

Weights and Measures Report by the National Measurement Office 2009 to 2013

Weights and Measures Report by the National Measurement Office 2009 to 2013

Presented to Parliament pursuant to Section 87 of the Weights and
Measures Act 1985

Ordered by the House of Commons to be printed 4 December 2014



© Crown copyright 2014

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.uk/government/publications

Any enquiries regarding this publication should be sent to us at info@nmo.gov.uk

Print ISBN 9781474112475

Web ISBN 9781474112482

ID 20111404 12/14 45121

Printed on paper containing 75% recycled fibre content minimum

Printed in the UK by the Williams Lea Group on behalf of the Controller of Her Majesty's Stationery Office

CONTENTS

INTRODUCTION.....	4
The National Measurement Office.....	4
PART I: UNITS AND STANDARDS OF MEASUREMENT	5
Primary Standards	5
Secondary and Tertiary Standards.....	6
Coinage Standards.....	7
Local Standards	7
Working Standards and Testing and Stamping Equipment	8
Testing of Other Standards and Equipment	9
Units of Measurement	9
PART II: WEIGHING AND MEASURING FOR TRADE.....	10
Approved Verification.....	10
European Communities Act	11
Non-Automatic Measuring Instruments (NAWI).....	11
The Measuring Instruments Directive (MID)	11
Type Approvals of Equipment for Use for Trade	12
Approvals made under UK National Regulations.....	12
The future of UK National Type Approvals	13
PART III: PUBLIC WEIGHING OR MEASURING EQUIPMENT	13
PART IV: REGULATION OF TRANSACTIONS IN GOODS	13
Specified Quantities	13
Food Information to Consumers	14
PART VI: LOCAL ADMINISTRATION	14
Section 70 Annual Reports of LWMAs	15
Section 71	16
Section 72.....	16
Section 73 Certificate of Qualification as an Inspector of Weights and Measures.....	17
The Diploma in Trading Standards (DTS).....	17
Trading Standards Qualifications Framework (TSQF).....	17

INTRODUCTION

1. This report, from the Secretary of State for the Department of Business Innovation and Skills, to Parliament covers the activities of the National Measurement Office from 1st January 2009 to 31st December 2013. This is a statutory requirement under section 87 of the Weights and Measures Act 1985 (the Act): *“The Secretary of State shall from time to time, and in any event not less than once in every five years, lay before each House of Parliament a report on the exercise of his functions under this Act.”*
2. The report is divided into sections broadly covering each part of the Act and describes what has happened during the period under each of those parts.

The National Measurement Office

3. The National Measurement Office (NMO) is an Executive Agency of the Department for Business, Innovation and Skills (BIS) operating under a net running cost regime, meaning that it must recover the full economic costs from its customers including its parent department and other government departments. NMO provides policy advice on measurement and hallmarking issues to BIS ministers.

NMO's mission statement is: *“To provide policy support to Ministers on measurement issues and a measurement infrastructure which enables innovation and growth, promotes trade and facilitates fair competition and the protection of consumers, health and the environment.”*

4. NMO receives funding from four sources:
 - from BIS (under the administration budget) for providing measurement advice to Ministers. This funds the underpinning of the National Measurement System plus the international, legislative/policy, enforcement, and other statutory roles (on behalf of the Secretary of State) arising from the Act. Funding is also provided for NMO's policy functions in relation to the Hallmarking Act 1973;
 - from the Office of Gas and Electricity Markets (OFGEM) to carry out statutory work relating to the accuracy of gas and electricity meters under the Gas Act 1986 and the Electricity Act 1989;
 - from contracts for work for the enforcement of measurement-related environmental legislation belonging to BIS, the Department for Environment, Food and Rural Affairs (DEFRA), the Department of Energy and Climate Change (DECC), the Department for Transport (DfT), and the European Union (EU), and
 - directly from business and local authority customers for type approval, testing, calibration, quality management system certification, notified body designation, approved verification and training services.

