

TOP MARKS 2001

A WORD FROM THE EDITOR

Welcome to the third edition of Top Marks, the road-marking guide produced annually by the Road Safety Markings Association.

In previous years the magazine has concentrated on outlining the changes that the new European Standards for road marking materials would bring, in a technical sense, for specifiers.

This year we have 'broadened the base' of the magazine to look at some of the challenges and effects of those changes; the development of STANSPEC, the standard specification document that has ironed out a number of potential problems that specifiers could have faced with the new standards, along with a look at the steps being taken to ensure road marking companies have a better trained and more efficient workforce to provide both company and client with a degree of security over the quality of the work being undertaken.

We hope you will find this edition of Top Marks as useful as previous editions and as ever we welcome your comments on the content of the magazine for future editions.

George A. Lee

National Director RSMA

RSMA

25 years of representing the industry

2001 is a landmark year for the Road Safety Markings Association as it marks the Association's 25th year of representing the interests of the UK road marking industry. Renowned as a progressive and forward looking organisation it is now building closer ties with clients.

The industry and the Association have witnessed many changes through these 25 years, change that has, if anything, accelerated over the last five years or so as material standards have changed, new training requirements have been established and the industry moves strongly into the 21st Century.

Whilst there have been many changes to the industry over the last few years, there has also been substantial change in the RSMA, with a considerable expansion in its operation and a continual growth in membership.

Adding to its role in representing members interests, the Association has become increasingly involved in providing services to member companies, as an Accredited NVQ Assessment Centre, through its innovative Training Brokerage that sources,

books and if required designs training solutions for member companies all at below market rates and the development of a major industry conference every November.

Other industry services include the RSMA NVQ Registration Card that is now an accepted element of the Sector Scheme requirements for road marking companies, whilst the Association is playing a central role in the development of the Industry Training Group for all road marking companies, delivering specific benefits for members. All in all this represents a portfolio of activities that are of increasing value to member companies and to the industry as a whole.

These activities have been added to the traditional activities of the Association ranging across the publication of industry standards on legal requirements for markings and best practice guides for safe road marking activities, more recently supplemented with the introduction of the STANSPEC document providing clients with a standard specification from which to build their requirements.

Plans for the future are already being laid with possible development of an RSMA Quality Assurance Service for member companies and new industry marking initiatives to promote the use of road markings as the primary road safety element on our road network.

Being Specific

Moving forward with performance specifications

The introduction of the new material standards for road marking materials has led to a dramatic change in the manner in which specifiers are required to approach tenders and contracts. An integral part of this process has been the movement towards performance specifications, since the old 'recipe' method is no longer valid for any publicly procured road marking contracts.

The year 2000 saw the publication of the first guidance for specifiers on how to approach performance specifications with the introduction of the RSMA Document STANSPEC, which has now been revised and will shortly be available in its second edition format for 2002. Also published for the first time is the Highways Agency Specification for Highway Works revisions that accommodate the advent of performance standards for road markings.

The two documents compliment each other in that STANSPEC uses the SHW as the starting point for local authority specifiers and consultants and is in essence an enhanced version of the HA document, providing significantly more detailed information along with structured guidance on issues including performance and Quality Assurance and monitoring.

In this article we look at the updating of STANSPEC, whilst Sydney Xavier of the Highways Agency summarises the changing approach from the HA in its new revisions to the SHW, changes that are reflected in the new STANSPEC.

STANSPEC – A major step forward for the specifier and contractor

The new updated and revised second edition will shortly be published in printed and electronic formats, following detailed consultation across industry and clients.

The latest edition of the RSMA Standard Specification Document or STANSPEC as it is known will shortly become available from the Association and represents a development on the first edition published in September 2000.

The publication last year of the first edition of STANSPEC, the RSMA Standard Specification for Road Markings marked what was seen as a major step forward, for both public specifiers and consultants responsible for the specification of road markings, in an environment transformed by the introduction of a clutch of new European Standards.

