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Opposition to EC ban on supplementary indications rising on all sides

Secretary of State for Trade and Industry Ian McCartney has responded to a question by Laurence Robertson MP (Conservative, Tewkesbury): "The European Commission is ... examining the working of [Directive 80/181/EC] with particular reference to supplementary indications. The Government expects that the Commission will propose *at least an extension of the permission for use of supplementary indications*. The Government will consult widely on whatever proposals may be made by the Commission".

While nothing is confirmed (the European Commission has yet to open the matter for discussion), it is clear that the Commission is under enormous pressure both from within the EU and outside not to withdraw "permission" for the display of supplementary non-metric information on 1 January 2010. Most industries are calling for a permanent derogation of the ban; Orgalime, the European electrical, mechanical and metalworking body, states in its position paper (reproduced inside) that this matter "has been reappearing on the regulatory agenda since the 1970s [and] needs to be dealt with once and for all".

BWMA and representatives from British industries will be meeting with DTI officials in November to explain the problems that the Directive will cause. A report of the meeting will be in the next *Yardstick*.

Metric Martyrs Defence Fund

Enclosed is a newsletter from our friend and ally, Neil Herron, who was campaign manager for the late Steven Thoburn, the first trader in Britain to be prosecuted for using pounds and ounces. Neil brings to the campaign a style of resistance that is effective, frontline and essential. We ask members to support his request for financial assistance where possible.

John Gardner, Director

BWMA is a non-profit body that exists to promote parity in law between British and metric units. It enjoys support from across Britain's political spectrum, from all manner of businesses and the general public. BWMA is financed by member subscriptions and donations.

Membership is £12 per year. Cheques or postal orders payable to "BWMA", 44 Greensleeves Avenue, Broadstone, Dorset BH18 8BJ

**BWMA submission to the
European Commission on EC Directive
80/181 and supplementary indications**

24 August 2006

The British Weights and Measures Association asks the European Commission to consider the following points.

1) Background

Article 3a of EC Directive 80/181, amended by 1999/103/EC, states that authorisation of non-metric indications alongside metric for “economic, public health, public safety or administrative” purposes will cease from 1 January 2010. Non-metric expressions are referred to in the Directive as “supplementary indications”.

2) Practical considerations

The Commission will be aware from other organisations that there are many practical problems arising from preventing the display of supplementary indications. These include safety, export and consumer information matters. Although we regard these concerns as important, we do not describe them in this paper, as these points are most appropriately made by the affected industries.

3) BWMA concerns

The issue that BWMA wishes to raise is that the debate about supplementary indications has tended to be seen as “metric versus non-metric”. This perspective is misplaced, since supplementary indications do not constitute an alternative to metric, but an addition.

Under Directive 80/181, only metric units are authorised for the specified purposes. Non-metric units ceased to be authorised in October 1995 and have since existed outside the EU’s legally recognised set of weights and measures. Therefore, the perceived grounds for de-authorising them again in 2010 are anomalous, since units cannot be de-authorised twice. Supplementary indications constitute additional information only, and do not form part of any transaction or contract in EU weights and measures law.

Prevention of supplementary non-metric expression is therefore not only unnecessary for accomplishing a single measurement system, but invasive, since it prevents the private provision of information alongside the legal requirement. BWMA believes that any perception of supplementary indications as an alternative to metric should be replaced with an appreciation of the right of producers to express

information freely, in addition to the legal minimum.

4) EC concerns

We are aware of two specific concerns expressed by the Commission over non-metric indications. One is that EU workers and consumers may not understand them. We ask that the Commission recognises that this concern is already addressed by making metric mandatory; no further solution is necessary.

Second, the Commission has expressed concern that the US requires the use of non-metric units, thereby requiring EU firms to display them also. We would ask the Commission to acknowledge that US law requires metric as well as US customary. This has been the case since 1994, meaning that metric labelling is obligatory on both sides of the Atlantic.

Whether US law requires customary units alongside metric is not a matter that should be of concern, since all countries have information requirements, be they indications of content, date of production, etc. That the US requires non-metric as well as metric should be regarded in the same light and as an internal matter for its own citizens. Whether US units ‘spill-over’ into the EU marketplace is immaterial since EU law does not recognise them for the specified purposes. Supplementary indications do not threaten the unique status of metric in EU law.

