REGULATED INDUSTRIES COMMISSION

PROPOSAL FOR ESTABLISHING CALL CENTRE PERFORMANCE METRICS FOR WASA

January 2022

This document presents the proposed key performance indicators that the RIC considers necessary for improving the quality of service from WASA's Call Centre. The metrics are specifically targeted to transform the customer service experience and ultimately improve customer satisfaction. WASA will be required to routinely monitor and report to the RIC on the selected metrics, which will be published periodically. The RIC is seeking public comments on this proposal.

Consultative Document

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1.0 PURPOSE AND STRUCTURE OF THE DOCUMENT

1.1 PURPOSE

This document presents the Regulated Industries Commission's (RIC) proposal for establishing Key Performance Indicators (KPIs) for improving the quality of service provided by the Water and Sewerage Authority's (WASA's) Customer Contact Centre/ Call Centre (CC).

1.2 STRUCTURE OF THE DOCUMENT

This document is divided into six (6) sections:

Section 2.0 - provides details on responding to this consultative document;

Section 3.0 - gives the background and context for establishing KPIs and performance standards for WASA;

Section 4.0 - outlines the approach taken in selecting the proposed KPI's and determining the appropriate performance standards for WASA;

Section 5.0 - discusses how the RIC intends to monitor and evaluate the Codes; and

Section 6.0 - lists all the main issues for Public Consultation**.**

2.0 RESPONDING TO THIS DOCUMENT

In keeping with the RIC's statutory obligation to consult, stakeholders are invited to comment on the proposal presented in this document. All persons wishing to comment are invited to submit their responses in writing to:

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Regulated Industries Commission
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Port-of-Spain
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All responses will normally be published on the RIC's website unless there are good reasons why they must remain confidential. Any requests for confidentiality must be indicated. A copy of this document is available from the RIC's website at www.ric.org.tt

The deadline for submission of comments is 15th April 2022.

3.0 BACKGROUND

The RIC is the economic regulator of the electricity, water and wastewater sectors in Trinidad and Tobago, and is responsible for regulating tariffs charged for services and the corresponding quality of service provided. The RIC Act No. 26 of 1998, sets out the broad principles that the RIC must consider when undertaking this role and, in particular, is required to have regard to the public interest. In this regard, the RIC's legal mandate to address WASA's CC performance and establish standards of service from WASA's CC are derived from the powers and functions conferred upon it by virtue of Section 6. (1) (d), (e), (f), (l) and (n) which states:

> *"(d) carry out studies of efficiency and economy of operation and of performance by service providers and publish the results thereof;*
>
> *(e) prescribe and publish in the Gazette and in at least one daily newspaper circulating in Trinidad and Tobago, standards for services;*
>
> *(f) monitor service providers and conduct checks to determine their compliance with the standards referred to in paragraph (e);*
>
> *(l) investigate complaints by consumers, of their failure to obtain redress from service providers in respect of rates, billings and unsatisfactory service and facilitate relief where necessary.*
>
> *(n) do all such things as may be necessary or expedient for the proper performance of its functions."*

Call centres/contact centres (CC) are a critical interface between the service providers and their customers. This interface becomes especially important when customers wish to either access information on services provided, make a request for a specific service, make or follow-up on a complaint lodged with the service provider. The quality of service emanating from WASA's CC has been an ongoing concern as customers have been complaining to the RIC over time about the issues they have been experiencing with WASA's CC, including dropped calls, inordinate time in the queue, poor customer service from the agents, and the non-issuance of reference numbers for reported complaints. Although the RIC has intervened on behalf of customers to bring relief, complaints regarding WASA's CC have persisted. In view of this, the RIC prepared a report on the issues affecting WASA's CC performance, April 2019, and noted there was room for improvement.

The key findings of the report were provided to WASA, and are outlined below:

- There was insufficient expertise to manage the CC effectively;
- Only five (5) performance metrics were being captured and monitored by WASA, namely, the number of calls answered, the percentage of calls answered, the number of calls abandoned, average speed of answer and average handle time. Notably, core CC

management information/data, such as KPI's, Service Level and other essential metrics, were either not used or not in place to measure and improve performance;

- Of the five metrics measured, four related to service responsiveness and they were very poor;
  - The percentage of abandoned calls was consistently too high, averaging 49%;
  - The percentage of calls answered by an agent was too low, averaging 46%;
  - The percentage of calls that were dropped/missed was too high, averaging 4%.
  - The Average Speed of Answer was inordinately too long, averaging 8.9 minutes or 534 seconds.
- There was an insufficient number of Agents to handle the daily call volume, and there was limited optimisation in workforce planning (scheduling) to address variability in daily/weekly/monthly call volumes; and
- There was no documented plan to improve the CC's performance.

The RIC provided several recommendations to address the issues identified above, and WASA was required to submit a Performance Improvement Plan to the RIC, which they submitted in June 2020. The RIC noted that all of its short-term recommendations were implemented. The medium-term recommendations were also accepted and incorporated but they were at various stages of implementation. The key findings of RIC's assessment of WASA's CC Performance Improvement Plan were as follows:

- A manager was appointed in March 2019, with strong experience in WASA's operations. However, this manager did not possess the requisite experience and knowledge in CC management.
- The improvement plan covered the essential areas required. However, there was no cost component, and some projects had no start and end dates.
- An additional 25 agents were recruited in May 2019 for the CC, which increased the staff complement to 60. However, WASA's assessment of the number of agents required for the CC, fell short of what would be considered adequate.
- WASA did not optimise the number of agents per shift to handle the call-volume variations better.
- WASA expanded the number of performance metrics they monitored from five (5) to include all fourteen (14) metrics indicated in the RIC's Report of April 2019.
- The new agents were trained in CC operations and Standard Operating Procedures. However, additional training and certification were not done for the supervisory and management level personnel, who are the persons responsible for improving the CC's overall efficiency and effectiveness.

The RIC recognises that modern CCs operate in an omnichannel environment, where all communication channels are integrated to provide a seamless experience to the customers. The RIC is aware that WASA has integrated other communication channels in its CC operation, such as e-mail, Facebook, WhatsApp, and Live Chat[1]. However, at this time, the RIC's focus is on establishing KPIs for a single channel, which is inbound phone calls, because it is the primary mode of contact utilised by customers of WASA's CC. Notwithstanding, the RIC will be reviewing the performance of WASA's CC across all available channels in the future.

[1] Live chat is an online communication app that enables visitors to your company's website to interact (chat) with your company's representative by typing in their comments or questions in the app.

4.0 RIC's APPROACH TO ESTABLISHING THE PROPOSED CALL CENTRE PERFORMANCE METRICS

4.1 THE MOST FREQUENTLY USED PERFORMANCE METRICS IN CALL CENTRE OPERATIONS

An efficient CC is usually managed by well-trained individuals who utilise a series of metrics or KPIs to evaluate key parameters of its operation that are important for the CC's effectiveness and efficiency. KPIs are essentially high-level measures of CC performance. Most of the metrics are automatically measured through the use of technology, in particular, specialised CC software based on predefined settings. A list and brief description of 36 frequently used KPIs is provided in Appendix 1. KPIs are often categorised depending on management's focus, which is usually captured by the scorecard used by the respective CC. As shown in table 1 below, the categories can vary.

Table 1: Example of CC KPIs Categories in Specific Groupings (by CC support Website)

Pointillist[2]	Call Centre Helper[3]
Customer Experience	**Customer Satisfaction**
First Call Resolution (FCR)	First Call Resolution (FCR)
Customer Satisfaction (CSAT)	Customer Satisfaction (CSAT)
Net Promoter Score (NPS)	**Operational Efficiency**
Customer Effort Score (CES)	Agent Occupancy
Call Initiation	Average Handling Time (AHT)
First Response Time (FRT)	Call Transfer Rate (CTR)
Blocked Call Rate	Cost Per Call (CPC)
Call Abandonment Rate	**Business Value**
Active Waiting Calls	Total Sales
Operational	Sales Conversion
Calls Handled	Customer retention
Cost Per Call (CPC)	**People Management**
Call Arrival Rate	Attrition Rate
Peak Hour Traffic	Agent Quality
Longest Hold Time	
Average Age of Query	
Callback Rate	
Agent Productivity	
Agent Utilisation Rate	
Adherence to Schedule	
Calls Answered Per Hour	
Average Handling Time (AHT)	
Average Speed of Answer (ASA)	
Average Caller Hold Time	
Average After-call Work Time	

[2] http://myjourney.pointillist.com/rs/837-MZM-862/images/Pointillist-Call-Center-Metrics-Analytics-eBook.pdf
[3] https://www.callcentrehelper.com/the-best-kpis-to-use-in-your-call-centre-10598.htm

4.2 CALL CENTRE METRICS ESTABLISHED BY UTILITY REGULATORS IN OTHER JURISDICTIONS

Research has shown that it is typical in many jurisdiction for sector regulators to establish CC metrics for utility companies. The KPIs used by some of the regional and international regulators are presented in table 2 below. It is noted that the choice of the KPI and the benchmarks used in the various jurisdictions are not consistent. This inconsistency may be attributed either to the regulator's level of focus, the development of the various jurisdiction, or the utility company's historical CC performance.

