APPENDIX A

Data Quality Policy

1.0 Introduction

1.1 This policy sets out Mid Devon District Council's (MDDC) approach to data quality. Data means the basic facts from which information can be produced by processing or analysis. Data is one of MDDC's most important assets – data quality is extremely important for MDDC. MDDC wants to be sure that information on which decisions are based is robust.

1.2 Data Quality underpins MDDC's corporate plan and priorities:

- Environment
- Economy
- Homes
- Community

1.3 Producing data that is fit for purpose should not be an end in itself, but an integral part of MDDC's operational, performance management, and governance arrangements. Consistent, high-quality, timely and comprehensive information is vital to support good decision-making and to improve service outcomes.

1.4 This document outlines the steps necessary to maintain the highest possible standards throughout the processes that result in recognisable performance information. It should be read in conjunction with the Data Quality Standards document (Appendix B).

1.5 The risk in not identifying and addressing weaknesses in data quality, or the arrangements that underpin data collection and reporting activities, is that data/information may be wrong or misleading, decision making may be flawed, resources may be wasted, poor services might not be improved, and policy may be ill-founded. There is also a danger that good performance may not be recognised and rewarded.

1.6 **Summary Statement**

MDDC is committed to high standards of data quality. Every care will be taken to ensure that the data and information used throughout the organisation and in particular in performance management is accurate, valid, timely, relevant, secure, accessible and complete.

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2.0 What makes good quality data?

2.1 There are six key characteristics that describe data quality (taken from the Audit Commission publication titled *'Improving information to support decision making: standard for better quality data'*). These characteristics can help the Council and its partners assess the quality of data and take action to help address potential weaknesses:

- Accuracy
- Validity
- Reliability
- Timeliness
- Relevance
- Completeness

2.2 **Accuracy**

Data should be:

- Sufficiently accurate for its intended purpose;
- Providing a fair picture of performance and should enable informed decision making;
- Captured once only and be right first time; and
- Captured as close to the point of activity as possible i.e. within the relevant service area

The need for accuracy must be balanced with the importance of the uses for the data, and the costs and effort for collection. For example, it may be appropriate to accept some degree of inaccuracy (i.e. an estimated figure) where timeliness is important. Where compromises are made on accuracy, the resulting limitations of the data must be made clear to the users of the data.

2.3 **Validity**

Data should be recorded and used in compliance with relevant requirements, including the correct application of any rules or definitions, e.g. nationally required data. This will ensure consistency between periods and with similar organisations, measuring what is intended to be measured.

2.4 **Reliability**

Data should reflect stable and consistent data collection processes across a collection of points over time, whether using a manual or computer based system, or a combination of the two. Where the data collection method is changed the user of the data must be informed in

order to ensure that they are aware of any potential variations in the data.

2.5 **Timeliness**

Data must be captured as soon as possible after the event or activity and must be available for the intended use within a reasonable time period. Data must be available quickly and frequently enough to support information needs and to influence service or management decisions.

2.6 **Relevance**

Data captured should be relevant to the purposes for which it is used. To ensure that this is the case, a periodic review of requirements should be undertaken to reflect any changing needs.

The users of the data should also be contacted on a periodic basis to ensure that the information meets their needs, contains the correct level of detail and is in the best format to enable effective decision making.

2.7 **Completeness**

Data requirements should be clearly specified based on the information needs of MDDC and data collection processes matched to these requirements. Monitoring missing, incomplete, or invalid records can provide an indication of data quality and can also point to problems in the recording of data.

2.8 In the case of all six of the key principles listed above, a robust quality assurance and checking process is required to ensure the quality of data. This is covered in detail in Data Quality Standards (Appendix B).

3.0 Locally Defined Data Quality Standards

3.1 The following best practice data quality standards have been developed to assist those responsible for managing and using data:

- Awareness
- Definitions
- Input
- Verification
- Systems
- Output
- Presentation
- Data Security

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3.2 The standards are covered in more detail in the Data Quality Standards document (Appendix B).