5) BWMA conclusion

Eliminating the option of displaying supplementary indications is not necessary to achieve the Commission’s goal of metric-only use. This arrangement already exists in law, and has done so since October 1995.

Preserving the option of supplementary indications ensures that businesses and organisations retain the flexibility to express additional information as required. It should not matter why information is provided; it is the right to do so that should be respected.

Preserving the option also demonstrates awareness of the cultural importance of traditional units. People should not be fearful of infringing a law simply for referring to them alongside metric.

We therefore urge the Commission to accept and support supplementary indications as a permanent option.

Correspondence between EC Commissioner Günter Verheugen and BWMA's Chairman Mike Plumbe

European Commissioner and Vice-President Günter Verheugen won the 2006 BWMA Golden Rule award for his statement in September 2005 that: "I am not pressuring the UK to go metric. As long as I am in Brussels I will not touch the issue. Full stop ... I personally have a lot of sympathy for the pint and for the mile in the UK ... what is the problem here for the internal market. Really, what is the problem?" While we were disappointed that Mr Verheugen declined the award, he provided the following letter of explanation to our Chairman Mike Plumbe, dated 6 June 2006:

"Thank you for your letter dated 1 May 2006 and your proposed award to me of your Golden Rule. While I fully stand behind my declaration made during the BBC's TV Question Time and appreciate your kind gesture, I regrettably do not feel able to accept your proposed award. If I may be frank with you, I do not feel that acceptance of your award would help in the management of this issue which, as you have noted, I am handling with care and respect for important national traditions and culture. I hope you will understand this consideration and I nevertheless look forward to enjoying a pint on my next visit to the UK".

Mike Plumbe replied: "Many thanks for the courtesy of your letter of 6 June. We quite understand the delicacy of your position and that you feel you cannot accept the Golden Rule Award. You may nevertheless like to have a photograph of what you would have received, had you been with us at our AGM. I am the happy chap holding it. We had arranged with an MEP for the Award to be smuggled into your offices in Brussels. You say you would enjoy a pint on your next visit to the UK. If you would allow us to meet you and to accompany you into a suitable hostelry, it would be our privilege to entertain you - free from publicity, I promise.

In the meantime, you will be aware that DG Enterprise is to review the workings of Directive 80/181, in particular, matters relating to supplementary indications. We hope that you will support our continued right to supplement metric with customary measures. Such indications do not threaten the unique status of metric in EU law, but their prevention could bring metric into disrepute. The prevention of supplementary indications would also be a deplorable restraint on our freedom of expression and damage the EU's reputation irreparably. We will be submitting a paper and look forward to any support you can offer. For our part we will keep you informed of developments from time to time".

Orgalime made its submission to the EC on 16 March 2006. Orgalime represents the mechanical, electrical and metalworking industries of 23 European countries, and speaks for 130,000 companies accounting for over a quarter of the EU's manufacturing output.

"Directive 1999/103/EC relating to units of measurement has postponed the date of possible use of supplementary indications, regulated in Directive 80/181/EEC to 31 December 2009. In addition, the Directive states that the application of Directive 80/181/EEC should be re-examined and appropriate measures should be taken towards achieving a global system of measurements based on SI units.

In its position of 16 March 1998, Orgalime supported the aim of the European Commission to ensure standardization on SI units, because the worldwide use of one system for units will, without doubt, provide considerable benefits to industry and consumers alike. However, as we believe that the process to achieve this should not cause prejudice to manufacturers, we requested that the Commission should allow the use of supplementary indications (so called dual labelling) on products, using both SI and other units in order to be able to serve the needs of the markets for engineering products.

Even if engineering companies, many of which manufacture at a global level, have already made considerable efforts to achieve the goal of standardising on SI units, they are still faced with a number of practical problems:

- Although in many countries SI units are the standard, this is by no means universal practice. In certain countries in the European Union, or outside it, units other than SI are still used and still have to be used.
- In the engineering industry there are often specific requirements for technical documentation dictated by the requirements of the international market. Thus, catalogues for machinery or parts may, in general, use the SI unit, but a corresponding additional unit is often included in brackets.
- Companies use sub-assemblies which they incorporate into their final products which may include components labelled in units other than SI.

