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To: Governance and Audit Committee – 24 April 2019

Subject: **DATA QUALITY POLICY**

Classification: Unrestricted

Summary:

KCC first adopted a Data Quality Policy in March 2008. The Data Quality policy helps ensure that performance information and information used for decision making is robust and fit for purpose. The policy is part of the council's internal control mechanism and is used to inform areas of Internal Audit's lines of enquiry. Over time the Policy has been subject to regular review, but no amendments have been made since 2013, when the policy was updated in response to an Internal Audit recommendation. The most recent review of the policy has resulted in some minor changes in wording and Members are asked to APPROVE the attached updated Data Quality Policy.

FOR DECISION

1. Introduction

1.1 KCC first adopted a Data Quality Policy in March 2008, with the policy approved by the Governance and Audit Committee.

1.2 The Data Quality Policy was a response to the Audit Commission document *Improving information to support decision making : standards for better quality data, November 2007*.

1.3 In subsequent years the Data Quality Policy and the council's compliance with it was a focus for external audit and the strength of the council's approach in this area informed external audit judgements for Value for Money. The implication of this was that robust processes for securing good quality data was considered a requirement for good decision making. This as summed up the Audit Commission statement:

“Accurate and reliable data is important to support sound analysis and good decision making. Because of this, auditors of local public bodies will continue to look at the quality of data, with emphasis on local arrangements for ensuring the accuracy of data...”

Comprehensive Area Assessment, Audit Commission, November 2007.

1.4 Internal Audit conduct regular audits of the council's Performance Management arrangements and within this, compliance with, and understanding of the council's Data

Quality Policy by those working with data has always been a core element of this audit work.

1.5 Internal Audit also focus on Data Quality issues across a range of specific and themed audits, in relation to systems and processes across services throughout the council, where compliance with the Data Quality Policy is also a focus within such audits.

1.6 During the recent review of the council's Strategies and Policies, although not being a statutory requirement, the decision was made to retain the Data Quality Policy within the council's overall framework of policies, due to its relative importance as part of the council's internal control mechanisms, with the continuation of the Policy being considered to be Best Practice.

2. Definition of Data Quality and Scope of the Policy

2.1 Quality is here defined as "fit for purpose", where the purpose is to inform the decision making process of the council.

2.2 Data refers to numeric and quantitative information, which may relate to activity, inputs, outputs, performance or the quality of services provided by the council, as well as similar information which may relate to the general quality of life of Kent residents, such as crime or health statistics.

2.3 The scope of the Data Quality Policy is primarily in relation to aggregate data and summary statistics relevant to performance management at a service or strategic level, otherwise known as Performance Indicators (PIs). Delivering good quality data at this level requires good record keeping within day to day operations and within client level records.

2.4 Data Protection and Information Governance have separate, although related requirements to the general requirements around management arrangements for securing data quality and are addressed in more detail within existing policies and documentation. In some cases data security is related to data quality through a subordinate role, for example if data are not secure, its quality could be comprised.

3. Updates to the policy

3.1 The Data Quality policy was first adopted in March 2008.

3.2 Version 2 of the Policy, the current published version, was adopted in 2013. The policy was updated at that time in response to an Internal Audit recommendation that the policy should include clearer guidance in relation to data received through partnerships or external contracts, which are an important concern for a Commissioning Authority.

3.3 Version 3 of the Policy, for which this paper seeks approval contains no material amendment to the policy. Any changes included in the latest version are minor and in the main have been made for the purpose of ensuring clarity of wording.

4. Conclusion

4.1 To support the council to continually improve services and provide better outcomes for Kent residents it is vital that elected members, stakeholders and the residents can be confident that decisions are based upon high quality information.

4.2 The council's Data Quality Policy supports this goal and communicates to the organisation the importance of Data Quality, giving clarity on responsibilities and the standards required for good data quality.

4.3 The Data Quality Policy remains as a core component of the council's Strategy and Policy register.

5. Recommendation

5.1 Members are asked to APPROVE the attached updated Data Quality Policy in Appendix 1.

6. Contact details

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Data Quality Policy

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Approved	

Introduction

The Council recognises the importance of having good quality data. The overarching objective of this policy is therefore to improve the quality of all data used by the Council.

This document sits alongside the Information Protection Policy and Records Management Policy. The purpose of this policy is to manage the quality of the data collected and used by the Council in relation to performance management and decision making. This policy document sets out the Council's approach to ensure that:

- information is fit for purpose, with appropriate balance between the characteristics of good quality data which are relevance, accuracy, timeliness, accessibility, coherence and comparability,
- awareness of data quality is fully embedded across all services and is a key factor considered by all staff dealing with data, whether from a collection or a decision making point of view.