4.0 Roles and Responsibilities

4.1 The following groups and individuals have roles and responsibilities for data quality within MDDC:

4.2 The **Audit Committee** will approve the Data Quality Policy and Data Quality Standards, as well as any subsequent revisions. It will also take appropriate action to ensure that data quality is embedded throughout MDDC.

4.3 The **Chief Executive** is the officer Data Quality Champion and has senior management responsibility for data quality.

4.4 The **Finance Cabinet Member** will:

- Communicate the importance of data quality to other Members
- Support the implementation of the proposed annual work programme
- Act as a sounding board and challenge the data quality process as a critical friend.

4.5 The **Corporate Manager for Digital Transformation and Customer Engagement** is responsible for the overall quality and audit of data within MDDC in order to provide MDDC with an adequate level of assurance. They are the key contact point for any data quality queries and responsible for data quality checking of all relevant Committee reports containing data.

4.6 **Corporate Managers and their Operational Managers** will be responsible for:

- Communicating the importance of data quality to all officers within their service area
- Ensuring that data quality responsibilities are reflected in the job descriptions and performance objectives of relevant officers within their team and that any training and development needs are identified and addressed through the supervision and appraisal process.
- Leading the data quality process within their service areas and ensuring that there are adequate systems and procedures in place to meet MDDC's data quality standards outlined in Appendix B

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- Ensure that any data that is provided by third parties such as contractors or partnerships meets the same standard of MDDC
- Ensure that data quality is included in any protocols drawn up for the sharing of services with other councils if and when it becomes appropriate

4.7 All **employees** who input, store, retrieve or otherwise manage data, are responsible for ensuring that the data is of the highest quality, that they comply with this policy and the Data Quality Standards document. It is also their responsibility to inform their Service Manager if they think they need any training and support.

5.0 Embedding MDDC's Data Quality Arrangements

5.1 The Data Quality Standards (Appendix B) outline details on embedding Data Quality within MDDC.

5.2 The Audit Committee will receive data quality awareness training and will also be made aware of any issues relating to Data Quality as and when appropriate.

APPENDIX B

Data Quality Standards

1.0 Locally defined Data Quality Standards

1.1 As outlined in section 3 of the Data Quality Policy, MDDC has locally defined the following Data Quality Standards:

- **Awareness**: everyone recognises the need for good quality data and how they can contribute;
- **Definitions**: everyone knows which performance indicators are produced from the data they input and how they are defined;
- **Input**: there are controls over input, especially that data is input on an ongoing basis, rather than being stored up to be input at a later date
- **Verification**: there are verification procedures in place as close to the point of input as possible;
- **Systems**: are fit for purpose and staff have expertise to get the best out of them;
- **Output**: performance indicators (and other data) are extracted regularly and efficiently and communicated in a timely manner whether it be for MDDC Services, Partnerships or Shared Services;
- **Presentation:** annual performance indicators (and other data) are presented, with conclusive evidence, in such a way as to give easily understood and accurate information to those users who are making decisions.
- **Data Security**: data is to be handled and stored in a secure manner to ensure that MDDC policies and procedures in relation to data protection, information security and the government connect Code of Compliance are adhered to. A Record of Processing Activity is being maintained.

1.2 The information in this Standard uses performance data as an illustrative example but these standards apply to all types of data and information that is produced by MDDC.

2.0 Awareness

2.1 Data Quality is the responsibility of all members of staff inputting, storing, retrieving or otherwise managing data from any of MDDC's information systems, whether manual or computerised.

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2.2 All service managers are responsible for communicating the importance of data quality to all officers within their service area and to ensure that any training and development needs are raised.

2.3 The Data Quality Policy and Data Quality Standards will be accessible through the Governance pages on SharePoint.

2.4 Where appropriate the importance of data quality will be discussed at staff briefings and in features in 'the link'.

2.5 Member briefing sessions will be held to make members more aware of the importance of data quality.

3.0 Definitions

3.1 All relevant officers must know how their day-to-day job contributes to the calculation of performance indicators, and how lapses could either lead to errors or delay in reporting, both of which limit MDDC's ability to manage performance and make decisions effectively.