Table 2: CC KPIs Established by Utility regulators in Other Jurisdictions

Regulator	**Key Performance Indicators**	**Performance Measure**
Office of Utilities Regulation (OUR) **Jamaica**	• Percentage Service Level • Speed of Answer • Call Abandonment Rate • Call Handle Time • Average Talk Time • % First call resolution Rate	80% 20 seconds ≤2% <12 minutes <5 Minutes 80%
The Water Services Regulation Authority (OFWAT) **United Kingdom and Wales**	• All lines busy • Calls abandoned • Call handling satisfaction score	Required to provide statistics on an annual basis
Office of Gas and Electricity Markets (OFGEM) **United Kingdom**	• Average speed of answer • Total calls received • Total time system unavailable to take additional calls (if applicable) • Number of calls with an engaged tone • Number of calls disconnected • Number of occasions all lines busy (if applicable) • Total calls abandoned • Total calls abandoned within 10 seconds • Total calls answered • Total response time for relevant calls	Required to provide statistics on an annual basis.
Essential Services Commission (ESC) **Victoria, Australia**	• Telephone calls answered within 60 seconds • Rate of first point resolution • Call handling satisfaction	85% 64% 85%
Public Utilities Commission of the State of California (CPUC) **United States of America**	• Calls answered in 30 seconds • Percentage calls abandoned	≥80% ≤5%

Source: OUR, OFWAT, OFGEM, ESC & CPUC

Regulatory Jurisdictions Reviewed

Jamaica

In 2019, the Office of Utilities Regulation (OUR) reviewed the key performance indicators for the Jamaica Public Service Company Limited (JPS) and National Water Commission (NWC) to ascertain whether best practice was being followed, and CC service level was found to be acceptable. According to the OUR, a review of CC reports[4] from JPS and NWC revealed that both are already measuring metrics that assess customer satisfaction. However, there were variances in performance measures used by both service providers. Consequently, a proposal was made to establish uniformity with both service providers' CC standards and performance measures. In addition, the OUR noted that neither provider was assessing the First Call Resolution (FCR) rate. Consequently, the OUR decided that a performance target should be established for resolving complaints at the first call, and the indicator should be measured by a post-contact survey.

United Kingdom

The Water Services Regulation Authority for England and Wales (Ofwat) introduced the Overall Performance Assessment (OPA) in 2005 for water service companies under its purview. The OPA, in particular DG9[5], established a performance measure for telephone contact. DG9 combined three measures – two quantitative (all lines busy and calls abandoned) and one qualitative (call handling satisfaction) – to derive a single DG9 performance score used to monitor service levels. For each of the measures, the service providers' performance was considered against a fixed range of industry performance and then combined to form the DG9 score. This assessment was independent of the technology used by the companies to handle telephone calls. The OPA allowed for a fair comparison of the respective company's performance and reflected customer experience. However, Ofwat no longer monitors the speed with which water service companies respond to calls because the information from this aspect of call handling is dependent on the type of telephone system in use. Companies use different telephone systems, so they were unable to provide consistent data that would allow meaningful comparison among water service companies.

The Office of Gas and Electricity Markets (Ofgem), Regulatory Instructions and Guidance[6] (RIGs) provides the framework for the collection and provision of accurate and consistent information from the gas and electricity service companies under its purview referred to as Distribution Network Operators (DNOs). Included in the RIG's are the definitions, instructions and guidance for reporting on the speed and quality of telephone response. The DNOs must report on the speed of telephone response by an agent once a customer decides to speak to an agent. The key measures for the reporting template are total calls on the specified lines, total calls answered by an automated message, total calls answered by an agent, mean time taken

[4] OUR - *Enhancing Customer Satisfaction through Contact Centre Standards for JPS and NWC Consultation Document* 2019/WAS/002/CON.001 2019 February 11
[5] https://www.ofwat.gov.uk/wp-content/uploads/2015/11/pap_rsh_opa2004-05.pdf
[6] https://www.ofgem.gov.uk/sites/default/files/docs/2003/07/4206-information_and_incentives_programme_july03.pdf

for response by an agent, the total number of unsuccessful calls comprising of total calls not reaching the fault lines, total calls terminated by the DNO during the IVR/group announcement, total calls not adhered into the queue of flushes from the queue and total calls abandoned by the customer in the queue. In addition, Ofgem measures the quality of telephone responses by surveying customers' views on the telephone response they received when they contacted the DNOs.

Australia

In 2020, the Essential Services Commission (ESC) in Victoria, Australia, employed an independent company to conduct a survey to benchmark Victorian water and sewerage service providers' CC performance[7]. During a telephone call, the key aspects of the customer experience are described as engage, introduce, clarify, resolve, and close. The scoring approach measures performance in these key aspects across the following three pillars:

- Ease - The agent should actively guide the customer through a clear process towards resolution.
- Sentiment – how the experience and interaction make the customer feel; and
- Success – the degree to which the customer can accomplish their goals.

For the period 2021-2024, new performance targets were established with Customer Satisfaction set at 85%, Service Level at 85% within 60 seconds, and FCR increasing from 64% in 2021 to 70% by 2024.

United States of America

The California Public Utilities Commission (CPUC) established telephone performance standards for water utilities in 2019 for "Calls answered within 30 seconds" and percentage calls abandoned[8]. The performance measure for Calls answered within 30 seconds was set at greater than or equal to 80%, and out of compliance is deemed to be less than 60%. For Percentage calls abandoned, the performance measure target was less than or equal to 5%.

A summary of the KPIs used in the various jurisdictions is provided in table 3 below. It is important to note that all of the regulators focus on KPIs that impact the customer service experience.

[7] https://www.esc.vic.gov.au/sites/default/files/documents/2019-20-water-performance-report-20201119.pdf
[8] https://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/106867-07.htm

Table 3. Summary of CC KPIs used in other Jurisdictions

Key Performance Indicators	Jamaica	UK	Australia	USA
Service Level Agreement	✓	x	✓	✓
Average Caller Hold Time	x	x	x	x
Average Handle Time	x	x	x	x
Average speed of Answer	✓	✓	x	✓
Blocked Call Rate	x	x	x	x
Call Abandonment Rate	✓	✓	x	✓
Calls Handled by Agents	x	✓	x	x
Callback Rate	x	x	x	x
First Call resolution	✓	x	✓	x
Longest Hold Time	x	x	x	x
Longest Delay in Queue	x	x	x	x
Call (contact) Quality	x	✓	x	x
Customer Effort Score	x	x	x	x
Customer Satisfaction	x	✓	✓	x
Net Promoter Score	x	x	x	x

✓ - *KPI used*

x - *Not Used*

4.3 KEY PERFORMANCE INDICATORS FOR WASA

The selection and tracking of appropriate KPIs are important in ensuring that managers can make decisions regarding CC operations to ensure efficiency, effectiveness and acceptable service to customers. However, tracking the wrong KPIs can lead to poor decision-making, wasted budget, a drop in customer satisfaction and inefficient CC operations. Customer service experience in a CC is the overall experience of a customer, based on interaction with the company's CC. It is one of the most critical elements of overall customer experience and retention over the long term. Therefore, the RIC felt that this aspect of service delivery was most important to customers based on the complaints and negative comments received on WASA's CC performance. Consequently, in order to propose the most appropriate KPIs for WASA, the RIC conducted research on the most frequently used performance indicators utilised in CC operations, and the KPIs that regional and international regulators established for the service providers' CCs under their regulatory remit. The RIC also examined the KPIs that would have a meaningful impact on improving the customer service experience in the local context.

