



Reward 2012

## Ford SYNC Emergency Assistance



Ford's SYNC Emergency Assistance makes an automatic call to the emergency services if the car has been involved in a serious accident, using the driver's mobile phone when connected by Bluetooth to the SYNC system. When the vehicle has been in an accident which is severe enough to trigger deployment of the airbags, Emergency Assistance automatically dials 112 and transmits a message stating that a Ford vehicle has been in an accident and giving the GPS location. This GPS location is taken from the on-board GPS module which is standard equipment of every vehicle having SYNC. When the message has been repeated twice (to ensure the operator has sufficient time to note all details accurately) Emergency Assistance leaves the phone line open to allow direct communication between the car occupants and the emergency services operator.

Unlike other systems which use a subscription-based service and manufacturer-specific call-centres, Emergency Assistance uses the regular mobile phone network and connects directly with the emergency services. As the system works with any Bluetooth-enabled mobile phone, it is in effect available for the lifetime of the vehicle.

### What is the safety benefit?

After a serious accident, time is critical. If injured people can receive medical attention with the so-called 'golden hour' their chances of survival are much improved. Ford SYNC Emergency Assistance shortens the time needed to contact the emergency services, especially in rural areas where there are unlikely to be others to make such a call. In addition, the system shortens the time needed for emergency services to locate the scene of the accident as precise GPS coordinates can be given. It is estimated that, if all cars were equipped with a system like Emergency Assistance, approximately 200 of European fatalities could be prevented each year.

## How has the system been assessed?

Ford has carried out extensive testing to ensure that the restraints control module (RCM) correctly triggers the airbag and/or cuts off the fuel pump in all accidents where severe injuries might occur. The RCM plays a central role initiating the Emergency Call.

In addition, Ford has carried out both simulated and real-world driving tests of the Emergency Assistance system from around 10,000 locations across Europe to ensure that the message is transmitted in the correct language for the location. For this exercise, calls were routed to Ford in order not to burden the emergency services. The final product has also been put through a similar real life testing regime. In cooperation with, amongst others, the German and British officials, Ford conducted Emergency Assistance tests with real emergency operators. These operators confirmed the emergency messages were understandable, both in terms of the information given and the quality of the call signal. The system functionality has been independently assessed by a Euro NCAP laboratory.

## What are the limitations?

Ford SYNC Emergency Assistance can be turned off by the driver. If it is turned off, it remains off but the driver is informed at the start of a journey that the system is not active. The system will not work if the driver's mobile phone is not connected via Bluetooth. Equally, if the driver should forget his mobile phone, the system cannot work. However, in this case, a warning is given to the driver that a previously synchronised phone has not been detected.

Ford SYNC Emergency Assistance relies on the mobile phone having an adequate network signal. However, 112 calls are given priority across all mobile operator networks so it is unlikely that the phone will be unable to connect.



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