3.2 This means that an understanding is needed of any performance indicators affected by the data contributed by the officer. A basic grasp might be, e.g., knowledge of what the numerator and denominator is, and whether there are any important technical guidelines (for example, the exclusion of certain cases). This will normally be easier to communicate if officers understand the purpose of the indicator, or the policy it is meant to monitor.

3.3 Where we are required to provide data and information to the Government (or relevant government department) whether through nationally set performance indicators or data returns it is important that the details provided are accurate and in line with the required guidance.

3.4 Where MDDC are setting local performance indicators MDDC need to ensure that MDDC have established a clear definition and that there are systems available to collect and report the data in an agreed format. In particular, MDDC needs to be clear about whether target and outturn figures refer to a snapshot or cumulative position.

3.5 In some cases there are a number of similar indicators measuring the same thing in slightly different ways. It is important to ensure that separate figures are calculated and reported systematically for each definition.

3.6 Every performance indicator has a named officer who is responsible for collecting and reporting the information. This ensures that there is

consistency in the application of definitions and use of systems for providing the data. Each named officer is kept up to date of any changes in definition that may occur and the guidance can be found on the Governance pages of SharePoint.

4.0 Input

4.1 There must be adequate controls over the input of data. Systems-produced figures are only as good as the data input into that system in the first place. The aim should be 100% accuracy 100% of the time. It is important that officers are given clear guidelines and procedures for using systems and are adequately trained to ensure that information is being entered consistently and correctly.

4.2 A key requirement is that data should be entered on an ongoing basis, not saved up to be entered in a block at the end of a period. This reduces the error rate and the need for complex verification procedures. It also means that up-to-date data is available at all times.

4.3 Controls must be in place to avoid double-counting. These must be designed according to the nature of the system, in particular where more than one person inputs data. A likely control will be an absolute clear division of responsibility setting out who is responsible for what.

4.4 The system must also record all relevant information. Individual systems need to be evaluated to determine whether additional controls are necessary. An additional control would be necessary if there is any way, theoretically, that a relevant case could exist without being captured by the current system.

5.0 Verification

5.1 Data requirements should be designed along the principle of 'get it right first time' in order to avoid waste, in the form of time, money spent on cleansing data, interfacing between different information systems, matching and consolidating data from multiple databases, and maintaining outdated systems.

5.2 Nevertheless, in complex systems, even where there are strong controls over input, errors can creep in. Where it is needed, a verification procedure should exist close to the point of data input. The frequency of verification checks must be aligned with the frequency of data reporting.

5.3 The simplest verification system might be a review of recent data against expectations, or a reconciliation of systems-produced data with

manual input records. Depending on the complexity of the system, it might be necessary to undertake more thorough verification tasks, such as:

- data cleansing, e.g. to remove duplicate records or to fill in missing information;
- sample checks to eliminate reoccurrence of a specific error, e.g. checking one field of data that is pivotal to a performance indicator against documentation, for a sample of cases;
- test run of report output, to check the integrity of the query being used to extract data e.g. for Business Objects reports;
- spot checks, e.g. on external contractor information.

5.4 Particular attention needs to be paid to data provided by external sources. A number of performance indicators are calculated using information provided by contractors/partners and MDDC must work alongside contractors/partners to ensure that such data is accurate.

5.5 When entering into contacts with service providers it is essential that, wherever relevant, there is a requirement to provide timely and accurate performance information. MDDC must also be clear with the contractor about their responsibilities for data quality and how MDDC will be checking the information they provide.

5.6 It might not always be possible to alter existing contracts so that contractors are fully committed to providing an agreed quantity of performance data. In this case, the data must be treated as **high-risk** and thought must be given to establishing a system of checks and measures to ensure that MDDC are confident about the accuracy of this data. When carrying out checks on such information it is essential that this is documented and signed off by the relevant officer.

5.7 Some important data – e.g., community safety statistics – is provided directly to MDDC by external agencies. The initial priority of this strategy is to address shortcomings in performance information provided directly by and to MDDC, but where concerns exist about the integrity of externally provided data, MDDC's intention is to work with other agencies constructively wherever possible to provide assurance and rectify any problems identified. Where the data from an external source is used in a Committee Report or public document the writer must always give the source of where the data has come from.