4.4 KPIS THAT IMPACT THE CUSTOMER SERVICE EXPERIENCE

After examining the KPIs implemented by regulators in other jurisdictions, the RIC has decided to focus on those KPIs that show how well the CC is performing, regarding customer service experience. KPIs relating to sales/profits and human resource management are not considered at this time. In selecting the most appropriate KPIs that impact the customer service experience, the RIC considered WASA's CC current capabilities, limitations and its status as a monopoly service provider. Accordingly, the RIC proposes ten (10) KPIs within the following three (3) categories:

A. Service Responsiveness;
B. Call Quality; and
C. Customer Satisfaction.

A. Service Responsiveness

1. Service Level and Response Time (SL)

This metric commonly defines X amount of output in Y amount of time. For example, 80 percent of calls answered in 20 seconds. Service Level (SL) is an effective KPI used to assess CC efficiency. It is often used as a good indicator of customer service quality in inbound[9] CC performance. It usually gives an insight into the CC's accessibility to its customers and its ability to plan for call volume fluctuations and execute its staffing strategy. It usually indicates whether customers are quickly connected to team members/CC Agents to get their issues addressed on time. There are different variations of the formula used to measure SL; some take abandoned[10] calls into account while others do not. However, SL is usually measured using the formula below for the period being measured.

$$\boldsymbol{SL} = \left(\frac{Number\ of\ Calls\ Answered\ within\ threshold\ (x\ seconds)}{Total\ Number\ of\ Calls\ Answered + Total\ Number\ of\ Calls\ Abandoned}\right) x\ 100$$

Although there are no set standards for SL, a CC must determine its service level target based on many factors, including customer needs, priorities, expectations and patience level, employee workload, call volumes, and business goals and objectives.

2. Average Hold Time

The Average Hold Time is the amount of time, usually measured in seconds, that a call is placed on hold by an agent, during the body of the call. The calculation does not include the time required to initially answer the call or the customer's time in the IVR[11]

[9] An inbound call centre is a customer service function whose primary responsibility is to handle incoming customer phone calls.
[10] For further details on abandoned calls, see item 6 below.
[11] IVR – Interactive Voice Response: Technology that facilitates both routing of calls, and allows a customer to interact with the data systems by responding to a menu of options. Responses are typically entered by pressing the keys on the telephone key pad.

menu. When customers are placed on hold for too long, they usually abandon the call, resulting in a lost opportunity to serve their needs. Long hold times make customers more stressed out, and thus, they feel devalued, creating a negative customer service experience. Average Hold Time is calculated using the formula below for the period being measured.

$$\textbf{Average Hold Time} = \frac{Cumulative\ Total\ Hold\ Time}{Number\ of\ Calls\ Placed\ on\ Hold}$$

3. *Average Handle Time (AHT)*

Average Handle Time is the average duration of the entire customer call transaction, from the time the customer initiates the call to termination, including all hold times, transfers and after-call work[12]. AHT is one of the most commonly measured metrics, which indicates the length of time an agent spends working on a task and therefore they are unable to deal with a new work item. AHT is a metric that impacts several other critical KPIs such as customer satisfaction, operational efficiency, agent effectiveness, and costs.

Having a low AHT may be desirable as it reflects an increase in productivity. However, there is the risk of agents rushing the customer off the conversation to get good AHT scores. Customers may have to call again until all their issues are properly addressed, negatively impacting customer satisfaction. AHT is calculated using the formula below for the period being measured.

$$\textbf{AHT} = \frac{Total\ talk\ time\ +\ total\ hold\ time\ +\ after\ call\ work\ time}{total\ number\ of\ calls}$$

4. *Average Speed of Answer (ASA)*

Average Speed of Answer (ASA) is a metric that shows the amount of time it takes for an agent to answer a typical call once it has been routed to the contact centre, which is from the ring tone up until the time an agent answers the call. It includes both IVR-handled calls and calls handled by an agent. ASA is one of the main factors affecting how customers judge the level of service, and it is often associated with customer satisfaction. ASA is a key part of a contact centre's Service Level Agreement (SLA). ASA is calculated using the formula below for the period being measured.

$$\textbf{ASA} = \frac{Cumulative\ Total\ Length\ of\ Time\ of\ Calls\ that\ are\ in\ Queue}{Total\ Number\ of\ Calls\ Answered}$$

[12] After Call Work is the average duration after each call that an agent takes to carry out post-call processing, including data entry and updates, scheduling follow-ups, and other communication requirements.

5. *Blocked Call Rate*

The Blocked Call Rate is the percentage of calls blocked due to congestion on WASA's network. The blockage may be due to a lack of available circuits, lines, or trunks and is often caused by one of the following:

- There are no available agents and no call queues configured, or the call queues are full, so callers hear a busy tone when they call or are routed directly to voicemail.
- The CC software cannot adequately handle the call volume.

Blocked Call Rate is a KPI that should never be ignored, as any blocked call can be a missed opportunity to connect with a customer and provide much-needed assistance/service. Blocked Call Rate is calculated using the formula below for the period being measured.

$$\textbf{Blocked Call Rate} = \left(\frac{Total\ Number\ of\ Calls\ that\ did\ not\ connect\ with\ the\ ACD[13]}{Total\ Number\ of\ Calls\ Offered[14]}\right) x\ 100$$

6. *Call Abandonment Rate*

The Call Abandonment Rate is the percentage of inbound phone calls that are abandoned by customers before speaking to an agent. Call Abandonment rate is usually a reasonable gauge of the customer service experience. It is used to measure how many customers terminate their call before it is answered in the CC. Excessively long wait time is usually cited as the primary reason why customers terminate calls or use other communication channels. Abandonment rate must be measured from both the system's telephone network side, that is, calls that are being abandoned within the IVR process and at the agent's queue. It is common practice to exclude calls that are abandoned in the first five seconds for two main reasons:

a. The customer dials the wrong number and only realises when the call is connected
b. The customer dials the right number but thinks they may have dialled a digit incorrectly and then hangs up and redials the same number to be on the safe side.

Call abandonment rate is calculated using the formula below for the period being measured.

$$\textbf{Call Abandonment Rate} = \left(\frac{Total\ Number\ of\ Calls\ Abandoned}{Total\ Number\ of\ Calls\ Offered}\right) x\ 100$$

[13] ACD – Automatic Call Distributor : A device used to manage and distribute incoming calls to a specific group of terminals/agents

[14] Calls Offered – The total number of inbound calls received by the ACD within a given period.

7. Call Handled Rate

Call Handled Rate is the percentage of how many calls that were answered by agents originating through a call queue. It does not include abandoned calls. Calls are "*offered"* to an agent, but the agent has to accept the call. Therefore, reportage of offered calls vs calls handled provides a measure of a CC's productivity at the agent level. Call Handled Rate is calculated using the formula below for the period being measured.

$$\textbf{\textit{Call Handled Rate}} = \left(\frac{Total\ Number\ of\ Calls\ Handled\ by\ Agents}{Total\ Number\ of\ Calls\ Offered}\right) x\ 100$$

8. Longest Delay in Queue

Longest Delay in Queue (LDQ) is the longest time a caller has waited in a queue before abandoning or reaching an agent. This metric helps the CC team empathise with callers and understand the queue times.

LDQ is a very important parameter to measure the overall performance of the CC. It also acts as a historical performance indicator for the customer's worst-case experience in a certain period, for instance, during specific periods of a day. LDQ is strongly impacted by several factors, including the speed of answer, call handling times, the number of customer requests received, and the customer's patience. Smaller LDQs might be an example of shorter AHTs, or higher agent availability or low call volume in general. Longer LDQs, on the other hand, indicate a possibility of higher customer dissatisfaction levels, higher AHT, and higher volumes.

B. Quality

9. Call (contact) Quality

Call (contact) Quality is a measure of the efficiency and effectiveness of conversations between the agent and customers. It is considered one of the most effective and efficient approaches to improving customer experience. By observing and actively keeping track of agents' inbound calls and analysing the quality of the agent's call concerning customers' requirements and expectations, managers can easily spot and discover problems within their teams.

