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## Introduction

With the introduction of the Traffic Management Act in 2004 (TMA2004), it was envisaged that local highways authorities in England and Wales would take responsibility for efficient management. Until now, the tools, in the form of the supporting Statutory Instruments (executive legislation that gives effect to framework laws such as the TMA2004), were not in place. In 2008, the first of these, covering parking, was implemented (coming into force in March 2009) and it is proposed that a second covering moving traffic contraventions, are still being considered by the Department for Transport (DfT). It is, however, unlikely that this will happen before the next UK general election.

Given these regulatory tools and appropriate equipment, the post of the "Traffic Manager" within the local highways authority should finally be able to address congestion on their networks. What's more, how the intervention is targeted should be determined solely on traffic management grounds and not dependent upon local policing priorities.

This opportunity to control road user discipline at locations determined by local congestion oriented targets could mean that congestion hotspots will be able to have 'softer' interventions before resorting to hard (and therefore expensive) blacktop modifications.

## Abstract

Traffic management regulations in the UK have been undergoing a significant transformation over the last four years. Principal among the changes is the transfer of certain types of traffic enforcement from the Criminal to the Civil domain. This brings both threats and opportunities to local highways authorities. The principal opportunity will be the ability to focus enforcement activities on parts of the network where poor traffic discipline is causing congestion. The main threat comes from the new equipment standard that is expected to result in a profusion of new enforcement equipment and methods leading to inappropriate choices by local highways authorities. This paper outlines the strategy for a fundamental change in the market in the UK that includes parallel development of policy, technology, supply base and regulation. Progress to date is outlined and future plans are described.

## Helping the traffic manager

In the introduction, we concentrated on the issues relating to the technology and the legislation and their effect on the roll out of the new strategy. In this section, we will try to explain what effect these new measures will have on the role of the traffic manager. Fundamentally, it will leave them free to focus on outcomes.

Department for Transport 'guidance' is that enforcement should not be seen as a revenue stream by local highways authorities. So in this context, achieving compliance (of road users with the posted regulations) is the issue. Road users have to be able to see (even if indirectly) some benefit to themselves of the enforcement that is taking place.

In the ongoing work being carried out by TfL and a number of London Boroughs under their own specific legislation, the effects of enforcement have been generally positive with some areas of concern. In particular with bus lanes, contravention rates fell by 90% after just 6 months of enforcement operations (Patrick Troy and Jim Lewis: ITS-UK Enforcement Interest Group annual conference 2005). With Yellow Box Junctions, contravention rates also fell, but by a smaller amount, after a similar enforcement duration (Steve Smith: Association of London Government Enforcement Taskforce Conference 2006).

As yet, there is not widespread experience of these measures in England or Wales. They are likely to include the bus gate projects in a number of local authorities and the Transport for London (TfL) Digital Traffic Enforcement System (DTES) project.

To sound a note of caution, there is a significant risk associated with this development, which if not handled carefully could seriously compromise both the evidential and public acceptability of these tools. The principal risk concerns the inexperienced application of technology resulting in poorly presented cases discrediting not only the individual scheme but also the whole national roll out of the civil enforcement strategy.

This risk arises because the initiative concerns the introduction of new technology, operating under a new legislative framework with an equipment approval process that has not yet been tested legally. Then this change is being imposed on perhaps one of the most conservative of institutions (quite correctly in this instance) - the British justice system. To mitigate this, work is already underway, primarily in London, where the new technology is being tested under an existing legal framework. Shortly, a pilot of the new technology combined with the new equipment approval process will be commencing before a full roll out in late 2008/early 2009.

Unfortunately with Parking, there seems to be no clear trend as a result of enforcement with anecdotal evidence indicating that whilst some classes of road users become more compliant, other classes become significantly less compliant. This might mean that an alternative treatment (other than the financial only penalty) may be needed such as vehicle removal / immobilisation for persistent offenders.