Good data are essential for the Council's operational business and performance management. To be effective it is important that the data, which underlies performance information, is robust and reliable. We use data to:

- Understand the Kent population and our customers.
- Inform good decision making and effective service planning.
- Help measure the effectiveness and efficiency of our services to the public.
- Identify and resolve issues rapidly and manage our risks.
- Benchmark cost and performance with other authorities.
- Set targets to improve performance, reduce cost and improve customer satisfaction.

Performance data and information is used by external bodies such as Ofsted to inform their inspections of specific services with a need for the council to demonstrate that underlying data are reliable and of good quality.

In working to improve data quality we are aware of the need to balance the cost of collecting and collating data into useable information and the benefits derived from using the information.

The risk of not addressing data quality is inaccurate or misleading information, or information which is too late to be of use. The consequence of this is flawed decision making, wasted resources and potentially non-compliance with statutory legislation or regulatory pressures.

Service specific policies and procedures will flow from this corporate policy, where relevant and necessary, thereby ensuring that all the corporate standards outlined in this policy are maintained across the council.

To show how importantly the council treats data quality this document will be available to all stakeholders and published on the web site.

Characteristics of good data quality

There is common agreement across International Statistical Agencies (e.g. Eurostat) and other commentators that Data Quality is defined as “fitness for purpose” in terms of user needs. It is generally recognised that Data Quality is best viewed as a multi-faceted concept with a number of important dimensions, which need to be balanced appropriately in collecting and presenting data.

When designing and reviewing data collection processes, the following characteristics of data quality should be considered, and an appropriate balance made between the different characteristics to ensure the needs of the users of the data are met to best effect.

- **Relevant** - Data should be defined, selected, collected, recorded and analysed with the intended use and audience in mind.
- **Accurate** - Data should provide a true account of what it is intended to represent to enable informed decisions to be made.
- **Timely** - Data should be available frequently and promptly enough for it to be valuable for managing service delivery and decision making, providing the opportunity to take corrective action where needed.
- **Accessible** - Data should be easily available to those who need access to it. This also refers to the format used to present the data and accompanying notes of explanation to ease interpretation.
- **Coherent** - Refers to data being consistent with other available information, either from other sources or with different frequency.
- **Comparable** - Data should be comparable across time, which requires consistency of method in preparation of the information. Where changes in methodology have occurred, this should be clearly stated in a commentary alongside the data.

The dimensions or characteristics of good data quality outlined above align closely to those used by organisations such as the Office of National Statistics, Eurostat and OECD.

KCC Data Quality Standards

The Council's standards for data quality are defined below and all staff with accountability for data quality should work to ensure that:

1. All data collected and stored by the council are clearly defined and understood, with clear documentation in place to support this.
2. All performance indicators reported within KCC performance dashboards will have a Performance Indicator Definition form completed and reviewed annually.
3. Information is collected accurately at source and initial input into any computer system is tightly controlled so that our performance information is right first time.
4. The management of data within the organisation is delivered with a connected and robust framework of systems, policies and procedures for data handling within each service area.
5. There are appropriate internal controls in place to check the quality of data reported, and that any issues or concerns about data quality are included within any reporting of that data.
6. High standards of data quality are received from partners on the information they share with us and which we make use of in decision making or assessing performance.
7. The information we process and use is regularly reviewed against the characteristics of good quality data, to ensure it is fit for purpose.
8. Services have in place the right resources, and in particular the right people with the right skills, to ensure we have timely and accurate performance information.
9. Provide effective training for staff who are required to collect and input data, so that the data quality expectations in terms of this policy are understood.
10. Data is stored, used and shared in accordance with the Data Protection Policy and Records Management Policy.

Roles & Responsibilities

The specific responsibility for data quality for any individual in the organisation will be dependent on their role. The different roles in the organisation and their responsibilities for data quality are shown below.