Call quality is usually measured by trained and qualified quality assurance associates using an appropriate scorecard, and routine call observations of agents conducted. Factors such as the agent's opening/closing remarks, customer service & communications skills, technical knowledge, use of systems, and process efficiency are typically considered. However, other factors, such as those associated with the emotional touch-point of a customer's journey, are also useful to measure. These factors include empathy, going above and beyond, and meeting the customer's needs.

A good call quality program has set targets for the number of calls monitored per week or month and a defined process and time allocated to provide feedback and define action plans. When conducted properly, it enables managers to maintain quality standards and compliance, boost customer experience, and improve the overall CC performance.

C. Customer Satisfaction

10. Customer Satisfaction (CSAT)

Customer satisfaction (CSAT) is a measure of how pleased customers are with the most important aspects of a positive CC experience: fast call resolution; real-time support; and the agent's friendliness. Organizations directly ask their customer base to rate their satisfaction with an event, product, or service to measure CSAT. This typically comes via a survey communicated through some channel to the customer (direct mail, e-mail, phone, etc.). For example, using a 5-point Likert scale[15] (1 being excellent and 5 being poor), customers would be asked to rate their level of satisfaction on the following typical questions:

1. Thinking about your most recent interaction with us, overall, how would you rate your experience?
2. Was the agent knowledgeable and well trained?
3. Did the agent understand your issue?
4. Was the agent courteous and polite?
5. Was your call handled efficiently?
6. Was your issue resolved during the interaction of your first call?

The exact wording of the CSAT question and the corresponding rating system used in surveys vary from organisation to organisation. This means that there is no industry-standard way to measure CSAT. A CSAT score does not have one unified measurement. The numerical score itself will depend on exactly what question is being asked. Nevertheless, CSAT is calculated using the formula below for the period being measured.

$$\boldsymbol{CSAT} = \left(\frac{Total\ Numbers\ of\ Customers\ who\ responded\ "satisified"}{Total\ Number\ of\ Customers\ Surveyed}\right) x\ 100$$

As a general rule of thumb, organisations try to get their percentage of satisfied customers as close as possible to 100%.

[15] A Likert Scale is a psychometric scale commonly involved in research used to represent people's opinions and attitudes to a topic.

4.5 UTILITY INDUSTRY BENCHMARKS AND BEST PRACTICES

Benchmarking can be defined as a structured, analytical methodology designed to establish a reference point for performance measures. It has proven to be an important tool for comparing operating metrics and methodologies of enterprises and organizations in the same industry. This practice has provided managers with a structured approach to addressing CC performance issues by providing useful insights, resulting in a fact-based process of discovery, action and improvement that ultimately leads to superior performance[16]. In many instances, benchmarking has enabled CC managers to identify, evaluate, and integrate those proven practices that are highly likely to either gain or maintain a competitive advantage where there is a competitive market.

The RIC used CC Industry Reports, published by Benchmark Portal, an agency recognised as a global leader in CC benchmarking, with the largest CC metrics database and the most advanced tools for benchmarking analytics. According to Benchmark Portal, the data that survey participants submit to develop the benchmark report is subject to three (3) rigorous quality assurance screening levels to ensure that their database remains accurate. Their reports are considered standard reference material for consultants and practitioners worldwide.

The RIC specifically selected Benchmark Portal's Industry Benchmark 2021 Report for Contact Centres in the Utility Sector. The report contains current benchmark data for specific KPIs for utilities so that suitable comparisons can be made for WASA. However, where there were no benchmarks for some of the KPI's, the RIC used industry best practice data obtained from careful consideration of available sources of online information.

The industry benchmarks and best practices associated with the respective KPIs have been provided in table 4 below.

Table 4: CC KPIs and their respective industry benchmark, best practice values

Key Performance Indicators	Utility Industry Benchmark	CC Industry Best Practice	WASA's Performance (2020)
1. Service Level	-	80% in 20sec	36% in 30 Sec
2. Average Call Hold Time	43.36 Sec	< 20 Sec	140 Sec
3. Average Handle Time	5.58 min	< 6 min	4.21 min
4. Average speed of Answer	47.18 Sec	< 20 Sec	506 sec
5. Blocked Call Rate	-	< 2%	3.2%
6. Call Abandonment Rate	5.24%	< 2%	36%
7. Calls Handled	91.06%	> 90%	60%
8. Longest Delay in Queue	-	< 10 min	63 min
9. Call (contact) Quality	-	70-90%	Not measured
10. Customer Satisfaction	78.95%	> 80%	Not measured

[16] Belfore, Bruce. Chatterley, John. Raia, David. 2021. Industry Benchmark Report for Contact Centres in Utility Sector. Benchmark Portal

4.6 WASA'S CALL CENTRE PERFORMANCE (2018-2020)

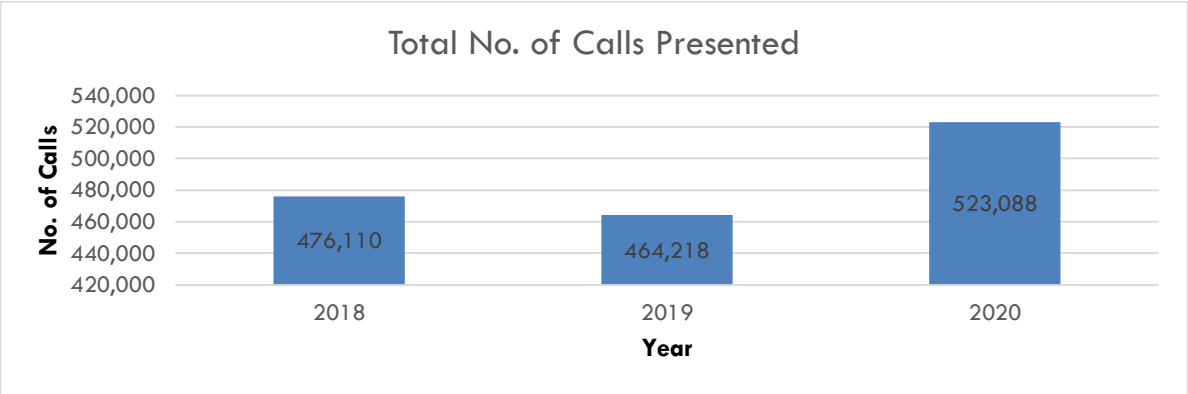
The RIC examined WASA's performance on the following ten (10) KPIs over the period 2018-2020, which will be discussed below:

- Total No. of Calls Presented
- Service Level (% calls answered within 30 secs)
- Average Call Hold Time (seconds)
- Average Handle Time (AHT) (seconds)
- Average Speed of Answer (ASA) (seconds)
- Blocked Call Rate
- Call Abandonment Rate
- Calls Handled
- Longest Delay in Queue (minutes)
- Call Quality

Total No. of Calls Presented

The Total No. of Calls Presented to the CC decreased by 2.5% or 11,892 from 476,110 in 2018 to 464,218 in 2019. Compared to 2019, the Total No. of Calls Presented increased by 12.7%, or 58,970 to 523,088 in 2020. The high number of calls presented exceeded the CC's handling capacity and negatively impacted the CC effectiveness.