5. By winning additional work the income that is generated increases the utilisation of staff and equipment and the income generated contributes to covering some of the overhead costs that would otherwise be borne by Government.
6. The legislation on Weights and Measures, Utilities metering and Hallmarking are important elements of the UK's trading and consumer protection framework. For many purchases made by reference to measurement (which include gas, electricity and petrol) it is virtually impossible for consumers to check the quantity they are paying for, so appropriate controls are essential for confidence in the pricing mechanism that in turn facilitates trading at both local and international levels.
7. There are a wide range of sectors where the trade of goods and services is controlled by weights and measures. Each year in the UK well over £300 billion worth of goods are sold on the basis of the measurement of their quantity, with goods worth almost another £300 billion weighed or measured at the industrial/business-to-business level.
8. During the period covered by this report, NMO has continued to review and modernise UK legislation in accordance with the Government agenda of minimising burdens on business whilst ensuring an appropriate level of consumer protection, paying particular attention to the needs of Small and Medium-sized Enterprises (SMEs) and micro-businesses. This has contributed to the growth agenda by reducing red tape and making it simpler to trade. We have also provided leadership to the enforcement authorities to ensure that regulation supports growth and have continued to consult with, and provide timely and proportionate advice to, business stakeholders.
9. The NMO co-ordinates input into international forums including the International Organization of Legal Metrology (OIML) and the European Cooperation in Legal Metrology (WELMEC). NMO aims to influence EU and international legal metrology forums in order to benefit the UK businesses, their customers and consumers. This is done by active participation in a number of international committees covering areas of interest to both UK businesses and consumers.

PART I: UNITS AND STANDARDS OF MEASUREMENT

Primary Standards

10. Primary standards are the standards by reference to which all other standards in the UK are determined. Section 2 of the Act charges the Secretary of State with the responsibility of maintaining primary standards, and of deciding when and how to determine or re-determine the values of the primary standards or authorised copies.
11. The National Physical Laboratory (NPL), as the UK's national measurement institute, maintains the primary standards on behalf of the Secretary of State. These standards underpin the National Measurement System infrastructure of traceability

throughout the UK to ensure accuracy and consistency of measurement. Funding of this task is from BIS through to NMO to the contractor, NPL Management Ltd.

12. On 27 November 2012 the Minister for Universities and Science announced that the future operation of NPL would take the form of a partnership arrangement between BIS, acting through the NMO, and one or more academic partners. This is intended to increase the alignment between the activities of NPL, notably those funded from the National Measurement System, and work in related areas of science carried out in the university sector.
13. Central to the new vision for NPL is a long-term strategic partnership between Government and an academic partner or partners in the operation of the NPL, whereby partners share in the risks and rewards, thus creating a vibrant laboratory at the heart of a science and innovation campus. This will maximise the economic impact derived from the investment the UK has made in NPL and its facilities.
14. The United Kingdom's national standard of mass, Kilogram 18, is held by NPL and is the basis of the hierarchy for mass measurement in the UK. Maintenance of the national standard of mass involves careful storage in a controlled environment and annual checking against a number of other platinum-iridium standards held at the NPL. NPL is currently coordinating a Europe wide research project investigating the processes necessary for the maintenance and dissemination of the unit of mass following its redefinition in terms of a fundamental constant. UK primary standards, including kilogram 18, are periodically compared with the international standards held at the Bureau International des Poids et Mesures (BIPM) in Paris, France. NPL is also collaborating closely with the BIPM on research in the area of new primary mass standards.
15. For the standard of length, NPL maintains frequency-stabilised lasers that provide the practical realisation of the metre within the UK. These lasers have a very stable vacuum wavelength (i.e. a very stable frequency) that is obtained by controlling the frequency to that of a molecular absorption. The frequency of these lasers is periodically checked against the NPL primary caesium frequency standard using a femtosecond comb. NPL is also undertaking research into optical frequency standards based on ion traps and lattice clocks both as optical frequency standards and to support the realisation of the metre.

Secondary and Tertiary Standards

16. Section 3 of the Act requires the Secretary of State to maintain certain secondary and tertiary standards of weights and measures and coinage standards of the weight of each authorised coin of the realm.
17. Over the period of the report, NMO has maintained secondary standard sets of metric, carat metric and ounce troy weights. A programme of five yearly calibrations against primary standards has continued. The corresponding sets of tertiary standard weights were also calibrated.

