

Response to

Department for Transport Consultation Paper

"Call for Evidence
Cycling and Walking Investment Strategy:
Safety Review"



Introduction

This is RoSPA's response to the Department for Transport's "Call for Evidence: Cycling and Walking Investment Strategy: Safety Review". It has been produced in consultation with RoSPA's National Road Safety Committee.

The aim of the government's Cycling and Walking Investment Strategy (CWIS)¹ is to double cycling, reverse the decline in walking activity and reduce accidents for these groups by 2025. As the Investment Strategy states, 'Realising our ambition will take sustained investment in cycling and walking infrastructure. It will take long term transport planning and a change in attitude. Walking and cycling should be seen as transport modes in their own right and an integral part of the transport network, rather than as niche interests or town planning afterthoughts'.

RoSPA strongly supports the vision as outlined in the Investment Strategy.

The Department of Transport recognise the considerable expertise and passion of road safety professionals, charity organisations, clubs and individuals to make our road infrastructure safer and increase cycling and walking. The government has a key role in setting strategy, policy, providing finance and ensuring compliance with legislative regulations. However, in many instances, innovation in industry and commerce has come from the 'bottom up'. Therefore, RoSPA welcomes this open and comprehensive review and the opportunity to present our suggestions for how cycling and walking can be made safer.

The Government wants walking and cycling to be a normal part of everyday life and the natural choices for short journeys. However, the sad reality is that in 2016, 550 pedestrians and cyclists were killed on our roads, making up nearly one third of all road fatalities, and thousands more were seriously injured.² The key to increasing cycling and walking is to create a safe on and off–road environment, improve road user attitudes and behaviour towards each other, and safer vehicles that reduce the risk of collisions occurring and the severity of those that do occur.

Improving the safety of walkers and cyclists will unlock the latent demand for both leisure and utility cycling. The 2016 National Travel Survey³ found that 59% of British people agreed that 'it is too dangerous for me to cycle on the roads'. Around one quarter (24%) of cyclists said that they mainly rode off the road, such as in the parks, but the NTS also found that cycle provision was the only mode of travel where more people were dissatisfied than satisfied, with 45% dissatisfied compared to 33% satisfied.

The RoSPA UGov Survey⁴, a year earlier, in 2015, produced a similar finding with 41% of respondents saying that they had concerns around the safety of on-road cycling. Thirty-one percent also had concerns about drivers treating them badly.

RoSPA believes that central to getting more people cycling and walking is achieving an improvement in road safety. In our view, the ambition to significantly increase the amount of walking and cycling will only be achieved if people feel safe when walking and cycling, otherwise the huge numbers of people who would cycle or walk if they felt they could do so, are unlikely to be persuaded that it is actually safe and convenient enough for them.





Question 1

Do you have any suggestions on the way in which the current approach to development and maintenance of road signs and infrastructure impacts the safety of cyclists and other vulnerable road users? How could it be improved?

RoSPA Response

Ideally, pedestrians and cyclists should be segregated from motorised traffic as much as possible, especially on higher speed, heavily-trafficked roads, and where this is not possible, effective speed management policies and schemes need to be put in place to reduce speeds to appropriate levels.

Safe Systems⁵

RoSPA is pleased that the call for evidence recognises the importance of embedding Safe Systems in Britain's road safety system and progressively eliminating sources of risk by focussing on safer roads and junctions, safer road user, safe speeds and safer vehicles.

The safe system approach recognises that people make mistakes and designs roads and vehicles so that these mistakes are not likely to result in death or serious injury. It places human vulnerability to injury at the centre of the road system and proposes that roads, vehicles, and traffic speeds are modified to prevent exchanges of energy that are likely to cause fatal injuries. This approach can be applied to all types of roads and for all road users.

In general, the safe system philosophy identifies ways of separating traffic, and especially separating vulnerable road users from motor vehicle traffic on high speed roads, and where this cannot be achieved, designing roads to reduce traffic speed. RoSPA prefers the segregation of traffic from pedestrians and cyclists from traffic. Of course, this is not always possible, so effective speed management schemes are also needed.