Figure 1. Calls Presented for the period 2018 - 2020

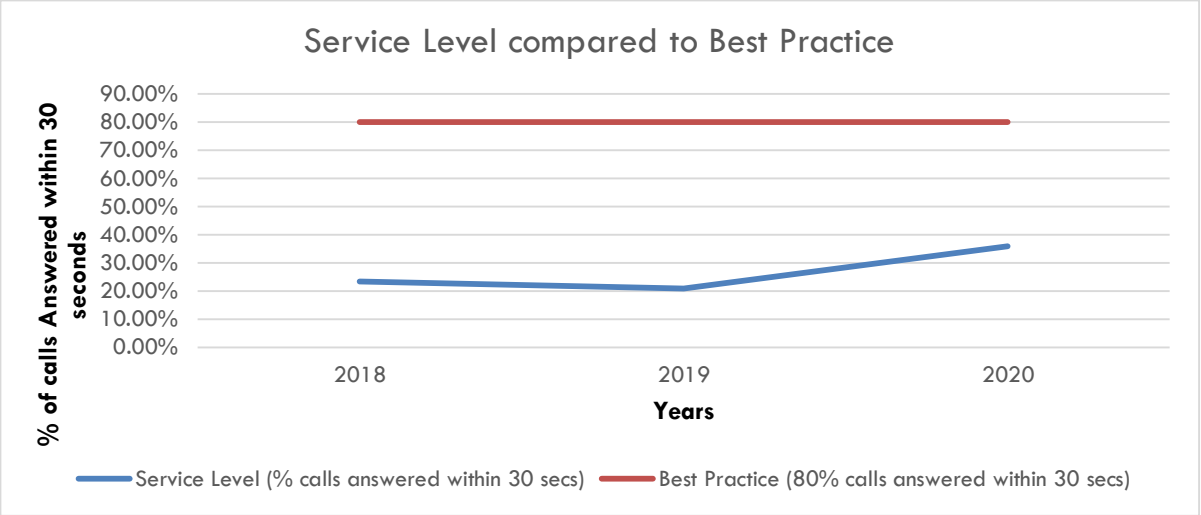


Service Level

Figure 2 below shows that the percentage of calls answered within 30 seconds decreased from 23% in 2018 to 21% in 2019. However, notwithstanding a 12.7% increase in call volume for 2020 compared to 2019, the Service Level increased to 36% from 21% in 2019. The small but notable increase in Service Level for 2020 was due to WASA partially implementing the RIC's recommendation to increase the number of agents at the CC. Although, the best practice is

80% of calls answered within 20 seconds, WASA has been measuring 80% of calls answered within 30 seconds. Despite WASA's improved performance, it is far from the best practice of 80% of calls being answered within 20 seconds.

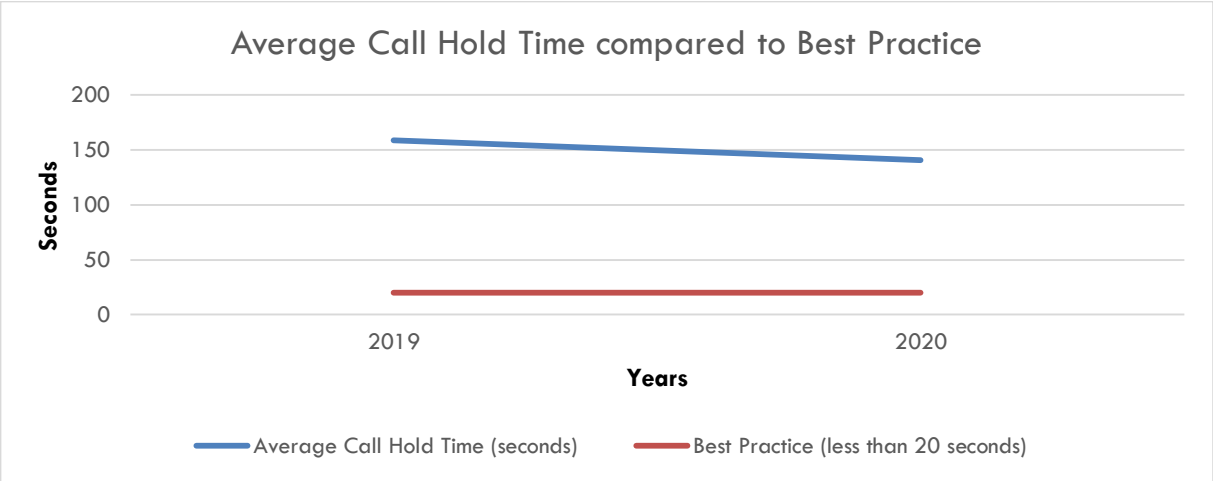
Figure 2. Service Level



Average Call Hold Time

The Average Call Hold Time (ACHT) decreased by 11.3% from 159 seconds in 2019 to 141 seconds in 2020. The data shows that, on average, customers waited on hold for 18 seconds less in 2020. While there was an improvement in performance for ACHT, the best practice is less than 20 seconds.

Figure 3. Average Call Hold Time

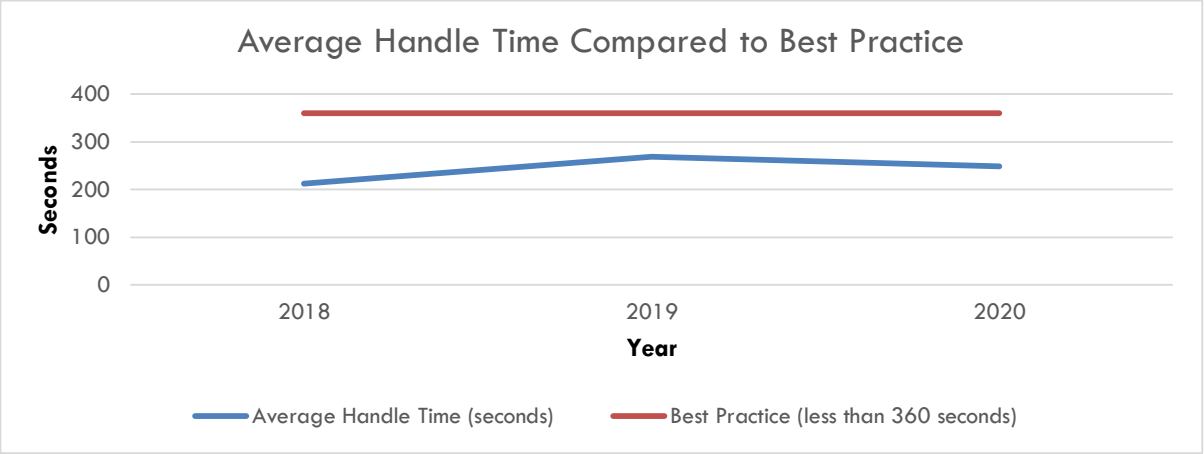


Average Handle Time

The data for 2018 to 2019 show fluctuating performance for the Average Handle Time (AHT). There was a 26.3% or 56 second increase in the average time taken by an agent to complete a transaction in 2019 compared to 2018. However, the AHT decreased by 7.4% or 20 seconds to 249 seconds in 2020 compared to the previous year. The best practice value for AHT is under

360 seconds. The data shows that WASA's CC is doing very well in this metric. The low value for AHT shows that agents are well equipped to handle customer queries.

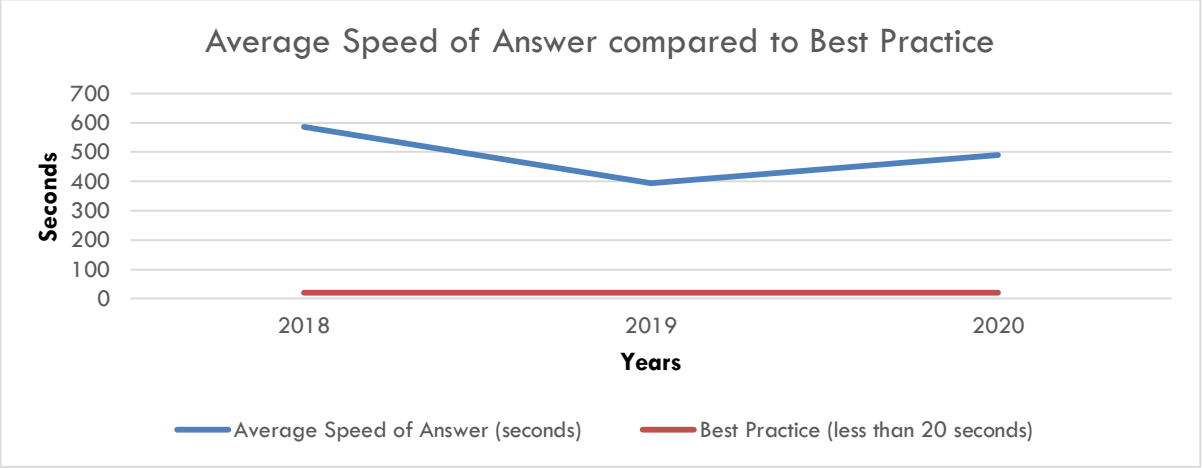
Figure 4. Average Handle Time



Average Speed of Answer

WASA's performance for Average Speed of Answer (ASA) varied from 2018 to 2019. ASA was reduced from 585 seconds in 2018 to 393 seconds in 2019, representing a 32.8% or 192 second reduction. Compared to 2019, the performance for ASA increased by 24.9 % or 98 seconds to 491 seconds in 2020. The data showed that WASA's ASA is inordinately long, as best practice is less than 20 seconds. The long ASA is related to the high call volume, which exceeded the CC handling capacity. A high ASA will result in customer dissatisfaction and high abandoned call rates.