18. NMO has participated in numerous mass, length and volume inter-comparison exercises internally and externally to ensure consistency of measurement and a high level of staff competency. The external inter-comparisons are conducted in support of NMO's United Kingdom Accreditation Service (UKAS) accreditation in conjunction with the National Physical Laboratory and calibration laboratories within the UK and abroad.

Coinage Standards

19. Coinage standards and trial plates for the annual Trial of the Pyx ceremony at Goldsmiths Hall were maintained throughout the period. A new commemorative gold coin celebrating the London 2012 Olympics, produced by the Royal Mint, required a new trial plate of 99.99% purity of gold content to be purchased. New coin weight standards were purchased. We continue to re-certify coin standards on behalf of the Royal Mint.

Local Standards

20. Section 4 of the Act deals with local standards kept by Local Weights and Measures Authorities (LWMA). This section enables the Secretary of State to prescribe the limits of error and the form and material of construction of the local standards. The standards must have valid certificates indicating that they have been calibrated by NMO against the appropriate secondary or tertiary standards.

21. Under Section 4(2)(b) of the Act, NMO has issued one specification for the different types of local standards and published it on the NMO website:

- 7310 Specification for local standards of capacity, glass delivery measures (automatic Pipettes), October 2011.

22. To make the most efficient use of resources, local authorities often make arrangements to use the local standards held by other authorities to calibrate their working standards (the test measures that are used to check instruments used for trade e.g. petrol pumps, weighbridges, water meters). This helps them to reduce the cost of delivering the service whilst ensuring traceability to national standards. Of the 206 local weights and measures authorities in Great Britain, 133 use another authority's local standards.

23. In 2012 NMO issued a public consultation to see if an alternative method of traceability through the use of UKAS accredited laboratories should replace the current system as set out in Section 4 of the Act. Following an analysis of costs and benefits based upon the consultation responses, Ministers decided to retain the existing requirements under Section 4 because the alternative method could *increase* the costs to local authorities.

24. Visits to LWMAs were made to re-certify local standard measures and to ascertain that the facilities continued to fulfil the requirements necessary to provide legally traceable measurement. Over the 5 year time period 48 LWMAs have been visited.

Working Standards and Testing and Stamping Equipment

25. Section 5 of the Act deals with working standards and stamping equipment which must be provided by local authorities for use by their inspectors. It requires standards and testing equipment to be of a material and form approved by the Secretary of State and enables him to specify the way in which they should be tested and adjusted, and to prescribe the maximum limits of error. Local authorities are empowered to hire working standards or equipment for their inspectors' use and to lend standards or equipment, except stamping equipment, to other people. NMO has issued two specifications for the different types of working standards and published them on the NMO website:

- *7310 Specification for working standards of capacity, glass volumetric flasks, October 2011*
- *7310 Specification for working standards of capacity, metal and epoxy composite material contents measures, February 2011.*

26. This section also authorises the Secretary of State to provide, and hire to particular local authorities, testing equipment which it would be unreasonable to expect authorities to provide because of the expense involved and the infrequency of use of the equipment. This provision was not formally called upon during the period of this report. However, due to continued financial pressure in local government the amount of testing equipment available to carry out inspections has steadily reduced. In particular, weighbridge test units are very expensive to maintain although they are required to test weighbridges which NMO have categorised as a 'high' risk. It is possible that requests for assistance under this provision may be received in the future.

27. With the opening up of the verification function following the Deregulation (Weights and Measures) Order 1999, new prescribed stamp numbers have been issued to a variety of commercial companies to be incorporated into their stamping equipment. For the time period of this report NMO has approved/renewed 39 Approved Verifiers and they have had a total of 209 stamp numbers issued to them. The full list of current and redundant prescribed stamp numbers is now available on the NMO website.