Such was the success of the document that a new edition of the document has been produced, in order that specifiers will be able to ensure that they are totally up to date with all the latest information and thinking on the implementation and realities of Performance Specifications for road markings.

George Lee, National Director of RSMA believes that producing the document has gone a long way in bringing clarity to many confused specifiers and contractors alike.

“There was significant concern amongst many industry practitioners and client side representatives that the change from BS3262 to the new European Standards would result in significant amounts chaos amongst specifiers, with impossible requirements being specified. As a consequence RSMA decided to invest in the creation of the STANSPEC document. Building on the outline of older standard documents and retaining the services of an experienced consultant materials engineer, we produced the first edition of STANSPEC.”

Unfortunately the availability of STANSPEC has not prevented some specifiers issuing contradictory and on occasion impossible performance specifications, however, as George Lee adds, There has been a much lower incidence of this occurring because of the success of STANSPEC.

“Whilst the biggest culprits in issuing unattainable specifications tend to be agencies that should by their nature be better informed, the success of STANSPEC has helped to reduce the number of theses impossible specifications. With in excess of over 100 public specifiers alone utilising STANSPEC we feel that the impact of the document has been unreservedly positive.”

The new document

Whilst on the surface the new document looks similar to the existing publication there has been a significant review of the detail following closer working between clients and contractors through the Road Marking Forum. This has more directly involved the client side in the writing of the document along with a more detailed consultation exercise involving CSS and SCOTS.

The consultation exercise, which was through circulation of questionnaires to specifying organisations nationwide, was undertaken under the auspices of the Road Marking Forum the public/private membership arena within RSMA with the process being managed by David Frankland, representing Bucks County Council. This represented a formal return to an old stomping ground for David, who was responsible previously for producing the HASS Document on road markings for the County Surveyors Society.

The questionnaire sought to get to the root of a number of issues relevant to the first edition of the STANSPEC Document and issues surrounding the general implementation of the new standards along with identifying those areas of most concern to clients. What it unearthed was instrumental in the development of the second edition of STANSPEC, as a document that provides that bit more than a basic approach to performance specifications presented in the first edition of the document. Some of the more interesting details of the findings of the survey, which was circulated to over 70 specifying authorities countrywide, are shown in Table A.

Responding to the overall feedback that was generated by the survey, the new document seeks to give additional guidance on road stud usage, the option of specifying increased retro-reflectivity levels and possibly most significant the inclusion of guidance on the establishment of monitoring regime for road marking.

Table A: Summary of finding of RMF Survey on Road Marking Specifications

Recognition of new road Marking standards:	92% of clients were aware the new standards were based on performance requirements	
Contract type: Performance vs. Recipe	40% Performance 60% Recipe Recipe includes longer-term contracts (up to 3 years) still in force at time of standards change.	
Performance Priorities of Specifiers: (of variables in STANSPEC)	Wet night visibility	20%
	Night visibility	20%
	Durability	17%
	Skid Resistance	16%
	Daytime visibility	15%
	Dimensional accuracy	11%
Availability of measuring/ Monitoring resources:	In house lab test facility only	22%
	In house lab & retro-reflectometer	25%
	External lab & retro-reflectometer	22%
	Independent procured ad hoc	19%
	None available/required	13%
Anticipated changes to Future specifications:	Adopt STANSPEC	52%
	Write or revise own document	27%
	Other	12%
	Stay with recipe specification	8%

The challenge of monitoring

The challenge of monitoring was something that has previously been raised at the RSMA Annual Conferences, Road Marking 2000, Setting the Standard and Making a Mark and along with these the questionnaire outlined above has led to STANSPEC providing two sample monitoring regimes detailing frequency and types of monitoring that can be usefully adapted for client use.

Like many aspects of the document the outline of possible monitoring systems is likely to be something that evolves further in future editions of STANSPEC as best practice in this area develops direct from the experience of clients and contractors.

