Submission No 579

MOBILE SPEED CAMERA ENFORCEMENT PROGRAMS IN NSW

Organisation: National Motorists Association Australia

Date Received: 9 July 2021

NATIONAL MOTORISTS ASSOCIATION AUSTRALIA .

Media Enquiries

[redacted]

National Media Spokesperson

[redacted]

[redacted]

Staysafe Committee Inquiry into mobile speed camera enforcement programs in NSW

Introduction

The National Motorists Association of Australia is a small group of people with a deep interest in road safety. We are not involved in insurance, road side break-down assistance or any commercial function and are not associated with any other motoring organisations.

We are all of mature years with a very wide range of experience both here and overseas. Most have achieved a high standard of driver training and most are university educated.

Our concern with improving road safety gives rise to acute observations of safety measures and their impact on risk reduction. We are constantly evaluating how systems can be improved both in terms of improved road safety and the amenities of road use for commercial vehicles, cars and other road users.

Our experiences and evaluations have lead us to the conclusions that there are far better systems to improve road safety than are currently being used in systems design, regulation, construction, enforcement, research and training.

Our observation is that Australia has very low standards of driver training and testing compared with Europe; for example, very few Australian trained drivers would pass the German driving test without significant remedial training.

The Authors

Michael Lane

Some 2 million kilometres, 60 years driving experience, initially 5 years in the UK thence in Australia and in recent years a regular driver in most of Western Europe. He has

been closely involved in teaching his two children to drive but having professional instructors to teach them to pass their test.

Much of his professional life involved assessment of Industrial Research and Development projects including the technology, scientific methodology, innovation, managerial abilities, finance prospects and commercial prospects.

He represents the Member for Davidson on the Ku-ring-gai Traffic Committee.

He was appointed as National Spokesman for the NMAA in 2003.

Graham Pryor

Graham has had a life-long strong interest in road safety and was the first person in Australia to pass the advanced driving test to the gold standard with Australian Driver Education. Subsequently, he became an Instructor for the Chapter of Advanced Motorists of the VMA from the age of 21 until the Chapter was dissolved.

He is a graduate engineer and a qualified mine manager. Also, he achieved a Master of Management degree with an award from the Australian Institute of Management for academic excellence.

Graham operated potentially dangerous underground mines in private industry for more than 35 years and was employed previously as a District Inspector of Coal Mines for the NSW Mines Department. He attributes the reduction in fatalities in NSW mines to the “risk assessment” approach that is now required by legislation.

He was appointed to the Executive Committee of the NMAA in the year 2000 in the role of National Liaison Officer.

Position Statement on Road Safety from the NMAA

The NMAA considers that mobile speed cameras are far less useful in road safety matter than properly trained police officers patrolling our roads in highly visible police vehicles and that the cessation of the use of warning signs is unacceptable conduct.

The government’s objective should be to reduce the number of speeding drivers by overt methods as opposed to increasing fine revenue by a “high catch rate” from unmarked cameras.

Our police are the public face of the government’s policies and our police lose the respect of the public by the government’s blatant “grab for cash” tactics. So much so that a previous government minister referred to the highway patrol police as “jury wreckers”.

More fundamental to the wrong direction being taken for road safety improvement, the government website's definition of speeding was changed to either exceeding the speed limit or driving too fast for the conditions. That enabled government bureaucrats to manipulate the statistics. A total of five causal factors were grouped under the heading of speeding. For example, "road conditions" such as loose gravel or oil on the road, spilt diesel fuel and black ice was included with the speeding statistics. Another example is the "driver looked but did not see" category was included with speeding when it should be in the "inattention" category.

The result is the incorrect claim by government agencies that more than 40 per cent of road fatalities are caused by speeding. This laid the foundation for the government focus on the use of technology for the detection of speed and the subsequent proliferation of speed cameras.

Yet Australian university based road safety research demonstrates that fewer than 8 per cent of road fatalities are caused by exceeding the speed limit. Specifically, research by the Monash University Accident Research Centre (MUARC) investigated the potential for road fatality reduction by Intelligent Speed Adaption (ISA). With this method the speed of every vehicle would be controlled by satellites so that no vehicle can exceed the posted speed limit.

That research report can be accessed at www.monash.edu/muarc/research/our-publications/muarc253.