Testing of Other Standards and Equipment

28. Section 6 of the Act provides for the Secretary of State to accept for testing standards and other articles and to make a charge for this activity. This enables NMO to offer commercial calibration and testing services. The revenue from this work increases the utilisation of staff and equipment and the income generated contributes to covering some of the overhead costs that would otherwise be borne by Government.
29. The upgrade of equipment and facilities at NMO has allowed the level of service to be extended. NMO offers mass measurements exceeding OIML Class E1 and length measurements exceeding OIML Class I. NMO mass capability has been extended with the addition of micro-weight calibrations. This gives NMO a world leading status in micro-weight calibrations as the only laboratory with UKAS accreditation for micro-weights. NMO also offers high accuracy volume measurements which are traceable gravimetrically through mass measurement. Many areas of measurement capability NMO provides are unique to the UK. This has resulted in the issuing of approximately 350 UKAS-accredited calibration certificates each year. NMO has a long-established commercial contract with Camelot for the testing of national lottery balls and machines. The testing provides independent evidence that all balls remain within specification (and thus helps to ensure an equal chance of any one ball being selected).
30. NMO is regularly asked to perform testing and calibrations for other government organisations and agencies, for example fish net gauges on behalf of DEFRA and Marine Scotland. NMO's services have also been used by the television programme "Watchdog" for the testing of numerous consumer items under investigation that require a high level of measurement by an impartial organisation. NMO has also carried out metrology work for a leading missile defence systems manufacturer. This manufacturer works on behalf of the Ministry of Defence. NMO assisted in the reduction of measurement uncertainty of missile measurement system used to calibrate missile navigation systems, reducing the potential error of the missile striking off target.
31. NMO also carries out the testing of taximeters on behalf of the London Taxi and Private Hire (LTPH) department of Transport for London (TfL). NMO ensures the meters used by Hackney Carriages (Black cabs) operating in London meet the LTPH (formerly PCO) specifications for taximeter fares. NMO currently tests approximately 800 meters per month. This number is expected to grow in the future as the new SIM card meters are approved by TfL and NMO becomes established as a leading independent taximeter testing laboratory.

Units of Measurement

32. Legal units of measurement in use for trade are set out in Section 8 and Schedule 1 of the Act. Since 1995 metric units have been the primary unit of measurement for the majority of traded goods and services, with the final changeover to metric, for

goods sold loose, taking place on 31 December 1999. Before 2009, the only imperial units of measurement permitted as primary indications were the mile, yard, foot and inch for road traffic signs, distance and speed measurements, the pint for the dispense of draught beer and cider and milk in returnable containers, the acre for land registration and the troy ounce for transactions in precious metals. In addition imperial units were permitted to be used alongside metric as “supplementary indications” until 31 December 2009.

33. Legislative changes were made in 2009 to reflect changes agreed at European level by Directive 2009/3/EC to Council Directive 80/181/EEC on units of measurement. The Units of Measurement Regulations 2009 (SI2009/3046) removed the time limit of 31 December 2009 on the use of supplementary indications of quantity expressed in imperial units of measurement. The use of such supplementary indications is, therefore, permitted indefinitely. The Regulations also made a number of amendments to the 1986 Units of Measurement Regulations, in order to implement technical measures adopted by the General Conference on Weights and Measures. For example, a new unit of measurement, the “katal” was included within the International System of Units as the unit of measurement of catalytic activity, so as to ensure a uniform indication of units of measurement in the fields of medicine and biochemistry. The Weights and Measures (Metrication Amendments) Regulations 2009 (SI2009/3045) also removed the time limit on the use of supplementary indications of quantity expressed in imperial units of measurement (31 December 2009) from secondary legislation on weighing and measuring equipment and partially revoked the Weights and Measures (Metrication Amendments) Regulations 2001, which inserted the 31 December 2009 time limit in question.
34. Directive 2009/3/EC also removed any requirement for the UK to set a date to end the use of the mile, yard, foot or inch for road traffic signs, distance and speed measurements, the pint for the dispense of draught beer and cider and milk in returnable containers, and the troy ounce for transactions in precious metals. This ensured that any decision about the future use of these remaining imperial units will be a matter for the UK alone. The exemption for the use of the acre for land registration was also revoked in recognition that it was no longer required as the UK Land Registries have for many years used metric units (hectares) for new registrations.