The Scottish Government⁶, Highways England⁷ and Transport for London (TfL)⁸ have, or are, are introducing the Safe System principles in their strategies. As this vision will take much time to achieve, interim targets are set, for example, Scotland's Road Safety Framework includes a target to achieve a 40% reduction in killed or seriously injured casualties by 2020, from a baseline of the 2005-09 average. Highways England's Delivery Plan includes the "goal of bringing the number of people killed or injured on the network as close as possible to zero by 2040" TfL 's aim is for deaths and serious injuries from road collisions to be eliminated by 2041.

The International Safety Standard, "Road Traffic Safety Management Systems", (ISO 39001)⁹ also advocates the adoption of a Safe System approach, stating that high levels of safety can be attained by achieving a good match between the function of the road, safe speed limits and their compliance and design and layout. Typical issues include separating on-coming traffic on high volume, high-speed roads to prevent head-on collisions and providing crash protective roadsides to address run-off road collisions.

Some studies have estimated the number of lives that could be saved by the safe system. For example:

- A Swedish study¹⁰ in 2004 judged that in 63% of these crashes, the road or vehicle did not meet the safety standards of the safe system approach, and concluded that these deaths could have been prevented by the safe system, even without addressing road user behaviour.
- An Australian study¹¹, ¹² in 2008 categorised 57% of crashes as failure of the safe system.

RoSPA recommends the further adaption of the safe systems approach throughout Great Britain.





Design Guidance:

The Department for Transport has published guidance documents to help local authorities design safe road infrastructure, including "Manual for Streets 2"¹³. However, Highway Authorities and traffic engineers follow a mass of unclear and conflicting design guidance on cycle provision, and some schemes, such as 'Light Segregation' cycle schemes are not covered by the Traffic Signs Regulations and General Directions 2016.

RoSPA believes that a national design standard should be developed to ensure that all schemes are delivered to a set safety standard. Without this there is a danger that schemes will be implemented which at best have no safety benefits and at worst create danger to vulnerable road users. Post–implementation monitoring should take place in all cases to allow for adjustments to mitigate unforeseen issues during the design stage'.

This lack of consistency also applies to other areas and we believe that common standard guidance should apply to all road and junction types, highway and traffic schemes, new developments and planned highway maintenance works.

Cycle and walking routes should be continuous, direct and join up residential, commercial and schools. Cyclists should not have to cycle unprotected in busy and fast moving traffic, and pedestrians need safe and well designed footways and crossing facilities. A new cycle route manual should be produced which builds on current technical advice that cycle routes need to be:

- Direct shortest, quickest route to minimise delay. Continual starting and stopping to cross roads is both frustrating and tiring.
- Safe The route must be both statistically safe and feel safe
- Coherent Joined up and easy to follow
- Attractive Enhance the existing streetscape
- Comfortable Clean, smooth surface in all weathers
- Adaptable Allow future upgrades to accommodate an increase in use

Junctions:

Three quarters of cycling collisions take place at junctions, while research by the University of Westminster found that regular cyclists have 25 near misses at junctions each year. Look and failed to see a cyclist has been widely reported with many local and national campaigns undertaken to highlight the dangers to two wheel riders. However, despite this, junctions remain a key risk location for both cyclists and pedestrians. Therefore, RoSPA would like to see new rules on junction priority developed to improve safety and convenience for both pedestrians and cyclists at junctions with or without traffic signals.

Many continental countries require traffic to give way to cyclists and pedestrians going straight ahead at a junction, even where the turning traffic has a green traffic light. British Cycling's 'Turning the Corner' campaign has called for something similar in the UK and RoSPA believes that this should be piloted, initially, by allowing pilots in specific locations. Currently, for a cycle lane or path to have priority when it crosses a junction, there must be a speed hump which is costly and unpopular; implementing the Turning the Corner' campaign would avoid this requirement.





Road Maintenance:

Badly maintained footways increase the likelihood of trips, whilst hitting a pothole can result in riders being thrown from their bicycle. In 2016, four cyclists were killed and 52 seriously injured due to poor or defective road surface. ¹⁶ This is an underestimate as many such casualties are not reported to the police.

Potholes are becoming an ever-greater problem, with a major cycling event apparently having been cancelled due to the number of potholes on the route. Poor road surfaces also create a major tripping hazard for pedestrians.

Although considerable funding is provided to local authorities, pothole patching is at best an inefficient, poor value and temporary solution. It is essential that highly used footways and cycle routes are maintained to a high standard and are regularly inspected. We believe that proper re-surfacing programmes of whole roads or stretches of roads, are a more cost-effective approach than repairing individual pot holes.