Figure 5. Average Speed of answer

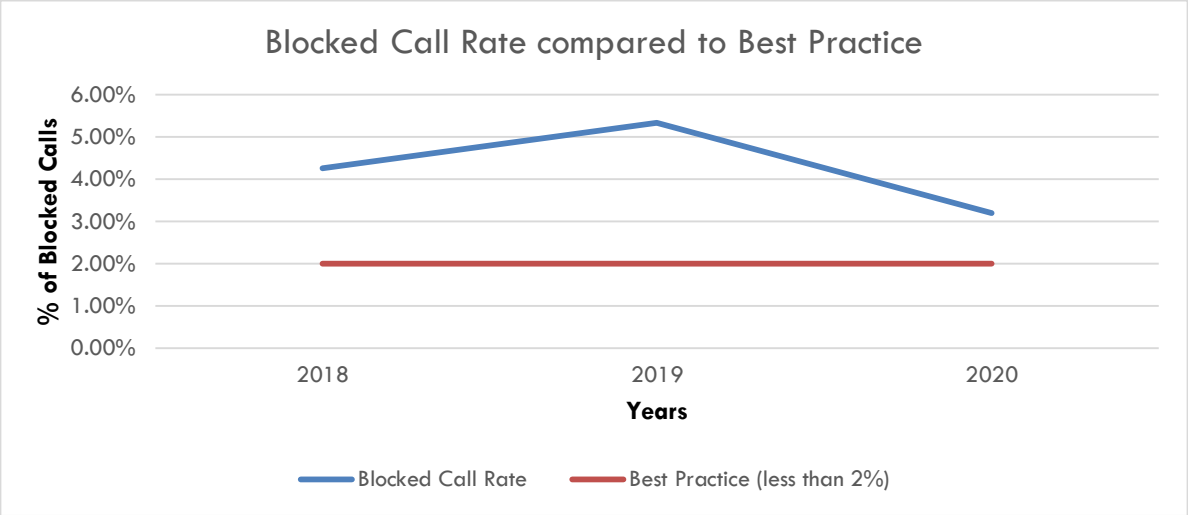


Blocked Call Rate

The CC Blocked Call Rate for 2018, 2019, and 2020 was 4.3%, 5.3%, and 3.2%, respectively. The rate of blocked calls for 2020 declined by 2.1 percentage points when compared to 2019. Despite WASA's improved performance for 2020, the best practice for Blocked Call Rate is

less than 2%. WASA's high Blocked Call Rate is indicative that call agents are not available or call queues are full, or the CC software cannot adequately handle the call volume.

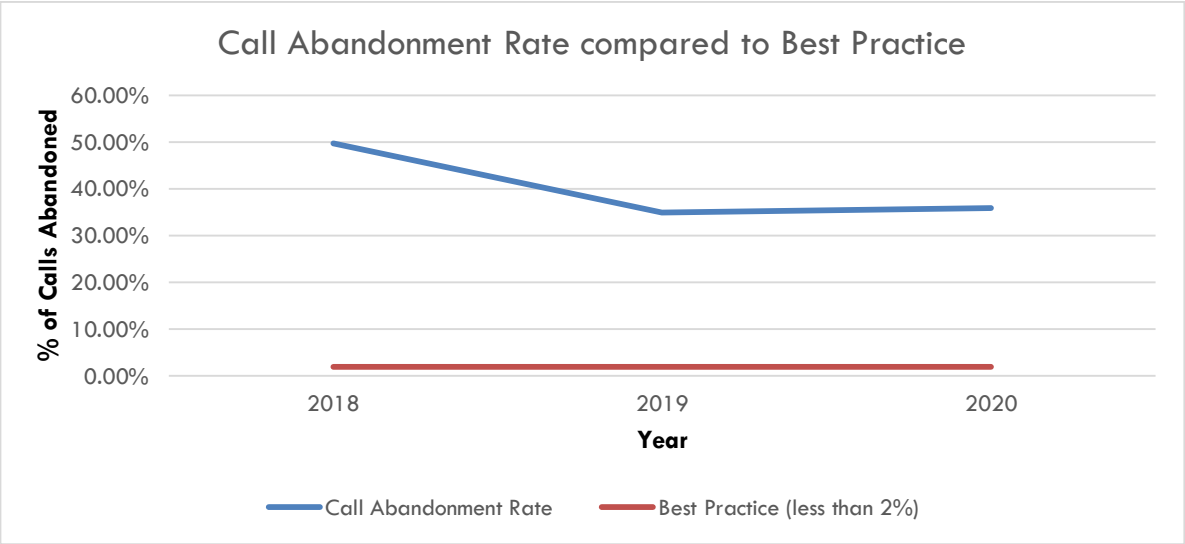
Figure 6. Blocked Call Rate



Call Abandonment Rate

WASA's Call Abandonment Rate decreased by 13.8 percentage points, from 49.8% in 2018 to 36% in 2020. The decline in number of abandoned calls indicates that many more customers decided to wait in a queue to speak to an agent instead of terminating the call. The minimal decrease in Call Abandonment Rate for 2019 and 2020, when compared to 2018 may have resulted from WASA implementing several of the recommendations in the RIC's April 2019 report on WASA's CC Performance. Despite WASA's improved Call Abandonment Rate for 2020, it continued to underperform in this metric, as best practice is less than 2%.

Figure 7. Call Abandonment Rate

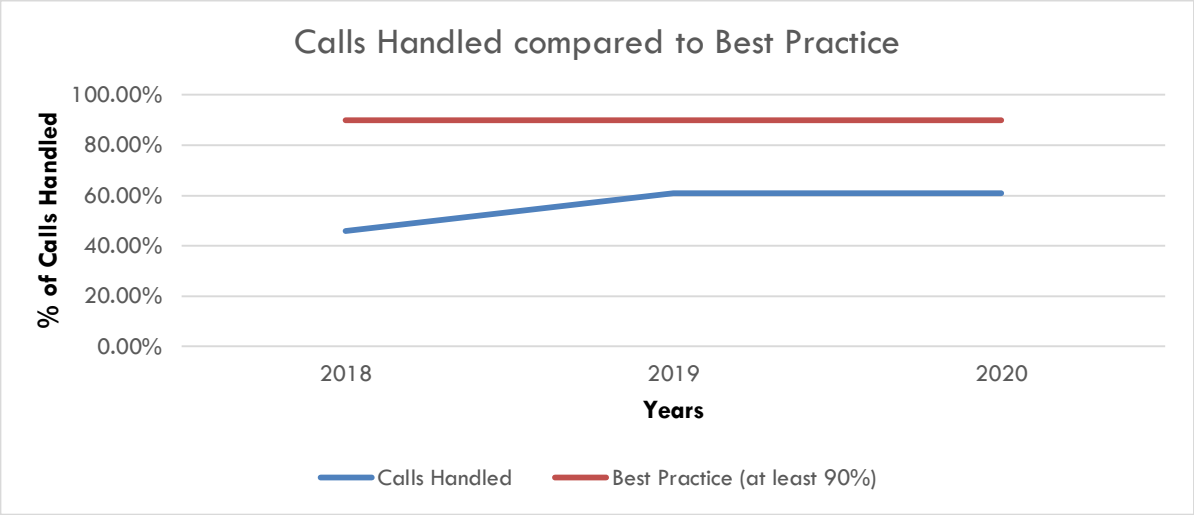


Calls Handled

Calls Handled increased by 15 percentage points from 46% in 2018 to 61% in 2020, even though there was a 10% increase in the No. of Calls Presented. There was no improvement from 2019. The improved performance shows that agents handled more calls, indicating

increased throughput of the CC, which may have been due to the recruitment of additional agents in 2020. However, WASA's performance is still too low as best practice is at least 90%.