PART II: WEIGHING AND MEASURING FOR TRADE

Approved Verification

35. The Act has been amended to reduce the burdens on business associated with the verification of weighing and measuring equipment intended for use for trade. Originally under the Act manufacturers, installers and repairers of weighing and measuring equipment needed a Weights and Measures Inspector to verify equipment which resulted in costs and delays to the businesses. However the change meant that businesses are now able to apply to NMO for approval to

conduct their own verifications of equipment they themselves have manufactured installed or repaired as an alternative to using trading standards.

36. There are currently 33 active approved verifiers in the UK.

European Communities Act

37. Although actually outside the scope of the Weights and Measures Act this has been included in this report to ensure a full picture of the weights and measures legal landscape is explained and the reason why UK national type examination has diminished during the period.

38. The Directives relating to Non-Automatic Weighing Instruments 2009/23/EC (NAWI) and the Measuring Instruments Directive 2004/22/EC (MID) establish a single market for measuring instruments which means that once instruments have been approved in one Member State they can be placed on the market in any Member State without the need for further assessment.

Non-Automatic Measuring Instruments (NAWI)

39. The NAWI Directive was initially implemented in 1992 and most recently replaced in 2000. No further implementation was considered necessary as a result of codification in 2009. Implementation of the NAWI Directive is mandatory and covers a wider scope than “use for trade” under section 11 of the Act (for example medical weighing).

The Measuring Instruments Directive (MID)

40. The MID was implemented in 2006. Although implementation is mandatory it is optional for Member States to decide whether or not to prescribe each of the instrument categories or types covered by the Directive and the scope of legal metrological control.

41. The scope of the UK legislation implementing MID has been limited to measuring instruments “in use for trade” for those prescribed under the Weights and Measures Act 1985. The MID was implemented in the UK by a series of fifteen statutory instruments covering individual measuring instrument types.

42. Ten of these statutory instruments were made in respect of instruments previously subject to Weights and Measures Act provisions. A further instrument was made for “non-prescribed instruments” to enable UK manufacturers to obtain conformity assessment of measuring instruments for other regulated EEA markets from UK Notified Bodies. Four other regulations were made for instruments that are outside the scope of the Weights and Measures Act, namely active electrical energy meters, gas meters, exhaust gas analysers and taximeters. These fall outside the scope of this report and are only mentioned here for completeness.

Type Approvals of Equipment for Use for Trade

43. The introduction of 'notified bodies' under the MID has meant that independent bodies have been notified to the European Commission and are able to conduct type examinations under the MID and the NAWI Directive. The Certification Services Directorate of NMO is itself a notified body, and as such delivers type examination (and other conformity assessment) services under MID and NAWI.
44. The introduction of the MID and NAWI has led to a large scale reduction in the demand for UK National type approvals for instruments that are now covered by the EU Directives. There has been an equally large increase in type examinations being sought and issued under the EU Directives. The National Measurement Office Notified Body has issued 793 type examination certificates, including revisions, under the MID and NAWI in the reporting period. (Note: The National Measurement Office is not the only notified body offering type examination).

Approvals made under UK National Regulations

45. Under Section 12 of the Act; 107 UK National type approval certificates have been issued (this includes variants and amendments/revisions of previously issued certificates).

UK National Certificates issued (including variants and amendments)	
Intoxicating liquor measuring equipment	26
Water Meters	7
Cubic Measures	1
Liquid Fuel Measuring Instruments	60
Automatic weighing instruments <ul style="list-style-type: none"> • Automatic rail-weigh bridges • Automatic catchweighers • Discontinuous totalisers • Automatic gravimetric filling instruments • Beltweighers • Dynamic Axle weighers 	13
Total	107

46. During the reporting period, NMO suspended and withdrew one UK National Type Approval Certificate.
47. In addition, modifications can still be made to existing UK National type approvals for the following equipment until the type approval certificate expires:

- Automatic weighing instruments
- Cold-water meters
- Fuel dispensers (< 100 L)
- Road tanker meter measuring systems (> 100 L)
- Material measures of length

The future of UK National Type Approvals

48. For new instruments covered by the MID, since the 30th October 2006 conformity assessment must be conducted under the MID.
49. Type approvals, issued under Section 12 of the Act, for instruments that are now covered by the MID, will no longer be eligible for revision or amendment after they expire.
50. Type approvals, issued under Section 12 of the Act, for instruments that are not covered by the MID, will remain eligible for issue, revision or renewal after the 29th October 2016 (end of the 10-year MID transition period).