Quoting from the report: "Based on the logged data, the ISA system by itself is expected to reduce the incidence of fatal crashes by up to 8 percent and serious injury crashes by up to 6 percent."

This revealed a more rational assessment of crash causes involving exceeding the speed limit.

The truth revealed by the research is that no more than 8 per cent of road fatalities are caused by exceeding the posted speed limit.

The NSW government's over-emphasis on speeding makes government agencies blind to the causes of the majority of road fatalities and injuries.

Response to items in the Terms of Reference.

a) Nature and timing of changes to mobile speed camera operations

The changes were announced just before Christmas 2020 with no warning or public discussion. This was a reversal of a well-established policy of using

warning signs for the presence of mobile speed cameras and contradicts the continuing presence of warning signs for fixed cameras.

In general, unless there has been an emergency, such a reversal of policy is subject to widespread discussion with those who have an interest in the area. This should include the Staysafe Committee as well as motoring organisations.

It is noted that the implementation of the removal of warning signs was observed to be immediate – again a breach of the normal democratic principles.

A simultaneous statement was made that the mobile speed camera hours of operation were to be tripled. Again there was no consultation or direct evidence to support the change.

Recommendation
Policy changes of such drastic changes be not undertaken without prior extensive discussions with the public and representative organisations.

b) Research, modelling, and the evidence base of fatality and serious injury reduction.

The causes of road crashes are extraordinarily complex and often the contributory causes themselves are precipitated by other causes or combine with other issues. This makes assessment of results of changes difficult; it is essential to examine the unintended outcomes of any project.

Discussion of research into road safety must also include development of the results of observed issues and counter measures. This means that in-depth crash cause analysis is essential. This is the principle behind aircrash investigation which used to blame “pilot error” but evolved into asking why the error occurred. This information has made the airline industry he safest mode of travel.

Similarly the UK crash cause assessment is a highly developed system with the nationwide “contributory causes” published annually. Note that this publication does not include analysis of the inputs to those causes i.e. why they occurred. This system distinguishes between “Speed in excess of the speed limit” and “Excessive speed for the circumstances” (i.e. under the prevailing speed limit). **See appendix A** which is an extract from a study of the official published crash cause assessments in the UK over a five year period. This involved all levels of severity but as an example it covered some 10,000 fatal crashes making it robust study.

A [redacted] of one of the authors [redacted] is a fully qualified crash examiner and is currently Officer-in-charge of fatal crash investigation in the West Yorkshire Police Service. In private conversations he has said in his experience that of the 13.9% of fatal crashes where exceeding the speed limit is a contributory factor some two thirds were precipitated by factors such as intoxication, fleeing apprehension, stolen vehicles, Joy-riding", non-motoring illegal actions, suicide etc. This leaves some 5% due to simple exceeding the speed limit. This means that static speed limit enforcement has a maximum effect on only 5% of fatal crashes. Live police patrols can have an impact on all matters.

By contrast the NSW Centre for Road Safety includes excess speed for the circumstances as well as exceeding the speed limit as "speeding". Further the definition of "speed related" excludes any form of crash cause assessment reliant on phrases such a "Police said" or assumptions about "run off road" or 'jackknifing" etc. Note that this definition is not available from the Centre but was part of a submission by a consultant on a traffic matter in the Ku-ring-gai Council area. **See appendix B.**

This explains why they claim that "speed" is the cause of 41% (or more) of fatal crashes. This does not mean that the NSW Police do not thoroughly investigate crashes but that the Centre uses an extremely wide definition which goes beyond exceeding the speed limit. See Appendix B which covers the definition of speeding used by the NSW Centre for Road Safety.

It is noted that the Centre informed the Auditor General that "Speed was the cause of 41% of fatalities on the road" when that office was examining the use of mobile speed cameras however their definition includes matters below the speed limit and thus not influenced by cameras. It is apparent that the Auditor General was deceived by this definition. Had the true figure of exceeding the speed limit been utilised the report is likely to have been different.

There are two aspects of research and development in road safety, each of which has two sub-sections. Both behavioural and engineering aspects examine primary and secondary areas, i.e. prevention of crashes is primary and reduction of consequences is secondary.

All research and development activities, in any area of human activity, can be compromised by the phenomenon of "noble cause, intellectual corruption". This is when the perceived desirability of the method of achieving a high noble outcome affects the integrity. Validity of the research is compromised by faulty methodology and/or not considering unintentional outcomes. The classic case (outside road safety) is Prohibition in the USA.