Shared Space Schemes

RoSPA supports 'Shared Space' schemes, in which the highway environment is re-designed to slow down traffic speed and give greater priority and safety to non-motorised users. It has considerable potential to provide a safer and more user-friendly environment, especially for pedestrians. However, it is important that such schemes are carefully designed and the needs of all users are accommodated; it is not a matter of just taking away road signs and markings and kerb lines.

Where single surfaces (in which there is no kerb between the road and pavement) are implemented, great care must be taken to ensure that people with vision impairments, who rely on a kerb edge to navigate, have a suitable alternative to the kerb that acts as a delineator to enable them to distinguish the section of the single surface used by vehicles.

Question 2

Please set out any areas where you consider the laws or rules relating to road safety and their enforcement, with particular reference to cyclists and pedestrians, could be used to support the Government's aim of improving cycling and walking safety whilst promoting more active travel.

RoSPA Response

Overall, the Government should consider the road safety implications of the reductions in funding for Police services around the country, and seek to ensure that sufficient resources are available for road policing.

The majority of pedestrian casualties occur in built up areas: 29 of the 34 child pedestrians and 302 of the 413 adult pedestrians who were killed in 2016, died on built-up roads. Pedal cyclists are also vulnerable in built up areas, with over half of cyclist deaths (58 of 102) and most cyclist casualties (16,934 of 18,477) occurring on these roads. ¹⁶

20 mph Schemes

Speed significantly increases injury severity in collisions, making serious or fatal injuries more likely. Research has shown that the risk of death for pedestrians struck by cars increases at higher impact speeds. The most recent modern estimates of the risk to pedestrians when struck by cars at different speeds are outlined in RoSPA's 20mph Zones and Speed Limits Factsheet¹⁷, which shows a fatality risk of 1.5% at 20 mph versus 8% at 30 mph.





Evidence shows that 20mph zones are an effective way of preventing injuries on the road. There is less experience with 20mph limits although the number of 20 mph limits has increased significantly in recent years. They have generally been positive at reducing traffic speeds, but do not reduce traffic speeds as much as zones. Evidence from Portsmouth, Bristol and Edinburgh, who have all introduced 20 mph limits, shows that on average speed reductions of one or two miles per hour were achieved¹⁷. Despite evidence that 20mph speed limits can lead to small reductions in vehicle speed, a 2017¹⁸ survey revealed that more than half (52%) of drivers admit to driving at 25mph or faster in a 20mph speed limit, and 26% admitted to speeding in 20mph limits once a week or more.

Where 20 mph speed limits are introduced, this must be supported with education and publicity to ensure driver compliance, together with engineering measures, if 20mph does not feel the appropriate speed. Without this little will change and the perception that the roads are too dangerous will continue. There is strong public support for 20mph limits - 72% of respondents in the British social attitudes survey¹⁹ are in favour or strongly in favour of 20mph speed limits in residential streets. However, this will soon be lost if they are nationally introduced and largely ignored by motorists.

RoSPA believes that 20mph limits are most appropriate for roads where average speeds are already low, and the guidance suggests below 24mph. The layout and use of the road must also give the clear impression that a 20mph speed or below is the most appropriate.

It is important that the long-awaited Atkins report²⁰ on 20 mph Speed Limits is published as soon as possible.

More effort is needed to establish how best to persuade drivers to comply with 20 mph limits.

School Crossing Patrols

Road Safety Great Britain's School Crossing Patrol Service survey²¹ suggests that the provision of school crossing patrols has fallen in recent years. Research to establish the provision and benefits of school crossing patrols should be conducted.

Other Road Safety Laws

RoSPA continues to campaign for changes in the law to improve road safety, such as the lowering of the drink-drive limit²² and a switch to Single Double Summer Time to bring lighter evenings²³.

Managing Occupational Road Safety

About a third of road accidents involve someone who is at work at the time, so further action on work-related road risk could bring major benefits. Employers need help to understand their legal duty to manage the risks their staff face and create when using the road for work, and to find ways to reduce at-work driving.²⁴





Question 3

Do you have any suggestions for improving the way road users are trained, with specific consideration to protecting cyclists and pedestrians?