Undoubtedly, this new initiative will help the traffic manager to keep major arterial routes moving. However, to ensure long term benefit, public acceptance will be a key issue in determining what tools to use, where to use them and how they should be applied to the specific environment that the Traffic Manager is responsible for.

### The financial challenge

As this is a very new market with only a small number of early adopters, the barrier to entry is still very high. In particular, the up front cost of the back office is in the \$500k - \$1m range because they are currently bespoke modifications to existing speed and red light enforcement packages.

For a typical local highways authority, with an initial need for 5 to 10 enforcement cameras, this is just too significant an up-front investment. If, instead of each local authority having their own back offices, one local authority were to buy the back office and 'rent' this out as a service to their neighbours, then it may be possible. It must be borne in mind, however, that this still requires one of the local authorities to find what is a very significant sum of money at a time when capital budgets are under more pressure than ever.

If this cannot be easily funded in the public sector, can the private sector help? Well the answer here is a definite maybe! This is clearly an opportunity where a reasonable financial model can be generated for a supplier to offer a lease back type service. However, as mentioned earlier in this paper, there is still significant risk associated with both the judicial acceptability of the technology and processes and the public reaction to enforcement of traffic violations that are currently commonplace

and only enforced if you happen to contravene in front of a police officer. If the public is not 'on side' and a concerted evasion campaign is waged by road users, then the financial case begins to look very weak.

The bottom line, is that this particular set of tools are expensive and unless the local highways authority is responsible for a large and strategically/politically important road network (e.g. London, Birmingham and Manchester), it is unlikely that they will buy the full suite. Fundamentally, to achieve road user compliance with traffic regulations costs money and for early adopters, that cost can be substantial. Some of the individual tools will soon be available for a much more reasonable cost and most local authorities will find a measure of benefit in using that limited subset.

### Getting it all to work

Simply buying all of the tools (even if the local highways authority had the money) is not the end of the problems. Before any enforcement system can be used in the UK it has to be certified as fit for use by either the Secretary of State for the Home Office (under the existing criminal regime) or the Secretary of State for Transport (for the new civil enforcement regime). In the case of the criminal regime, this involves demonstrating that the system will operate to provide proof that a contravention has taken place beyond all reasonable doubt. This is very onerous requirement and thus requires significant effort to be expended by both the system stakeholders and Secretary of State's representatives. Recent changes have meant that policing traffic contraventions that have little impact on road user safety are now a very low priority for the Home Office and it is unlikely that any new systems will be approved by this route. That leaves the civil enforcement regime as the likely method to be employed by local highways authorities and manufacturer to get systems and components approved. Unfortunately, this is currently unproven and the amount of input necessary to achieve certification is unknown. It is also likely to require expert assistance to prepare the necessary documentation expertise that is likely to be available within the manufacturing

community but is unlikely to be present to any degree within the local highways authority community.

Once the systems are in place and certified ready to go, the final barrier to successful enforcement is the need to ensure that the appropriate Traffic Regulation Orders (legal documents that define the restrictions on road use at a particular location) are in place, that signage is not only correct but also in accordance with the Traffic Regulation Order (TRO) and finally that any road markings are correct and in accordance with the TRO. Only if all three elements in this ladder are correct in full, can enforcement take place at the desired location. It is worth pointing out at here that there are many groups on the Internet that offer much practical advice to motorists sent a penalty charge notice regarding how to appeal and what to look for in signs, lines and orders that might render them invalid.

### End note

Since this paper was written, a number of civil traffic enforcement schemes have been implemented and a great deal of experience in the processing of certification applications has been gained. The current certification guidelines have been found to be satisfactory for all applications submitted to date but work continues to review the guidelines to ensure that they remain applicable to new technology. The author of this paper has been retained by the Department for Transport as an expert advisor in the drafting of the next issue of the guidance.

Copies of the guidance and other enforcement resources are available on the DfT TMA2004 portal at <http://www.dft.gov.uk/pgr/roads/tpm/tmaportal/tmafeatures/tmapart6>.