Behavioural research is aimed at discovering any connection between crashes and human behaviour as primary safety and the severity of injury as secondary safety.

An example of sound behavioural research is that conducted by Solomon and others in the early 1960s in the USA which compared the speed of travel of cars and their crash rate. As there were some 200,000 cases in the study it is robust and is claimed to have been repeated by other researchers. Its primary finding is that the safest speed is the 85th percentile speed. That is the speed at which 85% of the cars drive at or less when their speed is not affected by external factors. The 85th percentile is not the average speed and is not affected by the speed of the outliers (those whose speed is vastly different).

A different view was taken by the University of Adelaide study under Prof Jack Maclean. In this study the police reports of over 900 crashes in Adelaide were given to the researchers who selected about 17% for further study. The sample was not random but biased towards low speed impacts – the classic “fender bender”. These are not assessed by specialist police as there are only minor damage and injuries. The researchers then conducted interviews – several weeks after the event – but without authority nor experience. Experience shows that the driver most at fault almost always claims that the other driver was going too fast. They conducted speed studies at the site by hiding to avoid being seen and then checking the speed of four vehicles. The short duration was to avoid other drivers warning the on-coming vehicles. The limited number of these measurements means that the outcome is not robust. The systematic experimental errors render this study to be of nil value yet is accepted by the regulators and is quoted by the Minister. The claim that crash chance increases dramatically over a certain speed do not match the observed results on very high speed roads e.g. the “unrestricted” Autobahns.

Secondary safety research is about the outcomes of an impact and is exemplified by claims that an impact at or above a certain speed will most likely kill, a lesser speed will most likely only injure. This is stating that it is okay to crash so long as you are driving slowly and only maim the victim and not kill them.

Engineering research and development addresses both primary and secondary safety. Avoiding crashes by improvements in brakes and steering, better road alignment, better grip on road surfaces, better headlights, clearer indicators, antilock brakes, electronic stability control, sensors and so on means that, to quote the chief instructor of the BMW advanced driving school, “it is impossible to crash a modern car unless you are doing something incredibly stupid”.

Secondary safety comes in the form of seat belts, airbags, side intrusion bars, padded dashboard, crumple zones, softer front end design, and the ridge in the roof from the top corner of the windscreen to the top corner of the rear screen. On the road there are crash barriers to keep an out-of-control vehicle from entering the opposing carriageway or hitting a solid object, ripple strips to alert the driver that they are crossing a dividing line if drowsy. These engineering developments have reduced fatality and serious injury more than any other measure.

There were claims made that Monash University (presumably MUARC – Monash University Accident Research Centre) had advised that the changes would result in a reduction of fatalities of the order of 40 per year. However this advice and the analysis that gave rise to it was not disclosed – again a breach of democratic protocols. The non-disclosure raises the suspicion that the advice was not as conclusive as was inferred or was merely derived from other work and adapted to give support. For example some years ago MUARC made a theoretical analysis of the benefits of in vehicle speed control ie where the maximum speed of a vehicle is controlled by a GPS or in car camera speed limit detection system ensuring that it could not exceed the speed limit at any point. The claim was that such a system would reduce fatalities by 8%. This appears to be of the order of fatality reduction postulated for the extended use of mobile unadvertised speed cameras.

Unfortunately this analysis did not take account of the unexpected outcomes of such a regime. It is a well-known phenomenon of human behaviour that their acceptable level of risk tends towards a norm i.e. if one risk factor is reduced they tend to increase the risk in other ways. One example of this is that in very low speed traffic areas pedestrians tend to take more risks by crossing roads in inappropriate places and manners.

Another example is that on long low risk roads such as many rural roads of all levels a low limit means that there is little cerebral stimulation in the driving task which leads to increased levels of “micro sleeps”, inattention and automatism i.e. where the driver acts purely automatically anddoes not perceive any unusual event. As these crashes are at travelling speed they are often classed as “speed caused” without consideration of the prime cause.

A number of local government areas in England have adopted a 20 miles per hour (30 km/h) limit to replace the 30 mph (50 km/h) limit in built up areas which has been in force since the 1930s. The results have been highly variable with about half reducing crashes and injuries and the other half increasing crashes and injuries. The presumption is that the connection between speed and crash/injury rates is not clear.

c) The views of key user groups, including community views towards these changes.