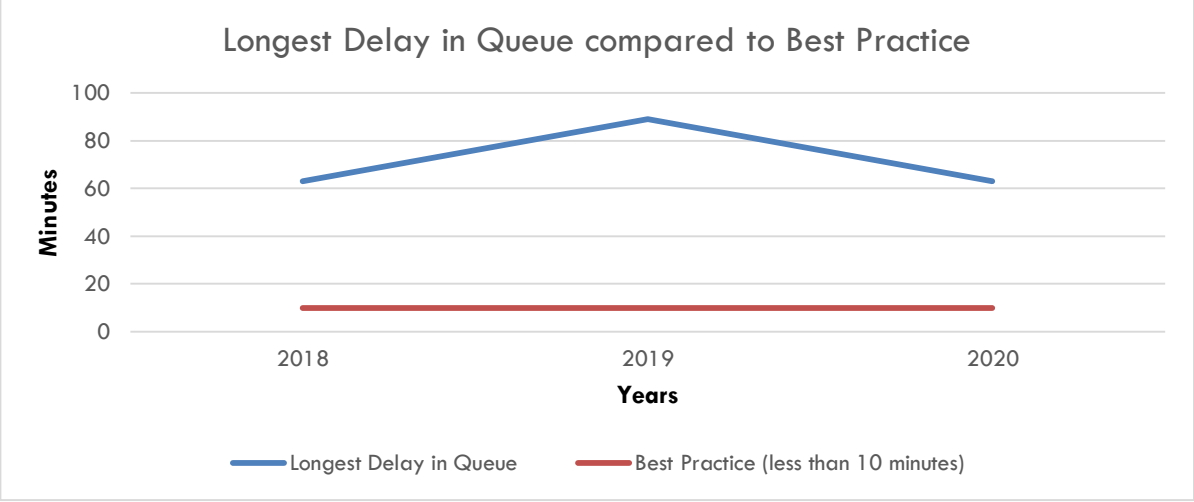
Figure 8. Calls Handled



Longest Delay in Queue

From 2018, the data show that the Longest Delay in Queue (LDQ) increased by 26 minutes in 2019 and decreased by 26 minutes in 2020. However, throughout the period 2018 – 2020, the overall waiting time was exceedingly long. This performance level indicates that callers are willing to wait very long in the call queue to access WASA services. WASA's performance in LDQ is significantly below best practice of less than 10 minutes. A long LDQ will lead to higher customer dissatisfaction levels and higher AHT.

Figure 9. Longest Delay in Queue



Call Quality

WASA's Call Quality rate for 2020 was 78%. This figure was derived by quantitative Call Quality measurements as part of the new additional agents' Performance Appraisal in 2020. WASA advised that the metric is to be further expanded to its other agents. On the basis of the

parameters assessed by WASA, it appears that its new agent's performance is acceptable. However, there is room for improvement as a high Call Quality rate improves the overall CC performance.

WASA's Overall Performance

Table 5 below summarises WASA's CC performance for the period 2018 – 2020.

Table 5. Summary of WASA's CC Performance from 2018-2020

Key Performance Indicators	Best	2018*	2019*	2020*
Total No. of Calls Presented		476,110	464,218	523,088
Service Level (% calls answered within 30 sec)	80% in 30	23.42%	21%	36%
Average Call Hold Time (seconds)	< 20 Sec	NA	159	141
Average Handle Time (AHT) (seconds)	< 360 sec	213	269	249
Average Speed of Answer (ASA) (seconds)	< 20 Sec	585	393	491
Blocked Call Rate	< 2%	4.26%	5.33%	3.20%
Call Abandonment Rate	< 2%	49.76%	35%	36%
Calls Handled	> 90%	45.98%	60.89%	61%
Longest Delay in Queue (minutes)	< 10 min	63	89	63
Call Quality	70-90%	NA	NA	78%

NA – Not available
**Performance Data Source: WASA*

The CC Key Performance Indicators (KPIs) presented for the reporting period 2018 – 2020 showed minimal improvements in Service Level, Average Caller Time, Average Handling Time, Blocked Call Rate, Call Abandon Rate, and Calls Handled. There was a decline in the Average Speed of Answer performance, and Longest Delay in Queue was constant. Overall, WASA's CC has achieved best practice for only one (1) KPI, that is, Average Handle Time.

4.7 NEW PERFORMANCE STANDARDS FOR WASA

The RIC conducted a comprehensive analysis to determine the appropriate performance standards for each of the ten (10) selected KPIs. The process involved the review of the historical performance of WASA's CC, examination of utility industry benchmarks, best practices, and regulatory decisions taken in other jurisdictions.

WASA's historical performance, and its current CC performance level were taken into consideration by the RIC in establishing realistic standards for WASA. The RIC felt that WASA should be allowed reasonable time to improve its performance. Also, it would be unreasonable to expect WASA to achieve most of the utility industry benchmarks and best practice data provided in table 4 above in light of the underlying constraints faced by WASA. However, the new performance standards being proposed must create a reasonable challenge for WASA to achieve. Further, the RIC is also of the view that the annual targets should be progressive to encourage WASA to achieve best-practice in the near future.

In September 2021, as part of its consultative approach to establishing the new performance standards, the RIC engaged WASA's Senior Management and its Senior Staff responsible for managing and monitoring the operations of the CC. WASA agreed with the view expressed by the RIC, that it should be given reasonable time to improve its performance and that the new performance standards must create a reasonable challenge for WASA to aspire to. WASA reported that some new technology and additional communication channels would be introduced for the CC to improve its customer interface. For example, customers making leak repair, road restoration and truck-borne water supply requests will be directed to utilise a self-service option and WASA expects to fully implement Artificial Intelligence[17] in its CC by 2024. In addition, other core service improvements were being planned, which would improve services and greater customer satisfaction in the short to medium term.

WASA agreed with the RIC's proposal for the ten (10) New Performance Standards over the period 2022 to 2024. However, based on WASA's current performance shown in table 5 below, both parties agreed that the following four (4) KPIs should be adjusted or recalibrated at the start of 2023 and 2024:

- Service Level;
- Average Caller Hold Time;
- Average speed of Answer; and
- Call Abandonment Rate.

Subject to the agreement to recalibrate the KPIs' performance standards above, the new Performance Standards for WASA's CC for the period 2022 to 2024 are shown in table 6 below.

Table 6: Proposed New performance Standards for the period 2022 - 2024

Key Performance Indicators	WASA's Performance (2021*)	New Performance Standards		
		2022	2023	2024
1. Service Level	50% in 60 sec	80% 60 sec	80% 45 sec	80% 30 sec
2. Average Caller Hold Time	147 sec	90 sec	60 sec	30 sec
3. Average Handle Time	3.92 min	< 6 min	< 6 min	< 6 min
4. Average speed of Answer	282 Sec	200 Sec	150 sec	50 sec
5. Blocked Call Rate	2.8%	3%	2.5%	2%
6. Call Abandonment Rate	29%	30%	20%	10%
7. Calls Handled	68%	70%	80%	90%
8. Longest Delay in Queue	58 min	30 min	20 min	10 min
9. Call (contact) Quality		70%	75%	80%
10. Customer Satisfaction		70%	75%	80%

***** *2021 values are based on data available from Jan – July, provided by WASA*

[17] For example, Chat bot and menu potions in the IVR

5.0 REPORTING AND PUBLICATION

Monitoring and evaluation are crucial to determine whether the KPIs have had a measurable impact on expected outcomes and/or whether they have been implemented effectively. The result of this analysis will assist the RIC in determining whether the selected KPIs and their associated performance standards meet the objectives of establishing the Service Standards, or if revisions of the standards may be necessary.

The RIC is proposing that WASA monitors and reports to the RIC every quarter on the performance of the ten (10) performance standards. The reports must be submitted to the RIC within one (1) month after the end of each quarter. The report should include the historical monthly values and the appropriate explanatory note for any variance of each metric against the performance standard. The data provided by WASA will allow the RIC to determine the status of WASA's CC performance and whether there will be a need to adjust the targets set by the RIC for 2023 and 2024. The RIC proposes to publish WASA's CC performance periodically. The RIC further proposes that WASA periodically submit reports on the status of the projects/initiatives identified to meet the New Performance targets. The RIC, to ensure that WASA's customer base is aware that steps are being taken to improve its CC performance, will recommend to WASA that on a regular basis information bulletins be provided to the public on improvements/ service level agreements for its CC.