5.8 Responsibility for initial data verification will lie within Departments, but Internal Audit can offer advice and guidance about the adequacy of verification procedures. However, where data is being provided to

members for decision making purposes, the Committee report and any accompanying papers must be completed and forwarded to Governance for data quality assurance checking and sign off prior to the agenda being dispatched.

5.9 Internal Audit also provides MDDC with a corporate overview as to the adequacy of MDDC's arrangements in relation to Data Quality.

6.0 Systems

6.1 Each system must have a named officer responsible for data quality issues. The responsible officer would be required to ensure that:

- data collection/collation/calculation process is accurately mapped (data mapping) and a set of written procedures (user guides) exists for the purpose of inputting and extracting performance information. This must be regularly updated to reflect any system changes and recorded on the Record of Processing Activity (RoPA);
- regular quality assurance checklists must be completed for all information systems and any identified risks should be promptly addressed;
- users are adequately trained, where appropriate by having a formal training programme which is periodically evaluated and adapted to respond to changing needs;
- information management and support is available to users;
- system upgrades are made where necessary (including to accommodate amendments to PI definitions);
- the system meets managers' information needs;
- feedback from users is acted upon;
- the system can produce adequate audit trails;
- actions recommended by system reviews (e.g. by the external auditors) are implemented;
- a business continuity plan for the system exists to protect vital records and data.

6.2 There must also be a named substitute officer who can deputise in the data quality lead's absence by (at least) maintaining the day-to-day functionality of the system. Given the increasingly demanding timescale for performance reporting, MDDC cannot afford to have systems lying dormant during unplanned absences. It is, therefore, also essential that written procedures are designed so that another officer can carry out the procedures essential to providing performance information if the officer who normally performs these duties is absent.

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6.3 The paragraphs above detail an approach to ensure that systems data quality is maintained, but there will be systems where work has to be undertaken to rectify gaps in the control environment. To identify these systems there needs to be a co-ordinated evaluation of every information system used in MDDC to produce performance information, including:

- the identity of the officer responsible for the system and their substitute officer;
- a central co-ordinator, who will be the Group Manager for Performance, Governance and Data Security, will ensure that there is a central register detailing all systems and responsible officers;
- a summary of data quality and verification actions undertaken;
- risk assessments undertaken.

6.4 Assessments of '**High Risk**' conditions will include:

- a high volume of data/transactions;
- technically complex performance indicator definition/guidance;
- problems/risks identified in previous years;
- inexperienced staff involved in data processing/performance indicator production;
- system being used to produce a new performance indicator;
- changes to the system or staffing;
- known gaps in the control environment.

6.5 The purpose of undertaking a risk assessment is to target limited resources at the areas that require most attention.

6.6 Where **High-Risk** systems have been identified for attention, the following steps will need to be taken:

- analysis of the control environment;
- identification of gaps;
- design of mitigating controls and procedures to address gaps;
- preparation of an action plan which lists responsible officers and target dates;
- monitoring the implementation of the action plan

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7.0 Output

7.1 Best use can be made of performance data if it is produced and communicated on a timetable that allows for management comment and action.

7.2 It is important that performance information is subject to scrutiny and quality checking in order for it to be challenged before being passed up the line for management action.

7.3 Where the data is being presented to members in the form of a committee report, the report and any accompanying papers must be submitted to Governance (in the same way that Legal and Financial Services receive relevant Committee reports) in order for the data to be quality assurance checked and signed off prior to the Committee report agenda being dispatched.

8.0 Presentation

8.1 Reporting accurate and timely data, leads to good decision-making and improved performance. For a large proportion of performance data, that performance will only be recognised publicly if it can be substantiated by external bodies.

8.2 If the controls listed in this document are in place, stakeholders will be able to have a greater degree of confidence in the information that is presented by MDDC.

8.3 It is of paramount importance that data is presented to the user clearly to show whether performance is getting better or worse and whether it is on, above or below target. There must be clear explanatory notes where there are variances, particularly where performance is getting worse or is below target.

9.0 Data Security

9.1 MDDC has the following policies which are to be read in conjunction with this Policy:

- Data Protection Policy
- Freedom of Information Policy
- Information Security Policy
- Information Security Incident Policy