The prime user group is the ordinary motorist but within this group there are a wide range of experiences and views. There are those who are of the opinion that speed is the cause of all the world's ills, those who have little world experience and accept the claims of speed limitation, and those of wider experience who are unconvinced of the absolute appropriateness of the numerical limit. There are also those with an extreme disregard for any form of regulation. This latter group are frequently involved in illegal or non-motoring aggressive behaviour leading to a wide range of poor road mannerisms.

The first group are advocates for extreme speed controls such as very low limits, automated controls and extreme penalties. They are advocates of unmarked cameras and hidden police speed measurements. Their driving habits are often deserving of attention for other matters as many believe that they can enforce their version of the law often by impeding the progress of others, e.g. by failing to keep let unless overtaking and complaining if they are "undertaken".

The second group are often wary of their own on-road experience and while supportive of speed limits and enforcement are less supportive of hidden measures. They are receptive to media, especially the more gruesome stories, but are not curious about the deeper information and are more likely to accept official statements without query. They tend to be impressed by photos of very severely damaged cars without comprehension that itis the outcome of the "crumple zones" designed to reduce extreme deceleration of the car's occupants. They are often surprised and indignant when they get an infringement notice in the mail. The non-immediate interaction with the enforcement authority, i.e. receipt of penalty notice days or weeks after the alleged offence, is disconcerting to this group who, however, support immediate interaction with police. As they and their family and friends receive more infringement notices they become more opposed to unmarked mobile speed cameras. Within this group there is an increased scepticism when cameras are seen to be located in safe places where there have been no known crashes. This group will generally support marked cameras but consider that unmarked cameras are unfair and their proliferation is unreasonable.

The third group have generally higher exposure to the roads and often to other hazardous situations and have developed good observation skills and ability to assess potentially risky situations and deal with them. They are not supportive of hidden enforcement of arbitrary rules but strongly supportive of enforcement against significant unsafe driving events. The use of camera enforcement of speed limits is not supported by this group.

Most of the driving public are opposed to the use of hidden enforcement and the removal of warning signs is regarded as unacceptable conduct.

d) Nature and oversight of compliance or enforcement contracts with government and private companies.

There is little available information on the nature of the contracts with the companies this being “Commercial-in-confidence”.

It is purported that the mobile speed cameras are directed to be placed at or near accident sites or where the public request due to claims of excessive speed or where the measured 85^{t}th percentile speed of vehicles is over the speed limit.

By observation there is no control over the placement of the mobile cameras. Placing them on long straight roads several hundred metres from a crash site is not a safety issue. If the 85th percentile speed is over the speed limit, this is evidence that the limit is too low and should be revised.

Cameras have been observed parked on footpaths and other unsafe/illegal places indicating that there is no supervision or control of their contractual obligations.

The inappropriate placing of cameras in places where there have been no crashes, or are placed in hiding, fuels resentment against them.

Corrupt conduct.

There is no known financial corrupt conduct in the traffic camera industry in Australia, however, there is significant evidence overseas which includes the US arm of the Australian company Redflex Traffic Systems, a contractor to the NSW Government. (It has now been taken over by Verra Mobility formerly American Traffic Solutions which is not known to have any history of corruption.) Several of Redflex US executives have been imprisoned for corruption involving actions in several states in the US. They are not the only company operating in the US that has been involved in corrupt conduct. As a result of the operation methodology and the political system in the US there is both a big incentive and opportunity for corrupt conduct. In the US the camera companies retain a portion of the financial penalties generated thus there is an financial benefit beyond the normal supply and operate provisions of a contract. Also in the US policing is done by localized police forces i.e. each municipality organises its own police

force and enforcement regime. It is easy for a company to provide complete funding for the election of its favoured candidate at a local level and hence get a program of speed camera usage approved by the Town Council.

Recommendation.

Local Government should not be permitted to have any involvement in camera operations.

e) The projected impact on revenue generated by these changes.