PART III: PUBLIC WEIGHING OR MEASURING EQUIPMENT

51. Section 18 of the Act provides that operators of public weighing or measuring equipment should hold a certificate from the Chief Inspector of Weights and Measures that they have sufficient knowledge to carry out their duties properly. Should anyone have been refused such a certificate, they can appeal to the Secretary of State who has the power to direct (if this is thought appropriate) the Chief Inspector to grant the certificate. During the period of the report there were no such appeals. Whilst information is not formally recorded, the number of operational sites that continue to conduct public weighing has decreased considerably as the market place has less demand for such statements of quantity.

PART IV: REGULATION OF TRANSACTIONS IN GOODS

Specified Quantities

52. Specified quantities for all pre-packed goods apart from wines and spirits were deregulated by the Weights and Measures (Specified Quantities) (Pre-packed Products) Regulations 2009 (SI 2009/663) on 11 April 2009. This followed from the agreement in Directive 2007/45/EC to remove all mandatory and optional specified quantities at European level, except for wines and spirits. Specified (or prescribed) quantities were the fixed sizes that certain goods were required to be sold in. They restricted business and consumer choice in order to ensure that consumers could easily compare quantities. However, following consultation at EU and national level it was agreed that they should be deregulated, except for wine and spirits where the intoxicating nature of those drinks justified retention of fixed sizes. The Weights and Measures (Specified Quantities) (Pre-packed Products) Regulations 2009 (SI

2009/663) removed restrictions on the placing on the market of products in pre-packages made up otherwise than in specified quantities, subject to the retention of nominal quantities applicable to certain wines and spirits. It required that aerosol dispensers be marked with an indication of the total capacity of the container, in such a way as to avoid confusion with the volume of its contents and provided that aerosol dispensers need no longer indicate the weight of their contents.

53. Following on from the review and reform of specified quantities for pre-packed goods, a review and full public consultation was held to consider the future of the remaining specified quantities for non pre-packaged foods, which are outside the scope of European law. As a result the Weights and Measures (Specified Quantities) (Unwrapped Bread and Intoxicating Liquor) Order 2011 was made. It amended the Weights and Measures (Intoxicating Liquor) Order 1988 to permit retail sales of 2/3 pint of draught beer or cider, to permit wines (other than fortified wines) sold in a quantity of less than 75 ml to be sold in any quantity without quantity indications and to require fortified wines to be sold only in specified quantities of 50 ml or 70 ml. It also amended Schedule 3 to the Act and Schedule 3 to the Measuring Instruments (Capacity Serving Measures) Regulations 2006 to permit the use for trade of capacity measures of 2/3 pint. It also amended the 2006 Regulations, which regulate the placing on the market, putting into use and use for trade of capacity serving measures, to apply them to 2/3 pint measures.

54. The 2011 Order also deregulated specified quantities for loaves of bread by amending the Weights and Measures (Miscellaneous Foods) Order 1988 so as to revoke specified quantities relating to unwrapped loaves of bread and to introduce quantity labelling requirements for any unwrapped loaves above 300g not sold in traditional sizes (i.e. 400 g or a multiple of 400 g). The main benefits of the reforms were to introduce greater flexibility on the sale of draught beer and cider by permitting the use of 2/3 pint, greater clarity on the sale of fortified wines and greater freedom for bakers to make up and sell any size of loaf. The Order came into force on 1st October 2011 and a full Impact Assessment was produced.

Food Information to Consumers

55. In 2011, EU Regulation No 1169/2011 (FIC) on the provision of food information to consumers was agreed, which will have direct effect on UK food businesses from 13 December 2014. The Act and its secondary legislation will be amended to remove conflicting or overlapping provisions regarding quantity labelling of foods and to provide for enforcement of relevant parts of FIC through the existing weights and measures regime.