In its 1998 position, Orgalime also suggested that the European Commission should undertake a campaign to inform users and to promote the benefits of worldwide standardization on SI units. We believe that such communication, in collaboration with countries such as the US, are essential conditions to

encourage a smooth and gradual transition to a single worldwide standardised system. It was our view in 1998 and still is today, that this is a concrete action that the Commission could and should undertake in the framework of transatlantic cooperation. We also believe that, on the contrary, further regulation aiming at driving change will be counterproductive. Therefore, we urge the Commission to refrain from introducing any further legally enforced time frame for introducing obligatory marking in SI units only within the EU.

Orgalime conclusion: Orgalime believes that the present issue which has been reappearing on the regulatory agenda since the 1970s needs to be dealt with once and for all, while avoiding taking measures that would damage the competitiveness of European engineering manufacturers. In conclusion:

- Orgalime fully supports the aim of the European Commission to ensure standardisation on SI units. This is a logical and welcome goal and we hope that the Commission will take steps to support this goal with appropriate communication.
- In a spirit of better regulation and in order to avoid imposing unnecessary costs and burdens on European engineering companies, it should be left up to each market segment to judge the speed at which it adopts the SI units system, if it has not already done so.
- The possibility to label products and have documentation using both SI and other units for as long as required by the market must therefore, in our view, be perpetuated”.

NB The **British Electrotechnical and Allied Manufacturers' Association (Beama)** is a member of Orgalime and supports the positions of Orgalime and BWMA on supplementary indications.

US National Association of Manufacturers and European-American Business Council, joint position paper, January 2006:

“On Jan. 1, 2010, EU legislation (80/181/EEC) will require manufacturers to label all products marketed in the European Union, with few exceptions, exclusively in metric units. Dual-unit measurements will no longer be permitted on product labels, brochures and advertisements, including those on the Internet. The new policy will end a longstanding practice in the trade community of allowing manufacturers flexibility on labeling products. Under the EU metric-only requirement, many U.S. manufacturers would have to label separately and maintain separate inventory and warehousing for products marketed in the United States and European Union. Separate metric-only product brochures, catalogues, and marketing websites on the Internet

would also be necessary. European manufacturers would face a similar problem for products requiring dual-unit labeling in the United States because of either legal mandates (e.g., under the FPLA) or consumer preference. These additional costs in two major consumer markets adversely affect companies’ global competitiveness and result in higher prices for American and European consumers with no accompanying value added.

A survey done in 1999 by the 82 companies and associations of the Transatlantic Labeling Alliance projected that the metric-only labeling Directive could adversely affect U.S.-EU trade of more than \$118 billion in consumer goods and \$143 billion in capital goods annually. Compliance costs were estimated in the hundreds of millions of dollars/euros. Some small and medium-size enterprises (SMEs) could be forced out of the export market altogether because of the costs. Allowing the options of either metric-only or dual-unit labeling serves the interests of producers and consumers. Labels can be adapted to consumers’ needs and preferences, and production and marketing costs can be reduced to help keep prices down. The EU should permanently change 80/181/EEC so that producers have the flexibility to use either metric-only or dual units on product labels depending on end-user needs”.

Confederation of European Businesses (UNICE), letter to the European Commission, 25 April 2006:

“On the 9th of February 1999 UNICE had cause to write to the then Commissioner with responsibility for industrial matters, Dr. Bangemann, with reference to a Council Directive relating to units of measurement (1999/103/EC).

In that letter we expressed strong support for the Commission proposal which aims at ensuring standardization on SI units but which also "postponed by an additional 10 years the end of the transition period provided for in Article 3 of Directive 89/617/EEC allowing supplementary indications of units of measurement (in both metric and imperial)".

“UNICE continues to supports the intention of the European Commission to ensure standardization on SI units. We believe it is the right course of action because worldwide use of one system for units can provide considerable benefits both to industry and to the consumer. However in striving for this goal mainly through legislative means we also believe that it should not give rise to situation which can be damaging to market actors.