6.0 COMMENTS ON THE MAIN ISSUES FOR CONSULTATION

Comments are invited on any issue within the document and in particular:

1. Whether you agree that the approach taken by the RIC to establish the proposed performance standards is well conceptualised.
2. Whether the approach taken by the RIC to select the proposed ten (10) KPIs is well conceptualised.
3. Whether you agree that the introduction of the ten (10) KPIs will lead to an improvement in the customer service experience.
4. Whether you think that the RIC should consider any other KPIs for WASA.
5. Whether the proposed performance standards are reasonable and adequate to ensure that there is an overall improvement in WASA's CC operations.
6. Whether you agree with the proposal to recalibrate the performance standards for several of the KPIs at the start of 2023 and 2024.
7. Whether you agree that WASA should report to the RIC every quarter on the performance of the ten (10) KPIs and that reports should be submitted within one (1) month after the end of each quarter.
8. Whether you agree that WASA should periodically submit reports on the status of the projects/initiatives identified to meet the New Performance targets.
9. Whether you agree that the RIC should publish WASA's CC performance periodically, and if so how often.

Appendix 1- KPIs Frequently used in Call Centres

KEY PERFORMANCE INDICATOR	DESCRIPTION
1. Average Caller Hold Time	The average number of seconds that a customer is forced to wait on hold during the course of a single call, as well as between transfers, over a certain period. This is the cumulative total of all hold time, divided by the number of calls placed on hold. This number does not include the time required to initially answer the call (i.e., speed of answer) or the time the customer spends in the IVR/VRU menu.
2. Active Waiting Calls	This is a real-time status metrics that measures current volume compared to the number of callers waiting to be patched through to an agent.
3. Adherence to Schedule	A metric used in the call centre to determine whether call centre agents are working the amount of time they are scheduled to work or not. A measure of whether agents are "on the job" as scheduled. This percentage represents how closely an agent adheres to his/her detailed work schedule as provided by the workforce management system.
4. Adjusted Calls offered	The adjusted number of calls that reached the queue. ACO excludes calls abandoned in less than 10 seconds.
5. Agent Occupancy	Refers to the percentage of time that call agents spend handling incoming calls against the available or idle time. The percentage of total paid hours of an agent's shift during which the agent is logged in to the ACD or other technology and is available to handle inbound phone, outbound phone, e-mail, chat and other productive work (white mail or back office work), divided by the total scheduled hours at work.
6. Agent Utilisation Rate	Measures and monitors the total percentage of the day that agents are being utilised, including jobs like taking up customer calls for support and providing effective resolution for issues. Utilisation is the percentage of the agents' shift engaged in productive work. For centres which are completely or almost-completely engaged in taking inbound calls, this will mean the percentage of logged-in time during which the agent is in active telephone mode (involving talk time, hold time and after-call work time). For multi-channel centres, utilisation will also capture productive time engaged in e-mail, chat, outbound and other productive work (responding to postal mail

	or performing productive administrative/"back-office" work).
7. Attrition Rate	The percentage of employees leaving the organisation each year.
8. Average After-call Work Time (ACWT)	The average number of seconds required to perform after-call work after a single call is completed over a certain period. It includes any time required after the phone call has ended to perform tasks to satisfy the customer's request or document the call (data input, filing paperwork, updating database, etc.)
9. Average Age of Query	This is the average amount of time a customer query that has not been resolved on the first call remains open. This metric relates to FCR, which provides a glimpse into which issues, channels, or engagement approaches lead to longer resolution periods.
10. Average Call Duration (ACD)	The average length of an answered call made over the network.
11. Average Handling Time (AHT)	The average time it takes to handle a call or transaction from start to finish – from call initiation, to hold time, to talk time, and all the way through to any related tasks an agent must perform post-phone call to resolve that call.
12. Average Speed of Answer (ASA)	The average amount of time taken for an agent to answer an inbound customer call, including time spent waiting in a queue. It excludes time spent navigating an IVR system. This is the cumulative total length of time of calls that are in queue or that are ringing before being answered by an agent, divided by the total numbers of calls answered. This includes both IVR-handled calls and calls handled by an agent.
13. Blocked Call Rate	The percentage of calls that are initiated by the customers but do not reach the centre due to technology failures such as lack of available circuits, lines or trunks. The total number of calls that did not connect with the ACD divided by the total number of calls offered plus blocked calls multiplied by 100.
14. Call (Contact) Quality	Measures the efficiency and effectiveness of conversations between the agent and customers. Factors such as the agent's opening/closing/customer service skills, technical/knowledge, use of systems, process efficiency/adherence may be considered
15. Call Abandonment Rate	The percentage of inbound phone calls that the customer abandons before speaking to an agent.

16. Call Arrival Rate	The average number of incoming calls.
17. Calls Offered	Total incoming calls received on a call centre software and are waiting on IVR queue for an agent to respond.
18. Call Transfer Rate (CTR)	The percentage of calls that the agent has to transfer to someone else to complete. The total number of calls transferred by agents (due to their inability to properly or completely handle the call – for whatever reason), divided by the total number of unique calls handled by agents. This would not include voluntary transfers to other departments after resolution occurs for the initial call reason.
19. Call Volume	The number of calls that call centre agents handles. Usually, it does not take abandoned calls into account.
20. Calls Answered Per Hour	The number of calls an agent answers in a shift or per hour. The total number of calls handled per agent per shift divided by the total number hours worked
21. Cost Per Call (CPC)	It is calculated by dividing the total operational costs by the total number of calls for a given period. This is the sum of all costs for running the contact centre for the period divided by the number of calls handled in the contact centre for the same period. This includes all calls for all reasons whether handled by an agent or technology, such as IVR.
22. Customer Effort Score (CES)	A customer satisfaction survey used to measure how much effort a customer has to exert to get an issue resolved, a request fulfilled, a product purchased/returned, or a question answered.
23. Customer Retention Rate (CRR)	The percentage of customers that the business retains over some time
24. Customer Satisfaction (CSAT)	A measurement that determines the degree to which a customer feels their expectations have been fulfilled by a company's products, services and capabilities.
25. Employee Satisfaction	The percentage of agents in the contact centre that are either satisfied or very satisfied with their job. It is typically measured annually or semi-annually using an agent satisfaction survey
26. Errors and Rework	Error rate is a term that describes the degree of errors encountered during data transmission over a communication or network connection. The higher the error rate, the lower the reliability of the connection or data transfer.

27. First Call Resolution (FCR)	Measures the efficiency in resolving/responding to customers' issues/queries during the first call received. This is the total numbers of calls that were completely resolved during the course of the first inbound call initiated by the customer (and that therefore do not require a call back to resolve the issue) divided by total numbers of calls handled by agents – expressed as a percent.
28. First Response Time (FRT)	The number of minutes (or hours) elapsed between when a customer submits a case and when a customer service agent responds to the customer. It's best measured in business hours, so you're not penalised for time off the clock.
29. Forecasted call load vs. Actual	Compares the actual contact numbers against the previously forecasted contact numbers. The Forecasted Contact Load to Actual Contact Load metric gives your team insight into how accurate their forecasting was and whether they are hitting their projected target.
30. Longest Delay in Queue	The longest time a customer waits in a queue before either connecting with an agent or hanging up.
31. Longest Hold Time	This is the longest time a customer call was on hold without the customer abandoning the call.
32. Net Promoter Score (NPS)	Measures the percentage of customers rating their likelihood to recommend a company, a product, or a service to a friend or colleague on a scale from 0 to 10.
33. Overall Call Centre ROI	A metric that compares how much a team earns to how much it costs.
34. Peak Hour Traffic	The time of the day when there are maximum calls to be handled by agents.
35. Repeat Call Rate	Measure the percentage of calls that addressed the same issue or subject.
36. Service Level and Response Time	Measures how accessible your call centre is to your customers, how many agents you need to staff to provide efficient service to your customers, and how your call centre compares to others in the industry. This is a broad-based term that is used to measure productivity; however, its use is not exclusive to the productivity of contact handling. In contact centres it commonly defines X amounts of output in Y amounts of time. For example, 80 percent of calls answered in 20 seconds.