RoSPA Response

Although the provision of practical cyclist training, especially for child cyclists, has increased in recent years, it seems that the opposite is true for child pedestrian training, whose provision has fallen. RoSPA believes that a comprehensive survey would help to establish the level of pedestrian training for different age groups and whether it has in fact reduced. If it has reduced, it should receive the same level of support, development and funding from which practical cyclist training has benefited.

The recent publication of the <u>Think! Road Safety Education resources</u> for parents, teachers and schools, many of which are designed to support pedestrian education and training, was very welcome.

As part of Bikeability training, children, are taught to watch out for drivers opening their doors whilst they are passing. Some instructors stress the need to remember 'door and a bit more'. However, where the road is narrow and there are oncoming vehicles, this is not always possible. It should be the driver's responsibility to avoid 'dooring' a cyclist and one way to avoid this is to use what has become known as 'Dutch Reach' which RoSPA has been promoting and supporting for the last 18 months.²⁵

This is a practice for drivers and passengers to use the far hand (normally the left-hand for drivers) rather than their hand closest to the door to open it. This sets off a series of five linked actions: reach, swivel, look back, open slowly, and then exit facing traffic. This approach has been widely promoted and used in the Netherlands and RoSPA would like it to be introduced in Britain and incorporated in the Highway Code and included in the driving test.

RoSPA would also like to see the roll out of 'Operation Snap'²⁶, an initiative of the four Welsh police forces to facilitate the submission of dash and helmet-cam footage of irresponsible road use. We also strongly support West Midlands Police's 'Operation Close Pass'²⁷ and would like stronger guidance from the National Police Chiefs' Council that this be adopted nationwide

Both cyclist training (Bikeability) and pedestrian training schemes (Kerbcraft) and local schemes such as Staffordshire County Council's Stepping out scheme have been independently evaluated. Results have shown that practical training improves a child's road safety knowledge and ability to interact with traffic. RoSPA would like to see this training made universally available to all pupils in key stages 1 and 2.

Pedestrian training

Pedestrian casualties increase as children grow older and become more independent as pedestrians. Road safety education and training for children at Key Stages 1 and 2 should be conducted in real-road environments, rather than sessions undertaken solely in a classroom or playground. It should also cover modern-day scenarios, such as distraction by mobile phones or MP3 players while walking, and crossing between parked vehicles.

Pedestrian training could usefully be seen as the beginning of a lifelong cycle of road safety training that also encompasses cycle training, pre-driver education, the learning-to-drive process and "refresher" or further driver training throughout life.





To support public health priorities, such as obesity and air pollution, it is important that road safety initiatives promote active travel choices like walking and cycling. With the peak times in the number of child pedestrians who are killed or seriously injured being the traditional "school-run" periods of 8-9am and 3-4pm, schemes that seek to teach road safety skills and reduce car journeys have the potential to make a particularly useful contribution.²⁸

Transport for London STARS²⁹ and Modeshift STARS³⁰ (outside of London) are examples of schemes that support schools in both teaching road safety and in encouraging families to make journeys by foot, bicycle or scooter, helping to reduce congestion at the school gates and providing a safer and cleaner environment. Transport for London's Young Travel Ambassadors scheme³¹, a peer-led behaviour change programme for secondary schools, also encourages walking and cycling, in addition to the responsible use of public transport. Since 2013, three quarters of participants have agreed or strongly agreed that they have become more aware of their safety on the roads.

Road safety programmes that combine education and changes to the road environment in an integrated package show some potential but more rigorous research is required.

RoSPA also support the "learning about safety by experiencing risk"³² approach to safety education, giving children the opportunity to develop their skills through practical activities. Visits to permanent practical safety education centres or participation in interactive safety schemes, can increase children's awareness of key risks. Research into the impact of children's visits to such schemes found that children who had experienced safety education improved their recognition of a variety of risk hazards.

RoSPA believes that the contribution made by PSHE education to students' health, safety and wellbeing should be reinforced by a strong statutory curriculum.³³

Question 4

Do you have any suggestions on how we can improve road user education to help support more and safer walking and cycling?

RoSPA Response

Think! Road Safety

RoSPA believes that the Think! Road Safety campaigns play an important role in providing road user education. One of the strengths of Think! Is that it provides a range of campaigns on different specific topics, aimed at different road user groups, and is very well targeted, delivered and evaluated. It is important that Think! Road Safety continues to be developed and delivered.

