk of Injury or Fatality (“RIF”) metric

TSSA management plans to review safety performance metrics, including the RIF, to assess whether they are appropriate as metrics to track TSSA’s performance and overall safety. Some results, including next steps identified, are expected early in fiscal year 2023.

It is recommended that TSSA management pay special attention to the RIF in their review and consider the value of the RIF in reporting on TSSA performance and how the PSR audience uses the information. A closer look at the value of presenting a composite RIF reflecting the three safety programs should be examined to determine the value to readers and TSSA.

Rationale

The RIF is an abstract, sophisticated metric, used to predict future risk based on past performance. It is unique to TSSA, and it is not known if it is easily understood or used by the audiences of the PSR. Without confirming the usefulness of the RIF to the PSR audience there is a risk that the effort invested in the calculation and presentation of the RIF is wasted.

TSSA Response and Action

TSSA agrees that a review of risk metrics can be beneficial to both TSSA and the readers of the report.

Action: In FY22, TSSA will undertake an initiative to revise the risk metrics, including a review of the RIF and an assessment of the value and clarity of providing aggregate measures.

Status - Open

TSSA began a review of the RIF metric in FY22 assessing the validity of the metric and scanning what other regulators and jurisdictions are doing. The next TSSA strategic plan will be released in FY24 and will introduce new organizational safety metrics. A further review of the RIF will be completed before then, and changes made to align with strategic plan.

Recommendation #3: Impact of COVID-19 Pandemic on Comparable Data

It is recommended that TSSA begin to consider how data trends may be affected for fiscal year 2022 and the next few years and what additional context will be needed for readers to correctly interpret the data trends. It may be helpful to look to other regulators for guidance in determining a suitable approach for TSSA.

Rationale

It is expected that the impact of restrictions on device usage because of COVID will continue into FY22 and may have longer term impacts yet to be determined. Understanding the impacts on data and its presentation will be necessary in future reports to provide quality data to readers.

TSSA Response and Action

TSSA recognizes that government mandated closures of many of the sectors and industries that TSSA regulates have resulted in fewer incidents and near-misses.

Action: The next edition of the PSR will include a disclosure on the impact of COVID closures on 10-year trends and analysis. TSSA will consult with other regulators facing similar issues with their disclosures.

Status – Closed

TSSA consulted with several other regulators and has assessed the impact of the COVID-19 pandemic on comparable data in the PSR. Information was added to the FY22 PSR to provide readers with an explanation of the factors impacting trend analysis.

Recommendation #4: Strengthening Quarterly Quality Reviews

Quarterly reviews over datasets informing PSR reporting should be fully completed in a timely manner to help ensure data (at that point in time) is as accurate as possible and to reduce the level of effort required to review data at the end of the reporting year.

Formal signoffs capturing the quarterly review of safety data by Statutory Directors for their respective program areas should be documented to formally capture any insights they may have and to identify any concerns over the data itself.

Rationale

Should quarterly reviews not be completed or performed in a timely manner, there is a risk that a data set at a point in time needed to identify trends or inform decision making may not be accurate. Furthermore, there is a risk that if data sets are not adequately reviewed throughout the year, the level of effort required to ensure all data is accurate and the review of any unusual results may impede efficiency and effectiveness of PSRM and operations staff.

TSSA Response and Action

TSSA recognizes the importance of reviewing data in a timely manner to identify trends and inform decision making.

Action: TSSA will continue to roll out and strengthen quality control processes as part of a Quality Management System.

Status – Closed

Quarterly meetings have been strengthened during FY22 and take place approximately 2 weeks following the end of the quarter. The data owners / management and Statutory Directors validate data sign off on the results by email following the meeting.

Recommendation #5: Strengthening Near Miss Occurrences

There is an opportunity for the TSSA to revisit the approach used for utilizing and reporting near miss occurrence data to help drive consistency in reporting. Possible considerations include:

- Separating this measure from incidents for reporting purposes.
- Reviewing the inclusion of near miss data in key safety performance metrics such as the RIF calculation.
- Adopting a consistent definition of near misses for all program areas which should be reflected in reporting requirements shared with the SAC.

To enhance completeness and quality of reporting on near misses, TSSA management should consider practices from other jurisdictions such as obtaining reports on near misses from regulated businesses through existing Joint Health & Safety Committees. These details may be more informative and complete than current information received through the SAC and help to better inform root-cause analysis.

Rationale

Improved tracking of near misses would provide the TSSA with an opportunity to better identify safety trends and provide training in areas where near misses are increasing or clustering.

TSSA Response and Action

TSSA agrees on the need to harmonize and strengthen the collection of incidents and near miss data.