In this context UNICE has noted that Orgalime has recently produced a position paper on this subject. UNICE is supportive of Orgalime's position on this issue. We agree with the general thrust of the paper when it suggests that even though the introduction of standardization for SI units is desirable, the Commission should allow the use of supplementary indications (dual labelling) on products indefinitely so as to avoid imposing unnecessary burdens and cost on European companies. In the spirit of better regulation it should be left up to each market segment to judge the speed at which it adopts the SI units system, if it has not already done so ... While we are aware that your services have not as yet started work on this issue, we believe, given the fact that the provisions governing dual labeling run out in 2009, that it is prudent to address you on this issue at this early stage and make you aware of our views. We remain of course at your disposal if you or your representatives wish to discuss this issue in more detail”.

Tyre Industry Federation (UK), 25 October 2006: “The Tyre Industry Federation is opposed to the proposal to ban the use of non-metric units as supplementary indications with effect from 2010. The Federation embraces the leading associations representing the whole spectrum of the tyre industry from manufacture through distribution and retail to recovery and thus represents the authoritative voice of the tyre industry in the UK.

The use of non-metric units is commonplace in the industry. For example tyre and wheel sizes are commonly denominated in inches throughout the world, not just in the UK, and this usage is recognised in global standards. A ban on their use would have a severe impact on both the industry itself and the users of the product. At the very least such a move would cause disruption to global trade in tyres, which is the norm in the industry, lead to other practical problems, impose substantial costs and sow confusion in the minds of motorists.

It is important also to remember that tyres are a safety-critical feature of motor vehicles. The ban on the use of units which are familiar to motorists, such as pounds per square inch for tyre pressures, could lead them to treat their tyres in inappropriate ways, at potential risk both to themselves and to other motorists. Safety is a paramount consideration in the tyre business and the Federation would not wish it to be compromised by this proposal”.

Association of British Healthcare Industries, 22 March 2006: “Within the medical devices industry many of the units of measure, e.g. Charrière gauge, the Needle gauge, wire diameter and the notation used to designate size of sutures and

ligatures are based upon historical units and could lead to confusion and potential major patient safety issues if attempts are made to metricate them. When the transition period ends in December 2009 what will happen to long-life products that have dual labelling and which are already in the supply chain? CEN standards advocate the use of both imperial and metric units on the product label. Will these standards be revised before the end of 2009? The ABHI urges the European Commission to permit the use of dual labelling indefinitely. This action would make EU and USA product packaging compatible and remove the danger, within the European healthcare sector, of patient harm caused by misunderstood product information supplied to the end-user”.

Cosmetic, Toiletry and Perfumery Association (UK), 28 July 2006: “The CTPA is concerned about the approaching prohibition of non-metric supplementary units of measurements. We intend to contact the authorities and urge for supplementary indications to continue to be allowed. The single issue for the CTPA, in this case, is the use of dual content labelling (metric/imperial) to facilitate harmonised cosmetic product labelling for the US and European markets. If imperial units are banned from January 2010 then the cosmetics industry will be forced to produce differently labelled products for each market which will increase costs, complexity and waste. As you say, it may also place a barrier to international trade as the marking of metric and imperial units is mandatory in the US”.

Association of Suppliers to the British Clothing Industry, 12 October 2006: “Thank you for your letter of the 2nd inst. and the attached background paper on the above. Following receipt of this correspondence, we have circulated our membership to ask their opinion on the situation. The consensus appears to be that whilst the use of metric units is probably inevitable, due both to our position in Europe and the fact that our education system no longer teaches in imperial units, it is felt that prohibition of additional and complementary imperial measurements on labels and other information elements is neither desirable nor necessary. The majority of adult consumers in the UK are still conversant with imperial units and use them in preference to metric units - particularly in clothing measurements (collar sizes, chest, waist and hips, inside leg, etc). In particular, the largest sector of the buying public is in fact the 'baby boomer' generation who were taught and have used imperial units throughout their life - these people are not going to disappear in four years and exclusion of their normal frames of reference would cause immense confusion. Additionally many companies sell products in non

European markets where imperial measurements are still widely used and a move to exclude these measurements from labelling in Europe would create extra work and costs for no benefit.