A report showed that there has been a very large increase in fines month on month, with the figure for March 2021 ($6.3 million) being more than 13 times that for March 2020. If the expanded operational hours for mobile cameras is tripled as is mooted, the increase in fine revenue is likely to be almost 40 times that i.e. $225 million. This a very large burden on the motoring community and a very strong indicator that there is a significant problem with the setting of speed limits. It is a sound fact that reasonable laws will be accepted and observed by almost all, but these figures indicate that there is a very big problem. Note that Solomon's research indicated a sound method of setting limits for minimising crashes. That method is based on the measured 85th percentile speed and it is the internationally accepted method of setting safe speed limits.

f) Ongoing funding of road safety and the Community Road Safety Fund both through fines and enforcement activities, and future government contributions.

The funding of road safety and the Community Road Safety Fund through fines and enforcement activities is intended to justify the level of revenue raised by fines. It is essentially a purely political message to try to persuade the people that they are getting a reward for their punishment – or other people's punishment. It was originally proposed by the NRMA with good intentions but their review shows that only some 26.5% goes to Community projects. 73.5% goes to NSW Centre for Road Safety projects including 19% for the speed camera program and 11% to "Enhanced enforcement program/police funding".

NRMA surveys indicate that almost 60% of those (NRMA members) surveyed in NSW would like to see funds applied to improving roads to be safer. No funds appear to be allocated for this. It is noted that only 11% of NSW respondents to the NRMA survey indicated support for more speed cameras – a strong indication of lack of support for speed cameras in general. The survey was done

before the removal of warning signs and support for unmarked cameras is likely to be much lower.

The NRMA has rightly called for an independent oversight of the expenditure classed as being part of the Community Road Safety Fund.

There is a significant level of disapproval of “revenue raising” by speed camera operations which is reinforced by claims that fines are used for road safety projects. It is a strong belief that roads and safety measures should be funded from general revenue and that increased fines and camera operations enforcing limits regarded as too low are merely revenue raising especially now that warning signs have been removed and that the camera usage is to be tripled.

If the actual expenditure range as shown in the NRMA report were widely known to the general public it would increase the opposition to cameras.

Expenditure on building safer roads and real road safety is a benefit to all road users and thus should be funded from general revenue not hypothecated fine revenue.

As safe roads are a benefit to all then if increased funding is needed then all road users should contribute.

Recommendations
The use and allocation of funding from enforcement fines be subject to an independent oversight.
The NSW Centre for Road Safety not be funded by revenue from fines.

g) Enforcement activities, including the balance between direct police enforcement and camera enforcement.

The balance between direct enforcement by police and camera enforcement should be driven by the outcomes of in-depth crash cause analysis and should not be influenced by belief systems or emotional arguments.

Cameras can only detect a single offence i.e. that particular regulation that they are set up to enforce, they cannot detect any other breach and they cannot bring the offender to a stop and bring the driver’s immediate attention to the breach.

A police officer on patrol can check the whole range of actions of drivers, they can stop them and the carry out a range of checks such as validity of licence, sobriety, seat belt usage, vehicle safety, compliance with health regulations etc. A well-trained officer will often detect non-motoring offences.

The visible presence of police on the road is an excellent way of improving road behaviour not just in adherence to speed limits but in drivers crossing unbroken lines, not signaling, cutting corners, not making turns from the adjacent lane, not tailgating etc. A police officer on the road can see, and should act on, the range of actions which indicate that the driver is operationally less competent than is acceptable and is thus likely to create a crash potential. An example is those turning right from a holding bay who swing to the left onto the dividing line with the next lane, cut the corner, cross the centre line in the street that they enter usually at low speed.

A police officer is also able to use discretion. For example, if a driver is overtaking a slower vehicle but exceeds the speed limit in order to reduce the distance travelled on the wrong side of the road, they would understand that this was the safest way. Some countries, Spain for example, officially allow a higher speed while overtaking. The forthcoming application of GPS speed control in Europe also allows for over-riding the speed control to enable safe overtaking.

The presence of police on the road means that they are readily available if there is an emergency somewhere, a fire, a robbery, a crash etc. In these circumstances a mobile speed camera operator is of no use. Substituting speed cameras for real police is depriving the public of the help they need and expect in these circumstances without any real benefit to road users.

The public perception of police on duty on the road is significantly higher than that of mobile speed cameras and infinitely higher than that of unmarked cameras which are regarded as sneaky revenue raisers.

Recommendation

The funding of speed camera operations be transferred into on-road police operations.

h) Impact on people living in regional and rural areas.