Action: TSSA will review the quality of incident reporting and look to implement a uniform definition and seek ways to enhance data collection. Any changes will be aligned with the reporting requirements in the regulation. As part of the review of the RIF, TSSA will assess the inclusion of different occurrence types.

Status – Open

In FY22, TSSA finalized an Advisory for Boilers, Pressure Vessels, and Operating Engineers (“BPV OE”) on the incident reporting definitions and process. Guidance on reporting incidents was published on the website and progress continues in addressing incident data quality. To better understand the impact of near miss occurrence data on the RIF, TSSA conducted a RIF calculation with and without the near miss occurrence data and concluded there was no significant impact on the RIF results. Currently each program area has distinct requirements for incident reporting that reflect their respective regulations. TSSA will continue work in this area in FY23 by exploring options to implement a uniform definition or enhance the data collection in other ways. Completion date is targeted as FY24.

Recommendation #6: Strengthening Incident Reporting

There is an opportunity for the TSSA to enhance transparency of PSR disclosures by including additional information on incidents under investigation each year, including the incident date and indicating data can be subject to change in the future. In addition, when data and trends for prior periods are restated, a

supplementary disclosure should be provided outlining the changes to the re-stated data for transparency purposes.

Rationale

In cases where there is an injury or fatality which requires an investigation, it may be several months before the root cause analysis to identify the cause of the injury or fatality is completed. These occurrences are reported in the PSR based on the date of their occurrence once a resolution has been reached. Therefore, previously reported incident data may be restated to reflect updates on incidents which occurred in a prior year(s). To date, supplementary information related to such restatements has not been included in the PSR to help the reader understand any changes to the RIF and Observed Injury Burden (“OIB”) calculations for restated/current results.

TSSA Response and Action

TSSA agrees on the need to harmonize and strengthen the collection of incidents and near miss data.

Action: TSSA will review and strengthen the language used to identify and explain changes in the data for transparency purposes. In addition, for greater transparency, TSSA will include the number of occurrences that have not yet been closed or are under investigation

Status – Closed

In the FY21 PSR, TSSA augmented the disclosures to further explain any information about incidents under investigation and changes to reported data from previous editions. Additional enhancements were made to identify open and closed incidents and near-misses in the FY22 report.

Recommendation #7: Strengthening Quality and Timeliness of Incident Reporting

While annual training is conducted for Spills Action Centre (“SAC”) staff to reinforce the quality standards required relating to incident response and reporting, there is an opportunity to perform this training on a bi-annual basis to ensure quality standards are clearly understood and any changes made to coordination response procedures can be communicated.

As a new Service Level Agreement (“SLA”) agreement with the SAC is currently being discussed, the TSSA should take this opportunity to incorporate key performance indicators into the agreement to better monitor and measure the services provided by the SAC. To help inform what key performance indicators should be included, there is an opportunity for the TSSA to closely monitor the performance of the SAC over the next short period of time to assess its effectiveness in meeting TSSA’s needs and which indicators should be reported on a regular basis.

Updated Recommendation for FY22:

TSSA should continue to follow up with the SAC regarding the execution of the new agreement and consider adjusting the term of the contract to compensate for the delay in signing. Staying current on capacity or structural changes at the SAC may allow for the introduction of KPIs in the future.

To further improve the efficiency of training delivery, it is recommended that TSSA consider implementing e-learning modules to supplement bi-annual training.

Rationale

The TSSA has a SLA in place with the SAC operated by the Ministry of the Environment Conservation and Parks. The agreement outlines the terms of telecommunications and response coordination support to be provided in reporting incidents to TSSA. It was observed that there are no key performance indicators within the agreement to help measure the performance of the SAC.

There is a risk that without adequate measures in place to assess the quality and timeliness of incidents reported, TSSA's ability to respond and report on incidents may be impaired.

TSSA Response and Action

TSSA agrees that its partnership with the SAC is critical for the quality standards of occurrence data used for public disclosures.

Action: In FY22 a new SLA was negotiated between TSSA and SAC and training provided to SAC staff. In FY23, TSSA will continue to monitor the quality and completeness of incident reports submitted by SAC and will continue to track any issues with reports to properly assess the impact of those issues on the quality and accuracy of public disclosures.

Status - Open

In negotiating the new SLA, the SAC did not agree to performance indicators and a signed agreement remains outstanding due to ongoing capacity issues at the SAC. TSSA revised the SAC training package and delivered training to SAC staff in May 2022 and designated individuals in each program area to monitor the quality and timeliness of data. Further attention is expected to be paid to the data received from SAC as the Data Governance Program Framework is executed over the next few years.