Large Vehicle Drivers

Professional HGV, bus and coach drivers must do 35 hours of periodic training every 5 years. The drivers CPC syllabus sets out a range of issues that can be included, with some providers offering a specific 'cyclist' module. RoSPA would like this to be mandatory within the CPC syllabus, ideally including a practical 'changing places' element.





Older Pedestrians

The forthcoming National Accident Prevention Strategy³⁴, due to be published in October 2018, will highlight the need for a strategic approach to falls prevention among older people. This could clearly make it safer for older pedestrians and help to persuade older people that it is safe and feasible for them to get about on foot. A literature review³⁵ about older pedestrians found that the risk of an accident crossing the road increased more rapidly with age from the early 60s, very rapidly from 70 years and substantially after about 79 years. Accidents were closely related to the times and places that older people most often walked, being more common during the day and 73% being within 1km of home; and, as with car occupants, the injuries caused to older pedestrians in collisions were more severe than for younger people.

Older people do not necessarily feel any more vulnerable than other pedestrians and their concerns about safety as a pedestrian tend to focus more on the experience of walking on the pavement, and related obstacles, rather than on crossing the road, perhaps because their attitude to crossing the road is more cautious than others.

There is little evidence that information campaigns directed at older pedestrians reduce their accident risk, although they may serve ancillary purposes, whereas educating drivers to understand their responsibility to vulnerable road users, which include older pedestrians, has been found to be effective, although there have been few published evaluations. The best evidence stems from studies of physical and regulatory changes, where measures such as lower speed limits, roundabouts and appropriate signal timing for vehicles and pedestrians have been shown to reduce pedestrian accidents.

The key measure to address the risk for older pedestrians is to provide a safer environment that is designed for their needs, and that encourages walking, given the importance of physical activity for health and wellbeing, and associated environmental benefits.

Older drivers

The number of older drivers has risen in recent decades and for many older people, driving promotes independence, giving them the freedom to go where they want to go, at a time of their choosing. Police records show that the risk of a driver aged over 70 killing a pedestrian is less than that of middle-aged drivers and half that of drivers aged up to age 25, although data from some insurance companies suggest that some older drivers, possibly those in the over-80 age group, may be disproportionately involved in crashes leading to very serious third party injuries.³⁶

As we get older, driving ability changes, but the timing of such changes are different for each person and there isn't a set age at which we automatically become unsafe to drive. Self-regulation is common, and older drivers may consciously make fewer journeys and avoid more demanding situations such as driving on motorways, at night, during busy times or in unfamiliar locations. Good information and advice about alternative means of travel and lifestyle adaptations should be provided for those older drivers who reach a point where giving up driving may be the right thing to do. Alternative means of transport should be supported and promoted wherever possible, in order to enable older people who do not drive to maintain their independence, which is a factor linked to wellbeing.^{37, 38}





Poverty

Accidental injuries disproportionately affect children from low-income families. For example, children in the 10% most deprived wards in England are four times more likely to be hit by a car than children in the 10% least deprived wards. Road deaths, especially among pedestrians and cyclists, are particularly high among children of parents classified as never having worked or as long-term unemployed.³⁹ A study of road accident data has shown that there would be around 800 fewer serious or fatal injuries to child pedestrians annually, and 136 fewer serious or fatal injuries to child cyclists, if all children had a risk of injury as low as children in the least deprived areas.⁴⁰

Targeting interventions to help those who are poorest would make an important contribution to reducing accidents and health inequalities.

These issues will be presented in more detail in the National Accident Prevention Strategy due to be published in October 2018.⁴¹

RoSPA strongly believes that a "cotton wool" approach to safety should be resisted because it could deny people, particularly children and young people, the opportunity to develop a fundamental awareness of risk and the knowledge and skills to manage it.

Bumps and scrapes are part of life, and help to develop resilience and an understanding of risk. Serious accidents, however, can change lives forever, resulting in ongoing physical effects, and associated social, psychological and financial impacts on the individuals and families involved as well as the health and social care services and society as a whole.





Question 5

Do you have any suggestions on how Government policy on vehicles and equipment could improve safety of cyclists and pedestrians, whilst continuing to promote more walking and cycling?