New electronic format

In another change and in response to the requests of many STANSPEC customers, RSMA has also moved to make a version of STANSPEC available in an electronic format in order to facilitate easier production for clients that have a requirement for multiple copies of the document. Allied to this is a further development, designed to extend the usefulness of the document, with the introduction of the electronic, Excel formatted, schedules that allow quick calculations by clients on costs and comparability between tender submissions by contractors.

For those requesting the electronic format, this will mean the introduction of a licensing system covering a three year period that will cover the updates produced over that time and the additional flexibility that will continue to be built into STANSPEC.

The document will, however, continue to be available in its traditional spiral bound format for customers that prefer that approach. Whatever the format, it is expected that STANSPEC, with its mix of specification details, guidance on the various elements that are involved in road marking specifications and contracts; and its appendices dedicated to monitoring procedures and outline monitoring regimes shall continue to grow in importance to the specifier and contractor alike.

STANSPEC is updated annually and document users are encouraged to feedback their experience and comments to RSMA in order that the updates are as relevant as possible to all users.

Fuller details on the costs for licensed electronic copies are available from the RSMA and will be circulated to existing customers shortly. Further details available from RSMA on 0161 763 7711

The Highways Agency has also been busy revising their Specification for Highways Works to respond to the withdrawal of BS3262, the revisions are all reflected in the STANSPEC, which takes them a step further by incorporating them in a practical format ready for incorporation into the tender process.

Sydney Xavier from the Highways Agency writes exclusively for Top Marks on the latest developments on the specification for road markings and road studs. This was the subject of consultation between RSMA, REMA, DTLR (previously DETR) and the

HA. The Highways Agency would like to receive feedback on these revisions or any other relevant issues or problems encountered when using the Specification and also comments on the associated Design Manual for Roads and Bridges.

REVISIONS TO SPECIFICATION FOR HIGHWAY WORKS – MAY 2001

A comprehensive set of revisions to the Specification for Highways Works (SHW) was published on 18th June 2001 by the Stationary Office.

This details various amendments to the many sections of the SHW. The revisions to Series 1200 captures a raft of BS ENs published recently, to both road markings and road studs.

It covers the change from BS 3262 and road trials at St Neots to BS EN 1436 and the new road trials site at Six Mile Bottom near Newmarket together with the effects of BS EN 1824 and other BS ENs such as 1423, 1424, 1463-1, 1463-2, 1790 and 1871.

Clause 1212.2 specifies that road markings should be tested in road trials to the rollover class P5, i.e. 1,000,000 wheel passes with heavy vehicles content of 10 % to 25%. Clause 1212.3 sets out the minimum performance requirement for the functional life of white and yellow lines. The latter do not normally have a guidance function and are therefore rarely retro-reflective. Improved visibility for wet conditions at night is specified in clause 1212.5.

Where yellow lines do have a guidance function, e.g. where they are preceded by white edge of carriageway markings and continuity is considered necessary, a value of 80 should be used.

The SHW provides further clarity on the use of raised rib markings for motorways and all-purpose roads to enhance safety.

As usual, departures from standard can be issued on a site-specific basis where there are special circumstances to justify them.

These are reproduced in Table B, as follows:

Property	BSEN 1436	Requirement	Value
Colour	Table 6	White Yellow Y1 and Y2	x,y co-ordinates given
Luminance factor	Table 5	White – B2 Yellow – B1	0.3 0.2
Skid resistance - Normal	Table 7	White – Class S1 Yellow – Class S2	45 SRT 45 SRT
Skid resistance - Higher	Table 7	White – Class S3	55

Retro-reflectivity - Dry	Table 2	White – Class R2 Yellow – R1	100 80
Retro-reflectivity - Wet night	Table 3	White – Class RW3	50

A useful companion to the SHW is SA1/2001. This lists all retro-reflecting road studs typed approved to direction 50 of the Traffic Signs Regulations and General Directions 1994. However, in future road studs will be required to meet specific performance class from BS EN 1436. Type approval by the Secretary of State will be restricted to those products outside the scope of the European Standard.