PART VI: LOCAL ADMINISTRATION

56. The Local Government re-organisation in 2009 has resulted in the following changes in the composition of LWMAs as defined by section 69 of the Act for Great Britain. (The figures in brackets are the numbers that were given in the previous weights and

measures report to parliament, printed 18 March 2009, as existing and know Local Weights and Measures Authorities as at 31 December 1994.)

- County Councils 27 (34)
- London Boroughs and the City 33 (31+1)
- Metropolitan Districts 36 (36)
The West Yorkshire Trading Standards Service administers the Act on behalf of the other metropolitan district councils under provisions of sections 101 and 102 of the Local Government Act 1972: Bradford, Kirklees, Calderdale, Wakefield and Leeds.
- Scottish Authorities 32 (32)
- Unitary Authorities 56 (46)
- Welsh Authorities 22 (22)

Section 70 Annual Reports of LWMA's

57. Section 70 of the Act provides for each LWMA to report to the Secretary of State on their weights and measures functions under the Act. The Secretary of State shall direct the form and content of the report.
58. During the period of this report the form and content was changed to make better use of the data received so that it could be fed into a risk matrix which is updated each year to reflect the latest data. The risk matrix can then be used by local authorities to prioritise and target their resources towards higher risk areas, supporting an intelligence led approach towards enforcement activity and enabling local authorities to optimise the use of their resources. NMO also uses the Section 70 return to help formulate which national projects should be co-ordinated for the following year. The small cost to local authorities of providing the return is far outweighed by the resources saved from authorities being able to target their resources and avoid carrying out routine, low risk inspections. This is in line with the Hampton principles of targeted, risk based inspections. The return is available electronically from the NMO website and can be completed and returned electronically in line with the Government's Digital by Default initiative.
59. The number of voluntary and statutory reports which are requested by central bodies from regulatory services was investigated by the Better Regulation Delivery Office (BRDO) in the report 'Data collections from local authority regulatory services: Data mapping and costing the administrative burden'. Completed by The Chartered Institute of Public Finance & Accountancy (CIPFA) for the Local Better Regulation Office (LBRO) 2009. The report concluded that the Section 70 report is a relatively minor 'burden' on authorities and consumes a small amount of time.
60. BRDO estimated the overall burden of the collection to be £16,091 per annum for all local weights and measures authorities (i.e. single cost per authority £93) with an average time to complete the return of 4.1 hours.

61. The Section 70 returns, report and risk matrix are in line with the BRDO principles contained in the new Regulators' Code that activities should be based on risk, that information about compliance and risk should be shared nationally, and that the approach to regulatory activities is transparent. The report and risk matrix is a publicly available document, downloadable from the NMO website. The Section 70 return enables NMO to provide leadership to local authorities and a co-ordinated approach to enforcement of weights and measures legislation to encourage consistency of approach across the UK.
62. For the past three years, authorities have been given the opportunity to feed back their foremost concerns relating to weights and measures using the section 70 return. The main theme generated from responses is of the annual struggles of time, budget and the battle to gain priority status against other competing trading standards activities.
63. Another major worry for authorities, highlighted in the returns, is staff resourcing and the diminishing number of newly qualified inspectors. For some authorities the level of resource required (financial and time input) to train an officer to competency as a Weights and Measures Inspector is significant and harder to justify due to lower priority given in the service in relation to metrology work.
64. In response to the decrease in the number of Inspectors of Weights and Measures actively enforcing the legislation, and following the demise of "Local Government Regulation" (previously "Local Authorities Coordinators of Regulatory Services"), NMO has supported the "Local Government Metrology Expert Panel" who were previously the "LACORS Metrology Focus Group". NMO has also provided free training for those participating in national enforcement projects and provides co-ordination of those national projects. NMO, in conjunction with the Trading Standards Institute, runs an annual Metrology Seminar for Trading Standards and businesses with an interest in weights and measures. NMO's leadership role includes promoting the importance of an effective weights and measures regime to ensure fair measurement for businesses and consumers in the UK.