RoSPA Response

Pedestrian safety can be improved through vehicle design and technology. Vehicles are increasingly designed to be safer for pedestrians, with technologies evolving rapidly as autonomous technology is developed and trialled. The recent EC announcement of a new of initiatives for vehicles and infrastructure safety as part of the third 'Europe on the Move' programme⁴²should be supported by the UK Government.

Some ways in which vehicle design and technology can offer protection to pedestrians include:

- Intelligent speed adaptation (ISA) to support drivers' compliance with speed limits. This is an
 important advantage comared to the speed limiters for heavy good vehicles and coaches, which only
 limit the maximum speed.
- Autonomous emergency braking (AEB) which uses sensors to detect a risk of a collision with a vehicle or pedestrian, warn the driver or automatically apply the brakes.
- Bonnet design to reduce injury severity in collisions with pedestrians need to be developed and promoted. Vehicle manufacturers are now developing cars with an 'active bonnet' which can detect an impact with a pedestrian, within a set speed range, and reduce the severity of any pedestrian injuries.

Financial road tax incentives along the lines implemented with diesel vehicles, could be implemented for cars achieving EURORAP pedestrian safety standards.

One of the main developments in the short and medium term is likely to be autonomous vehicles. As cars become highly autonomous, but still rely upon occasional driver intervention, RoSPA is concerned about how this may affect pedestrian and cyclist safety. The DfT needs to be aware of this and ensure that technology works for the benefit of all road users, not just those inside the vehicle, and ensure that the development of autonomous vehicles, and the legislation governing them, takes account of cycle and pedestrian safety.

Automated vehicle technology is developing rapidly and will profoundly change the way we drive, ultimately to the point where in fully automated vehicles the driver will be just a passenger. This technology offers enormous potential to reduce crashes and casualties, enable better use of road space, and improve mobility for people who are unable to drive conventional cars.

It is not yet clear when people will be able to purchase or use a truly driverless car, but estimates are that it could be any time from the mid-2020s onwards. However, some forms of autonomous vehicles, such as cars which can be parked by remote control, or pilot themselves with human oversight on high speed roads, will be available for sale in the next two to four years.

There will be a transitional period during which we will have a shifting mixture of conventional cars, cars with increasingly sophisticated advanced driver assistance systems (ADAS) such as adaptive cruise control, and ultimately, fully automated vehicles. Therefore, it is important that we continue developing policy and making appropriate regulatory changes to facilitate the safe use of this technology in a responsive and evidence-based manner.





The Government should take great care that the gradual introduction of driver assistance technology, and the regulatory changes and Highway Code changes that accompany them, do not cause further confusion about the importance of avoiding drive distraction.

Specific and clear advice about drivers understanding that they remain in full control of their vehicle when using such technology will be constantly needed. The Government will need to monitor the development of technology in this field, and respond.

Large Vehicles

HGVs account for only around 3.6% of non-motorway motor-vehicle mileage on Britain's roads, yet they are involved in around 18% of cyclist fatalities and 14% of pedestrian fatalities. The problem is particularly acute in urban areas with HGV being involved in about a quarter of cyclist deaths in these locations. Vehicle design to improve driver visibility has been shown to hugely improve the protection of both pedestrians and cyclists by reduce 'blind spots'.

Transport for London (TfL) has policies within its tendering procedures which restrict unsuitable Lorries from using the city's streets and plans to adopt a 'direct vision standard' for lorry cabs. RoSPA would like the UK Government to introduce similar arrangements nationally.

Question 6

What can Government do to support better understanding and awareness of different types of road user in relation to cycle use in particular?

RoSPA Response

Bikeability teaches a cyclist to adopt the 'Primary' position where the road narrows as a means of deterring motorists from squeezing past. However, there remains considerable ignorance amongst drivers as to why a cyclist is taking this position, which can result in misunderstanding and potential conflict. RoSPA would like to see greater promotion of cyclist positioning as part of the DVSA theory test.

Share the roads

RoSPA believes that "Share the Road" should be widely incorporated into education and awareness-raising campaigns to help all road users to understand each other's characteristics and needs, and to highlight the fact that roads are not intended for one particular group of road users but are provide for all road users to use and share safely.

RoSPA thanks the Department for Transport for the opportunity to comment on the Call for Evidence. We have no objection to our response being reproduced or attributed.

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