Unlike the Design Manual for Roads and Bridges (DMRB) which is already on the web site (www.official-documents.co.uk/menu/byha.htm) the Manual of Contract Documents (MCD) which includes SHW is not as yet available. The above Stationary Office web site is also hyper linked from the Highways Agency's own web site on www.highways.gov.uk. The Highways Agency is also currently reviewing TD 26/86 on the Maintenance of Road Markings, which is in volume 8 of the DMRB. Readers may wish to look at this once it is released for consultation with RSMA and REMA.

Fuller information is available by contacting:
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A VERY PUBLIC VOICE IN THE PRIVATE SECTOR

The Road Marking Forum brings a shared view for client and contractor; building on shared experience to provide best value and enhanced quality throughout the sector.

Launched last year the Road Marking Forum gave public sector specifiers a voice, for the first time, within the exclusively private sector Road Safety Markings Association – now in year two a partnership approach is beginning to build. The formation of a specific public sector facing group with formal membership structures within a trade association is somewhat innovative and underlies the commitment from RSMA members to see strong and constructive relationships between client and industry producing safety dividends for road users.

At a time of fundamental change it is commonplace for people to seek refuge in the familiar and the safe, and therefore it was refreshing to see the genuine enthusiasm from 'both sides' of the road marking industry for the Road Marking Forum (RMF), which was established to help reduce the potential confusion of the recent change in material standards.

RMF, which is subscription based, is open to all full members of the RSMA (as part of their membership) along with public sector specifiers and private sector consultants and has in its first year provided an opportunity to discuss some of the ‘thornier’ issues surrounding performance specifications and new standards, along with longer standing problems and issues faced by members and whilst it is still early days, Forum Chairman Jack Coup believes its potential is significant.

“Whilst we got off to a gentle start, it was interesting to see how many of the same concerns were shared by specifiers and contractors over the implementation of new type specifications and whilst we are still trying to resolve issues, there is a feeling that by working together we can get results.”

The clearest indication of joint working is the new revised edition of the STANSPEC Document, which has been developed by an RMF working group made up of private and public sector representatives, where previously the RSMA Working Group merely consulted with client side groups.

As part of this process the Forum joined with CSS and SCOTS to issue an agreed questionnaire to over 70 highways authorities nationwide, answers to part of which have advised the Forum Working Group on some of the STANSPEC revisions, whilst other elements will form part of the future workload and discussion for the Forum. (Some of the findings of this survey are reported in the ‘Be Specific’ article published in this edition of Top Marks.)

Forum Chairman Jack Coupe, who is also Chairman elect of RSMA, summed up the feelings of many of the Forum members,

“The Forum provides a direct opportunity to get to the root of potential misunderstandings, learn together from the genuine mistakes that can happen on both sides of a contract and to share experience. The RSMA sees the Forum as an integral part of the way forward for our industry and looks forward to seeing an increasing number of authorities becoming involved in this partnership approach over the next few years.”

Details about Road Marking Forum membership, including subscription levels are available by contacting Joyce Bury at RSMA on 0161 763 7711. Forum membership also entitles members to discounts of up to 30% on RSMA publications and seminars.

The ACE in the Pack

RSMA NVQ Card offers client and contractor peace of mind regarding operatives’ competence across the entire road-marking sector.

With the advent of performance related material standards and the requirement for output driven specifications, it has become increasingly important for clients to be sure they can rely on their contractor and his operatives to deliver the required job. The potential costs relating to monitoring or even issues surrounding liability also serve to emphasise the need for a competent and dependable workforce. As a

consequence the RSMA have sought to address the issue by developing the RSMA NVQ Card or 'competence card' for operatives.