Many regional and country roads have had limits reduced to unreasonable levels basically on desk analyses. Often this has unintended adverse effects as the long distances essential for business and domestic needs can readily lead to fatigue and automatism. Whereas city drives may be only a few kilometres much driving by country dwellers is relatively long distance – it is common for the distance between townships to be over 100 kilometres. The optimum safe speed may be over the posted limit but would be about the 85th percentile as in Solomon's research i.e. the safest speed.

Driving on country roads often involves overtaking either on straight sections or where overtaking lanes have been provided. Done safely this will often involve

being faster than the posted limit during the overtake in order to minimize time and distance on the wrong side of the road.

While it may be argued that the limit is absolute in both of these circumstances it is safer to exceed the limit. Unfortunately, these are preferred areas for the use of mobile speed cameras which is likely to be far more prevalent if the proposal for tripling their use eventuates. Without warning signs, many more rural motorists will be fined and accumulate demerit points and possible loss of licence.

Whilst city residentshave ready access to public transport, buses, trains and taxi/uber systems those in rural and regional areas have relatively less access except in the larger towns and not at all in country areas where a farm may be tens of kilometres from services in the nearest town and perhaps further for more specialised services. Thus, while loss of licence would be inconvenient for city dwellers, for many country dwellers it would result in isolation from essential services.

One of the principal reasons for having warning signs was that an alert driver would be warned and not be penalised but the unobservant would. Alert drivers are usually safe drivers because they can deal with changed circumstance before they become a hazard.

i) Impact on those of low socio-economic backgrounds and indigenous people.

Those of low socio-economic circumstances and indigenous people (who are often in poverty) are disproportionately penalised by the level of fines imposed.

It is likely that in more remote areas where a hierarchical society is prevalent that the imposition of a penalty could result in loss of status which is a very severe outcome.

People in this group are particularly highly penalised by loss of licence.

j) Impact on P plate drivers

Similarly to country dwellers and the lower socio-economic groups, P plate drivers are vulnerable to increased speed enforcement because they too tend to be less wealthy being early in their life and because penalties are harsher.

While it is true that new drivers do have a higher crash rate than the more experienced and there are some who drive very inappropriately, the majority are well behaved on the roads. It is an interesting phenomena that the eyes see everything but the brain only notices things that are a perceived threat. Hence

everyone notices the naughty P plater but is unaware of the ones being good. Public odium of P plate drivers is exaggerated.

The training and testing of new drivers is very much rule orientated rather than concept orientated and the natural reaction of the young is to rebel against overly restrictive rules. Those who have a good understanding of the concepts of good driving practices e.g. that the purpose of signaling is to advise others of what you are doing in order that they can make their decisions on what to do is better than a myriad of rules whose purpose is not understood.

People respond better to regulation when the reasons for the regulation are understood. That explanation is best achieved through education and training. The most effective method of achieving high rates of compliance is by “appealing to the intellect”.

The high crash rate of P platers is a strong indication that the standard of driver training in NSW is inadequate.

k) Any other related matters.

The move to unmarked mobile speed cameras has come from the bureaucracy along with other measures which are alienating the public. Ministers and their advisors rarely have technological skills to query these moves. It would be a very good balancing move for the Minister to appoint a panel with real experience in assessing research studies and on road realities. We would suggest that as well as a representative from ourselves there should be a representative of the NRMA being the largest motoring organization in NSW, a representative of the heavy goods vehicle industry, a representative of a legal practice involved in third party insurance claims (expertise in assessing responsibility in crashes) and a representative from the motor vehicle insurance industry. It is noted that the motor vehicle insurance industry has extensive crash claim statistics that are not being used to improve road safety.

Most UK police services tend to an unwritten tolerance factor in cases of exceeding the speed limit of 10% + 2mph (3 km/h) up to 70 mph (112 km/h). Generally, this is at the discretion of the officer involved and is dependent on the observed driving behaviour of the individual.

The outcome of breaches of traffic law and regulations is purely punitive and can involve instant licence suspension. There is no provision for retraining or assessment of suitability for the task of driving. Further a suspended driver is out of practice and driving judgement deteriorates with time off the road and this is the opposite of what is intended to be the outcome.

Please refer to the Position Statement on Road Safety from the NMAA outlined in the introduction to this submission.