To conclude, we feel that the metric system will eventually displace imperial units as the population ages and changes. The decision as to when to stop using imperial units will be decided by the market and the consumer - until that time, we feel labelling and size indications should inform the consumer and the premature elimination of imperial units would inhibit this”.

National Electrical Manufacturers Association (US), 15 Jun 2006. NEMA has been working to raise awareness of the matter in Washington, meeting with officials from the Office of the U.S. Trade Representative and Commerce Department, as well as enlisting support from the U.S. Chamber of Commerce and National Association of Manufacturers. The association is urging members with European parent companies and subsidiaries to talk with their counterparts about wielding influence in Brussels. NEMA describes the option of supplementing metric with inch-pound units as “necessary, reasonable, and desired by the EU and U.S. business communities”. It states: “Both U.S. installation codes and product standards are based on critical, non-metric units-of-measure for electrical products. Three examples are motor and controller ratings in horsepower, wire sizes provided in American wire gauge (AWG), and torque provided in pounds/inch. The EU directive would require motor ratings in kilowatts, wire sizes in mm² and torque in Newtons. Dual labeling would ensure that electrical equipment can be safely selected and installed for either market”. According to NEMA President Evan Gaddis, “American electrical equipment manufacturers are neither opposed to the metric system, nor opposed to permitting flexibility to use metric or dual labeling where appropriate. It is not a question of whether the U.S. will ‘go metric,’ but of irreconcilable differences between the built electrical infrastructures in the U.S. and in many European countries.”

Southern Sheds, Kent, 10 August 2006. “Southern Sheds have been producing garden buildings for over 30 years. They are advertised and sold in feet and inches. We find that everyone understands a 6 ft x 4 ft or an 8 ft x 6 ft but very few people come in and ask for a 1.2 metre x 2.4 metre; even young people ask for imperial sizes. All our workshops are set up in feet and inches i.e. auto-saws, cutting tables, benches, etc and to convert would cost us a considerable amount of time and money”.

Rock Oil (UK producer of lubricants and fuels), 3 May 2006: “This letter is to confirm that we as a company would like to display non metric measurements for exactly the same reasons mentioned in the previous (1998) letter. If anything it is even more imperative that we can display non metric measurements as we have significantly expanded our interests in the US in the last couple of years”.

Harris, manufacturers of paint brushes and tools, 6 September 2005: “We entirely agree with your opposition to the proposed EC Directive that will ban the use of imperial measurements and we agree with your idea that this should be market driven rather than by Brussels. The main reason for this is that imperial dimensions are still used by very many people as their measure of choice, and it is therefore restrictive and necessarily obstructive to only use the metric system as these consumers always tend to translate this to imperial measurement. To use a personal example, at school I was taught in both imperial and metric measurements and have used metric measurements all my life but I still tend to think in imperial measurements first and translate metric measurements. In my view the proposed directive will not have any benefit to the consumer, indeed the opposite, and seems to me to be driven by a misdirected desire for European uniformity”.

TransAtlantic Business Dialogue, 25 September 2006. TABD represents US and EU exporters and was active in opposing the ban on supplementary indications when the deadline previously threatened in 2000. In a communication to BWMA dated 25 September 2006, they stated that their position remains unchanged: “...manufacturers should have the option of using only metric units or metric and a supplementary unit in response to customer needs and preferences”.

Other organisations opposed to the 2010 ban are:

- **Dairy UK;**
- **Food and Drink Federation;**
- **Biscuit, Cake, Chocolate and Confectionery Association;**
- **Federation of Small Businesses;**
- **Federation of British Hand Tool Manufacturers;**
- **Bicycle Association; and**
- **Inveresk (producer of artists’ paper).**

Still no reply from Consumers Association
BWMA has written twice to the Consumers Association, on 18 February and 30 August 2006, regarding the EC’s ban on supplementary indications with no response. Could members who have not already done so please write to them (as private individuals), asking that they support consumers’ right to information in non-metric terms. Their address is 2 Marylebone Road, London NW1 4DF.