As George Lee, RSMA National Director comments, "Historically the RSMA have been to the fore in promoting quality, from helping to define the Sector Scheme to writing training units and modules. As the first highways sector trade body to attain Assessment Centre Status for the new generation of on-site NVQs, the Association has sought to build quality into road markings, we believe that the competence card once again underlines this commitment to quality."

The latest Association initiative, the RSMA NVQ Card is, with the support of the Highways Agency and other Sector Scheme partners, now the recognised occupational card for part and fully NVQ qualified operatives.

The card identifies the units to which the operative has been assessed and also details when their next formal Health and Safety refresher course is due. Linked as it is to qualifications attained through the fairly rigorous City & Guilds verification regime, clients can feel assured that the RSMA Card is the competence card for the industry.

Although an NVQ Assessment Centre in its own right the Association acts as the universal registration body for part and fully NVQ qualified road-marking operatives under Sector Scheme No. 7, which means that the card is not exclusively available to operatives being assessed by the RSMA team of 16 Assessors, but to any operative through their employer, regardless of which Assessment Centre they are under or whether their employer is an RSMA Member or not.

The development of the RSMA Card is only one of a number of changes that are taking place within the accreditation systems for qualified road marking operatives. The Certified Operatives Registration Scheme covering the basic training of road marking operatives, which has over the last two years lost out to the NVQ Scheme, may see a change in administration by Spring 2002 with RSMA and another potential registration body currently bidding to take on the registration role currently carried out by LGNTO.

The further development of the CSCS card is also something that is subject to ongoing discussions, this time between the road marking industry and main contractor representatives, and may at some time in the future see the RSMA card ultimately become a player in the bigger construction skills accreditation scheme.

All of these potential developments and the existence of the RSMA NVQ Card are however, good news for the hard-pressed client who will increasingly have to show that they have taken steps to ensure they retain a quality, qualified contractor committed to the performance requirements of their road-marking contract.

UP TO THE MARK 2001

WORK BEGINS ON ANALYSING THE NEW 2001 ECODYN SURVEY OF UK MARKINGS FOLLOWING THE CRITICAL 1999 REPORT 'UP TO THE MARK' INTO THE PERFORMANCE LEVELS OF UK ROAD MARKINGS

The third RSMA Ecodyn Survey of UK roads has just been completed with the analysis of the results to be undertaken prior their publication at the presentation to the RMA 'ON THE MARK 2001' Conference in November this year.

The survey which is undertaken, on behalf of the Association, every three years over an established route taking in 1000 miles of UK roads, made news nationally in 1999 when it highlighted a significant reduction in the performance of markings on UK roads between 1996 and 1999.

This year no precise comparison can be made with the 1999 report due to a change in the measurement geometry used in order that the results can be analysed with reference to the new European Standards.

As a consequence this years results will be used as the baseline for future surveys and provide an independent assessment of the performance road markings across the UK road network and will make 'Up to the Mark 2001?' the primary source of comparative data when determining whether the potential safety enhancements that can be provided under a performance driven regime are indeed being delivered.

George Lee, National Director of RSMA believes that the Association survey plays an important role in monitoring the potential road safety outputs of investment in the trunk road network.

"The role of road markings in underpinning safety on our roads is well documented and the RSMA survey serves a useful role in monitoring the actions of the Highways Agency and its agents in investing in that element of road safety.

After the 1999 publication 'Up to the Mark' and the comments it attracted, the Association has worked closely with the Highways Agency to bring the monitoring and maintenance of road markings up the agenda for action and we are hopeful that this years' results and the imminent introduction of a new edition of the Technical Directive TD26 will help accord road markings their rightful place in the road safety hierarchy."

THE FULL REPORT OF THE 2001 RSMA ECODYN SURVEY OF UK ROAD MARKINGS WILL BE LAUNCHED AT EH RSMA 'ON THE MARK' CONFERENCE AND SEMINAR ON 15TH NOVEMBER 2001 AT THE HANOVER INTERNATIONAL HOTEL, BRADFORD.