Role	Areas of responsibility
Elected Members	<ul style="list-style-type: none"> • Awareness of this Data Quality policy. • Monitor and challenge that services have sufficiently robust systems in place to ensure good data quality for key management information. • Consider the quality of data before them when making decisions.
Corporate Directors & Directors	<ul style="list-style-type: none"> • Overall responsibility for assuring the quality of data (in particular that which is business critical). • Ensure improvement action is taken where necessary. • Verify and sign off performance reports.
Heads of service	<ul style="list-style-type: none"> • Communicate the Data Quality Policy ensuring it is understood and implemented by all staff. • Review data quality and agree actions for improvement where required. • Advise elected Members of any data quality issues. • Ensure data quality training is available and sufficient.
All other Managers	<ul style="list-style-type: none"> • Understand and implement the Data Quality Policy. • Responsible for ensuring that staff have the necessary skills required to deliver high quality data. This is reflected in job descriptions, monitored and supported through the staff appraisal process. • Ensure appropriate systems and processes are in place to deliver high quality data, and contingency arrangements and appropriate controls are in place to give assurance about quality.
All Staff Members	<ul style="list-style-type: none"> • Aware of this Data Quality Policy. • Aware of their individual responsibilities relating to data quality and how their day to day work can impact upon the quality of data and add value for the organisation.
Analytics, Performance and Management Information Teams	<ul style="list-style-type: none"> • Have knowledge of relevant performance measures, requirements and performance issues. • Ensure high quality information is regularly provided within the timescales agreed, highlighting any changes, caveats or potential issues relating to the information provided (e.g. changes to systems, sources and definitions) so that sound judgements can be made about how this information should be used and interpreted. • Ensuring that the information provided is supported by underlying working papers/records and that these are retained as appropriate. • To support all managers in ensuring they understand and deliver on the requirements of the KCC Data Quality Policy.
Internal audit	<ul style="list-style-type: none"> • Annual audit programme to review underlying systems used to produce performance information using a risk based approach.

Additional Guidance

Additional guidance to support the Data Quality Standards is provided below.

Systems & Processes

Arrangements for collecting, recording, analysing and reporting data (including frequency and quality standards required) should be considered as part of the business planning process, for example when new indicators are agreed.

These systems and processes should be set up in a way that maximises our ability to achieve high quality data first time, avoiding the need to divert resources and cause delays due to excessive checks, controls and 're-works'.

The level of checks and controls should be proportionate to the value of the data and risk of poor quality. These should be appropriate to the systems and processes being used and include lead officer 'sign off' to assure the quality of data.

Contingency arrangements should be established to ensure data can be delivered when circumstances change. This should include, as a minimum, producing back-ups of data, creation/retention of audit trails and ensuring that there is a deputy in place who would also have some knowledge of the relevant data and processes and/or systems used to produce it.

Relevant supporting information should be held for all performance data, including a Performance Indicator Definition form.

Systems and processes should be regularly tested to ensure they remain fit for purpose. Data quality should be regularly reviewed in-year using appropriate tools and techniques to enable necessary actions to be taken where issues are identified.

Staff involved in the production or use of data should be provided with appropriate training and support to ensure data are produced and used in a way that adds value for the organisation and is of high quality.

Partnership working and contracts

Where data is provided by a third party or shared externally the following should be agreed and documented in Service Level Agreements (SLA) or contracts:

- Clear definitions of data requirements and terminology.
- Statement of expected levels of data quality and data validation.
- Outline of quality assurance processes to ensure data quality standards are met.
- Process to ensure notification of any changes to methods of data collection that may impact upon the data provided.
- Ensure that Data Quality is not compromised by data adjustment, e.g. it should be clear where estimates or sampling are being used.
- Clear process to address any issues or questions over data quality.

Data use and reporting

To provide most value, data should be focused upon supporting the organisational priorities and be defined in a way that will support decision making and help the organisation take appropriate action.

Data should be presented in a format that is meaningful and accessible to the users of that data. This includes for example providing numbers alongside percentages, so that performance and activity are considered together. User feedback should be sought to ensure outputs continue to be valuable.

Where the preferred performance data are not available as expected, the creation of proxies/alternative data sources should be considered, where these will support decision making. In these instances, care needs to be given to ensure that data shows what it is intended to and limitations of such proxies are communicated and taken into account by users.

To get most value from data, supporting commentary and contextual information needs to be maintained and kept relevant and up to date, with any caveats or data quality issues clearly outlined.

Data should be at an appropriate level of detail to influence management decisions e.g. broken down to underlying activity, district or service level where meaningful.

Comparison to earlier periods and/or other organisations or groups should be considered to help with interpretation of data and identifying potential areas of good practice.

Where there is significant variation in performance against target and/or over time, underlying information and causes should be considered to identify whether this is a performance issue or data quality issue. Monitoring and reporting should include a review of latest progress on such issues and any management action being taken to address these.