From the Archives: "Measuring v. Making"
by Frederick Halsey, New York. This superb lecture appeared in BWMA's annual report of July 1905, and in a pamphlet by the US National Association of Manufacturers the same year:

The scientific use of measurements consists in measuring existing things; the industrial use of measurement consists in making things to certain sizes. In the scientific use we have given the thing of which we find the measure; in the industrial use we have given the measure to which we make the thing.

Parallel with this difference we find this division of sentiment, for between those who measure things and those who make things is the line of cleavage. Such a broad clear line of demarcation is a very significant thing, and instead of dismissing opposition to the metric system as due to ignorant prejudice, fanaticism and blind partisanship, as is habitually done, it would be more in accord with the spirit of science to examine the difference between these two kinds of measurements in order to determine if therein lies a satisfactory explanation of the opposite attitudes of the two contending parties.

A typical illustration of the scientific use of weight and measure is found in the chemist's balance. The chemist places a substance upon one pan of his balance, and proceeds to balance that substance with his weights and his rider. This is the exact opposite of the grocer's use of his balance, for the grocer places his weight upon the scale pan first, and proceeds to balance that weight with the required amount of material. This weighing out of a specified amount of material by the grocer is closely analogous to the making of things to specified sizes, and by comparing these two kinds of weighings we may quickly pass in review the salient points of difference between scientific and industrial measurements.

The chemist has given a mass of material of which he finds the weight; the grocer has given a weight of which he finds an equal mass of material. The chemist finds the weight, but the weight is the very thing which the grocer has given in advance. Each in fact finds what the other has given, and each has given what the other finds. The weight found by the chemist is a matter of pure accident; that is, while, like everything else subject to the laws of Nature, it is, so far as his individual control over it is concerned, a matter of simple chance. The weight used by the grocer, on the other hand, is a matter of deliberate choice. This power of choice, this ability to say in advance what the measurements shall be, is the turning point in this whole matter. The constructor always has it, the scientist never, and hence they differ upon this subject.

Comparing the apparatus used by the two parties, we naturally find that each is adapted to its purpose. The chemist sets out to find any weight whatever within the range and capacity of his apparatus. His balance is, therefore, fitted to find any possible fractional weight down to the minutest difference under which the beam will turn. The grocer's weights, on the contrary, have no

reference to the sensitiveness of his scales, but only to the wants of his customers. From whatever standpoint we examine these two kinds of weighings, we find them the exact opposites of one another – and this regardless of their relative accuracy, which is a difference of degree only.

If the chemist's balance is sensitive to the tenth of a milligram, he is equipped for dealing with ten thousand fractions of a gram but, in the case of the grocer, under the exercise of his power of choice this great number is cut down to three: one-quarter, one-half, and three-quarters of a pound, or of an ounce, as the case may be, for he deals with no fractions whatever but these. It is not surprising that a system of notation which is satisfactory when dealing with three fractions fails to be satisfactory when dealing with ten thousand; it is not surprising that when dealing with ten thousand fractions requirements develop which are absent when dealing with three, and this is exactly the situation. The chemist has chosen to use decimals because for the miscellaneous fractional quantities with which he deals, vulgar fractions would be hopelessly cumbersome; while for the few fractions with which he deals, the grocer finds them entirely satisfactory – decimals being, for his quantities, the more cumbersome.

Summing up, then, we find the basic differences between these two kinds of weighings to be that while the chemist deals with many fractions, the grocer deals with but few, and, what is much more important, that while the weights determined by the chemist are matters of accident, the weights used by the grocer are matters of deliberate choice.

These differences run through all scientific and industrial applications of weight and measure. The scientist always measures things as they are; the constructor always changes them to sizes which are required. The scientist, like the chemist, must always be prepared to deal with all possible fractional values; the constructor, like the grocer, deals with a few selected fractions only.