Section 71

65. Section 71 of the Act gives the Secretary of State authority to undertake inspections of LWMAs to ensure the provisions of the Act are complied with. During the period of this report no formal inspections have taken place. However, a programme of informal visits has been made to those authorities engaged in standards provisions to ensure that appropriate arrangements are in place. Other visits have also been made to individual authorities where issues have arisen and these have subsequently been quickly resolved.

Section 72

66. Section 72 requires that each local weights and measures authority appoint a Chief Inspector of Weights and Measures and has sufficient inspectors of weights and

measures for the efficient discharge in the authority's area of the functions conferred or imposed on inspectors by or under the Act. The number of inspectors actively working in weights and measures has fallen from 503 in 2011 to 304 in 2013¹. NMO is concerned that this trend may compromise the future delivery of weights and measures enforcement and increase the risk of fraudulent trading activities based upon measurement. The change to the Act (in 1999) to allow private sector verification has resulted in less verification work for inspectors and less income for local authority trading standards. This makes it harder for local authorities to support the cost of Weights and Measures Inspectors whose enforcement work (unlike verification) does not create income.

Section 73 Certificate of Qualification as an Inspector of Weights and Measures

67. This section requires that Inspectors of Weights and Measures hold a statutory qualification. The Trading Standards Qualification Framework (TSQF) replaced the Diploma in Trading Standards (DTS) in 2008. The qualification necessary to become an Inspector of Weights and Measures is the metrology module of the Diploma in Consumer Affairs and Trading Standards (DCATS).

68. NMO has policy responsibility for the Section 73 certification, and the Trading Standards Institute (TSI) provides the delivery in conjunction with NMO. On a candidate's successful completion of all the required elements of the TSQF for a Module Certificate in Legal Metrology, TSI will inform NMO that a candidate is competent to achieve the Section 73 certificate.

The Diploma in Trading Standards (DTS)

69. The DTS had its final round of delivery in 2008 with a referral round delivered for one candidate in 2009. Thereafter all delivery of the Section 73 Certificate was via the TSQF (see below).

Trading Standards Qualifications Framework (TSQF)

70. The Trading Standards Qualification Framework consists of three main levels of qualifications:

- Core Skills in Consumer Affairs and Trading Standards (CSCATS)
- Diploma in Consumer Affairs and Trading Standards (DCATS), and
- Higher Diploma in Consumer Affairs and Trading Standards (HDCATS).

¹ Section 70 Returns – Annual Report 2013/14

71. To achieve the requirements to obtain the Section 73 Certificate a candidate must successfully complete the module of Legal Metrology as part of the DCATS. For a candidate to achieve the full DCATS they must achieve three modules (including Legal Metrology), or four modules, not including Legal Metrology. The TSI delivery, in conjunction with the NMO, provides all elements of the Legal Metrology examinations.

All examination outcomes are recorded and reported to the TSQF Qualification and Awards Board and Examination and Advisory Board (on which NMO have a seat) for ratification. Once ratified they are reported to the NMO to confirm that all elements of the Section 73 requirements have been successfully completed and a Section 73 Certificate is signed and issued.

72. The number of candidates sitting the DCATS exams including the metrology module pass rates and annual costs are shown below:

Year	No of Candidates	No of passes (taking between 1 and 4 exams)	No of fails (taking between 1 and 4 exams)	Awards	Price of examinations per candidate non TSI member rate (metrology service delivery module elements only)*
2009	57	96	23	29	852
2010	37	63	7	28	878
2011	43	106	4	40	905
2012	50	98	2	37	936
2013	40	76	7	22	945

*The cost of the registration and the CSCATS core skills and base elements is in the addition to these costs.

73. Candidates are not required to complete all examinations at the same time and can split the exams over a number of years.

The requirement of the Legal Metrology Service Delivery Module is:

- Legal Metrology Law written examination
- Legal Metrology Technology written examination
- Legal Metrology Practical examination
- Legal Metrology Oral examination
- Legal Metrology portfolio of evidence.

ISBN 978-1-4741-1247-5



9 781474 112475