



Position Statement

The Safe System

August 2021

Introduction

The Safe System is a strategy based on ISO 39001 accreditation adopted by the United Nations (UN) and delivered through the World Health Organisation (WHO).

In February 2020, Second Decade of Action (2021 – 2030) was launched setting out a range of measures and with a new goal of a 50% reduction in killed on the roads by 2030. The UK has signed up to the declaration (Baroness Vere of Norbiton on behalf of Government).

Safe System is the generic term for approaches such as 'Vision Zero', 'Sustainable Safety' and 'Towards Zero'. It is based primarily on Vision Zero, recognising that human beings' lives and health should never be compromised by their need to travel. Vision Zero states that any fatal or serious injuries that occur within the road system are unacceptable. This is considered best practice in road safety according to the WHO and the Organisation of Economic Cooperation and Development (OECD).

Unlike the traditional approach to road safety, the Safe System approach recognises that human error is no longer the primary cause of accidents. Rather, a failure of the road system is the cause of many collisions that result in death or serious injury. It also shapes interventions to meet the long-term goal of zero deaths and serious injuries, rather than relying on traditional interventions to set the limits of any long-term targets.

The key objective for those managing the roads is that, as road users will continue to make mistakes, when crashes do occur, outcomes such as serious injuries and death do not occur. Therefore, roads need to be equipped with a 'forgiving' infrastructure, taking into account the vulnerability of human beings. By recognising that road deaths and injuries are not an inevitable part of using the roads, and seeing them as an unacceptable system failure, it counters the risk that transport planners might adopt measures of transport efficiency that tolerate fatalities that are preventable.

Road crashes costs usually represent around 1-3% of a country's gross domestic product (GDP), depending on the approach used. The Safe System approach can produce economic savings for a society, as the costs of the prevention of accidents are usually substantially less than the cost of collisions occurring. Therefore, attention must be given to making roads and roadsides, vehicles and speeds more forgiving, as well as continuing to work towards achieving greater levels of road user compliance.

Pillars of the safe system

According to the Safe System approach, crashes resulting from failures in the road system can be addressed through improvements to the road system. These improvements can include management of infrastructure, improved vehicle design and reduced speeds.

There are five essential elements of the Safe System approach, which reflect a holistic view of road safety:

Road Safety Management - in a Safe System, roads are designed to reduce the risk of crashes occurring and the severity of injury, should a collision occur. One way in which this can be achieved is to segregate

different kinds of road users and to segregate traffic moving in different directions or at a different speed. If this is not possible, a speed limit to protect the most vulnerable road users can be implemented.

Safer Roads and Mobility - speed limits in a Safe System are based on aiding crash avoidance and reducing the speed at which impacts occur, to ensure that the body's limit for physical trauma is not reached. The Safe System aims to establish appropriate speed limits according to the features of the road, the function it serves, and the physical tolerance of road users present. The setting of speed limits should also be determined by the protective quality of the road sections and vehicles in use rather than the behaviour of road users. The Safe System also works to enforce existing speed limits and to educate road users to ensure that they comply with speed limits.

Safer Vehicles - vehicles are designed and regulated to minimise the occurrence and consequences of collisions. Making vehicles safer can involve installing 'active' safety measures, which can prevent collisions occurring, such as autonomous emergency braking or 'passive' safety measures, which protect occupants if a collision does occur, such as seatbelts and airbags. It is also vital to ensure that vehicles are roadworthy, that is, regulated to the highest standards. Increasingly, roads and vehicles will be managed within an intelligent transport system relying on ever more autonomous vehicles and smart infrastructure. As safety becomes hardwired into vehicle technology and road design, there is potential to further reduce road casualties and deaths.

Safer People (road users) - as Safe Systems involves both those who manage and design the roads and those who use them to be responsible for eradicating serious injuries and fatalities on the roads, all road users are expected to use the roads safely and comply with the rules. Safe road users are competent at the basics of safe road use, including paying full attention to the road, adapting to the conditions of the road, travelling at lower speeds, not drinking alcohol or taking drugs and driving, not driving when tired and not close following the vehicle in front, nor using a handheld mobile phone. Measures to encourage safe road use could include working together to reduce traffic, by inspiring people to use active modes of transport such as walking and cycling or use public transport rather than their own vehicle. Education interventions are also important, to ensure that road users are risk aware and act appropriately to keep themselves safe on the road.

Technology within vehicles, such as feedback from the speedometer and seatbelt reminders can also educate road users about safe road use.

Post-Collision Response - The Department for Transport state that it is vital to work with the emergency services and the National Health Service (NHS) to ensure that road collisions are effectively responded to and investigated. Health outcomes for victims of collisions rely on the ability of the emergency medical care system to quickly locate and provide emergency first responder care to stabilise the victim and transport them to hospital for the appropriate care and treatment. NFCC and the Fire Sector can greatly support post-crash response.

However, it must be noted that there is a limit to the extent that infrastructure and vehicle design can accommodate crashes resulting from extreme road user behaviour, such as excessive speeding and drink driving. Therefore, other countermeasures will be essential to influence road user behaviour, including the proactive delivery of road safety education and training to at risk road users.

Further reading, evidence and research

Department for Transport – The Road Safety Statement 2015, [Working Together to Build a Safer Road System](#)

Department for Transport – The Road Safety Statement 2019, [A Lifetime of Road Safety, Moving Britain Ahead](#)

Highways England - Putting Safety First – Our Story So Far (2019) [putting-safety-first.pdf \(highwaysengland.co.uk\)](#)

NFCC will:

- NFCC supports and promotes the adoption of a Safe System approach to meet local operational and resource requirements. NFCC supports road safety partnership working, the delivery of road safety campaigns and improving post-crash response arrangements.
- It encourages all Fire and Rescue Services to work with their Strategic Road Safety partners/partnerships to adopt the principles of The Safe Systems approach within their evidence-based road safety risk reduction plans.
- NFCC supports the FIRE sector by writing guidance, influencing national discussion, working with strategic partners, lobbying and responding to national consultations.
- NFCC advocates that FRS can greatly support post-crash response and other countermeasures that will be essential to influence road user behaviour, including the proactive delivery of road safety education and training to at risk road users.

Committee

Prevention

Date for review

August 2024



Road Safety Management