It is the starting point of all organised manufacture that, of the many possible sizes, but few shall be actually used. Measuring to thousandths of an inch only, we might have, between one and two inches, a thousand diameters of screw thread. As a matter of fact, of standard threads we have but eight, while of standard shafting we have but four, and of standard pipe but three. These few sizes correspond with the grocer's few weights, and like them they are the result of this exercise of choice. Like the grocer, the constructor deliberately chooses these few fractional sizes, and discards all others, saying he will not use them, except, of course, when necessity compels, and even then he uses but few of the many sizes that he might use. This limitation of manufactured things to a few of many possible sizes characterises all branches of manufacture and has always done so. We see similar examples of it in our wearing apparel. Our collars, cuffs, shoes, hats and gloves all illustrate the same principle. *To be continued in the next issue.*

Arthur Fredrick Whillock 1912 – 2006

Arthur Whillock was an early member of BWMA, and for a number of years the Association's Technical Adviser. Arthur was an engineer who had worked at the Hydrological Research establishment in Wallingford. His understanding of the origin and history of practical measurement gave him a special insight into the issues; as a scientist and a practical engineer, he knew from experience that Base 10 metric units were not necessarily appropriate for all tasks.

Arthur was an enthusiast for the 'dozenal' system of arithmetic notation and calculation, and wrote articles decades ago about the disadvantages of the metric system. Colleague Brian Bishop wrote of Arthur: "He contributed much to the Dozenal Society of Great Britain. In what some people think as a tiny area of activity, but which we see as important, he was full of innovative and practical ideas".

According to another DSGB member, Shaun Ferguson, "Arthur's conviction was that the artificial conventions and mathematical convenience of the Metric System would never improve upon the user-friendly systems on which Imperial Units were based. To him, the Metric System represented a debasing of measurement, an act of mathematical vandalism; easier to calculate, perhaps, but less convenient for practical people. To Arthur, the old measurements were as much a part of our national heritage as our language, music, literature, historic buildings and landscape".

EC officials are not the only ones working to make us all metric. Here is an account of the work of their counterparts in Guyana, reported by the Guyana's *Stabroek News*, 9 April 2006:

On 1 January 2002, the metric system of measurement replaced the imperial system. What progress have we made towards the completion of the change? The 2005 annual report of the Guyana National Bureau of Standards gives an account of the activities in the metrication section of the bureau. There is an indictment against consumers. Let me give you the comment:

"In the foregoing year it was observed that generally businesses are willing to change over to the use of the metric system, but the consumers are the driving force behind the use of the imperial system. Hence in the New Year a concerted effort must be made to target consumers with the metric message."

In my childhood parents upbraided a disobedient child with these words, "Child, your ears hard." There is no doubt about it: Consumers' ears hard. They still ask for vegetables and fruit in pounds and not in kilogrammes. They accept the litre when purchasing purified water and drinks but speak of pints of rice, not accepting that rice is not a liquid. The GNBS has appointed a National Metrication Committee and states that the work of the committee is very vital to the success of the national metrication programme. The NMC is headed by Mr Narvon Persaud who represents Guysuco on the committee. Other representatives come from the Guyana Police Force, the Guyana Forestry Commission, the Lands and Surveys Commission, Guyana Consumers Association, Ministry of Public Works and Communications, Ministry of Education, Ministry of Agriculture and the Vendors Association.

The work of the metrication sector in the GNBS is the work of a team headed by Evadnie Enniss-Fields. They are on the move year round. No clock-watching for them. Visits have to be paid to outlying areas in all regions, training courses are held with the co-operation of ministries and businesses. Here is a snippet from the 2005 annual report:

"These visits were significant in that they targeted senior management operatives in the agencies listed to solicit their support, determine training needs and the status of metrication in the organization, provide assistance for the implementation of metrication in the organization, review existing legislation, and come up with a workable plan of action for the implementation of metrication. 85 visits and subsequent meetings were conducted with management representatives."

There is a note on the results from sector visits: "With respect to State agencies and Government Ministries, it was observed that not much work was done regarding the implementation of metrication and it was sometimes challenging to meet senior functionaries who were in a position to effect changes to existing practices. Intensive training needs to be done to address these needs in the coming year."

The note targets other sectors and says: "On the other hand, media houses and advertising agencies have given heartening support in the past year. However there is still room for improvement, especially in the area of advertising in the electronic media, as media houses complained that their clients requested advertisements to be done in imperial units".

Please note our address

(this replaces the PO Box)

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