Where data quality issues are raised internally through self-assessment or externally, e.g., through matters arising from audit, this should be taken into account in any interpretation and analysis.

All reporting should be compliant with data protection legislation. This includes suppression of figures which are less than 5 if publication could result in the identification of individuals.

Performance Indicator Definition Form

Completion of all sections of this form is mandatory and an audit requirement for ALL Performance Indicators reported to Cabinet and Cabinet Committees.

All performance indicators reported in published performance reports must have a KCC Performance Indicator Definition form completed at the start of each year. If the indicator was reported in the previous year, then the indicator definition must be reviewed and updated by completion of this form.

KCC PERFORMANCE INDICATOR DEFINITION State Year	
SHORT NAME for the indicator which clearly summarises the area being measured (e.g. Child protection reviews)	
Reference No.	<i>Unique Performance Indicator Reference Number Defined by Division and Service e.g. SCS 001</i>
Description	<i>Provide a full and unambiguous description of what is being measured by the indicator</i> <i>e.g. The percentage of child protection cases which were reviewed within statutory timescales as a percentage of those cases which were due for review.</i>
Purpose /aim	<i>Use this space to show which business plan objective the indicator supports or how this represents a core service outcome.</i>
Definition	<i>Use this space to provide a full technical definition of the indicator. Include details of numerators and denominators if the indicator is a ratio of two other figures. Specify records in underlying database which are included and those which are excluded.</i> <i>Example :</i> <i>Numerator: The number of children on the Child Protection Register at reporting date who at that date had been on the Register continuously for at least the previous 3 months and whose cases had been reviewed within the required timescales.</i> <i>Denominator: The number of children on the Child Protection Register at the reporting date who at that date had been on the Register continuously for at least the previous 3 months.</i> <i>If the indicator is a result of a complex query against a number of database tables, ensure the method of the query is fully documented and refer to the to this as a source where further details can be obtained. It is an audit requirement that reported figures can be traced back exactly to underlying database sources and previously reported figures re-tested and confirmed by full walkthrough during the audit process.</i>

Formula	<p><i>Detail the formula which specifies the indicator precisely in a mathematical format.</i></p> <p><i>$N = (\text{Numerator} / \text{Denominator}) \times 100$</i></p>
Number format	<p><i>Detail the format of the number being reported. E.g to 1 decimal place, or whole number</i></p>
Information systems	<p><i>Provide the name of the information system which will provide the source data for this indicator - e.g. HR Oracle database, Swift, standalone Access database, locally designed excel spreadsheet, etc</i></p> <p><i>Specify if the indicator is calculated after drawing data from different sources and then matching them on client reference or similar such method.</i></p> <p><i>Specify the source if data is obtained externally to KCC, providing name and publisher. e.g. data are taken from quarterly Recorded Crime Statistics published by Home Office.</i></p>
Measurement Period	<p><i>Generally indicators are expected to be available continuously throughout the year on a monthly basis (or quarterly in some cases) accumulating to annual figures which are reported by financial year.</i></p> <p><i>If data does not conform to this, please provide details, such as “school attainment results available by academic year”. The main exception here is expected to be for pupil academic attainment or indicators which relate to once a year surveys. i.e exceptions are only a result of how the data is physically collected.</i></p>
Data Quality	<p><i>Identify and document data quality processes in place. Where there are known issues with completeness or other issues which may affect interpretation of results please specify.</i></p> <p><i>Examples:</i></p> <p><i>Detailed client level reports are run each month and checked for accuracy by service managers.</i></p> <p><i>There is a delay in processing information and in-year figures are therefore provisional. Final year-end data is fully validated once it is confirmed that all data entry is complete.</i></p>
Change control	<p><i>Note any variations in the measurement of this indicator that have occurred this year. Indicators should be reported on a consistent basis for a full year and continue to be reported on the same basis as in previous years.</i></p> <p><i>However, there are at times valid reasons to change the way an indicator is reported and measured. Any such changes should be made at the start of a new year of reporting and not part way through the year. The details and impact on figures should be highlighted here, on the occasions when this happens.</i></p>

Accountabilities	<p><i>Accountabilities here should list:</i></p> <ol style="list-style-type: none"> <i>1. Person accountable for delivering the service which is being measured – Director or Head of Service and should not be below this level.</i> <i>2. Person accountable for data quality checks</i> <i>3. Person accountable for collating and reporting results upwards to higher management and feeding into Directorate Dashboards.</i> <p><i>There should be clear separation of duties in these accountabilities.</i></p>
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Date of completion/review:	Completed/reviewed by: