

VEHICLE SPECIFICATION, SPONSORSHIP, TESTING AND RETESTING



Version 6.3

Euro NCAP © October 2013

EUROPEAN NEW VEHICLE ASSESSMENT PROGRAMME



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VEHICLE SPECIFICATION, SPONSORSHIP, TESTING AND RETESTING PROTOCOL

1. Introduction

This protocol details Euro NCAP's procedures relating to the sponsorship, nomination and selection of models to be assessed by Euro NCAP, the specification of vehicles to be tested, their testing arrangements, the circumstances when re-testing is allowed and the rules of publication.

1.1. Definitions

- 1.1.1. In this document, frequent references are made to terms as model release date, variant, model range, safety equipment, etc. A list of definitions for these terms in the context of this protocol can be found in the Appendix.
- 1.1.2. With Europe, the market that includes all current Member States of the European Union (currently EU-27) is meant. Should the European Union expand to include new member states, Euro NCAP will take the steps necessary to apply all requirements of this protocol (fitment of standard safety equipment, etc) to the enlarged union as soon as practicable.

2. Sponsorship and Model Nomination

Euro NCAP's internal rules stipulate that each of the Members sponsors at least one vehicle model a year. In addition, vehicle manufacturers often wish to sponsor a vehicle so that the results may be published at a preferred time, such as the vehicle's public launch. Euro NCAP applies a set of rules to address the most common situations where conflicts may occur.

2.1. Preconditions

- 2.1.1. Vehicle models can be nominated for inclusion in Euro NCAP's assessment programme by a Euro NCAP Member, a vehicle manufacturer or any third party. By nominating a model, the party agrees to accept the costs related to the assessment and publication of the result.
- 2.1.2. Subject to 2.1.3, any vehicle model currently on sale in Europe can be nominated. No consideration is given to:
 - Sales volume;
 - Method of type-approval (whole vehicle, low volume, etc.).
- 2.1.3. Vehicles that have a valid rating cannot be nominated, except in case of a re-assessment (see 5.3).

Note: The validity of the rating is defined in the Application of Star Ratings protocol.

2.1.4. The choice of vehicle model to be assessed by Euro NCAP shall be made by the sponsor. Sponsors are encouraged to nominate their choice of vehicle as soon as possible but no later than 1st of September of the year in which tests must take place.

2.2. Member Sponsored Models

2.2.1. Where a third party wishes to sponsor the testing of a vehicle model already nominated by a Member, the Member will have the first right.

2.2.2. Where a manufacturer wishes to sponsor the testing of a *new vehicle* model already nominated by a Member or third party, the following conditions apply:

2.2.2.1. Up to 12 months before the model release date, the manufacturer has exclusive rights to sponsor the testing of that vehicle. Once the formal agreement to sponsor the vehicle is made, it cannot be cancelled and the manufacturer is obliged to inform Euro NCAP of any changes in the model release date.

2.2.2.2. After 12 months prior to the model release date, the manufacturer loses the exclusive right to sponsor the vehicle. A manufacturer may take over the sponsorship commitment from the Member or third party, provided they agree to comply with the following requirements:

- The publication date is not delayed by more than 3 months;
- The choice of drive (LHD or RHD) and the choice of test laboratory are not changed.

2.2.2.3. In the case where the manufacturer has taken over sponsorship, the Member may nominate an alternative vehicle model.

2.2.3. Where a manufacturer wishes to sponsor the testing of *any other vehicle* model already nominated by a Member or third party, the following conditions apply:

2.2.3.1. The manufacturer may take over the sponsorship commitment from the Member, provided they agree to comply with the following requirements:

- The publication date is not delayed by more than 3 months;
- The choice of drive (LHD or RHD) and the choice of test laboratory are not changed.

2.2.3.2. A manufacturer may advise Euro NCAP that a vehicle model which has been chosen for sponsorship by a Member is soon to be replaced by a newer version. If so, the manufacturer may request that the updated model be tested.

- If this is expected to delay publication by more than 3 months, the request will only be accepted if the manufacturer agrees to take over sponsorship of the vehicle. The choice of drive (LHD or RHD) must not be affected.
- Publication of the results for the updated vehicle model cannot be delayed beyond 9 months of the initial formal request by the manufacturer.
- Euro NCAP reserves the right to test the original vehicle model if above conditions are not met.

2.3. Manufacturer Sponsored Models

2.3.1. Where a third party wishes to sponsor the testing of any vehicle model already nominated by a manufacturer, the manufacturer will have the first right.

2.3.2. Where the manufacturer has nominated a *new vehicle* which is not yet made available to consumers at time of nomination, the following needs to be taken into account:

2.3.2.1. Manufacturers may advise Euro NCAP of the expected date when the vehicle model is to be first offered for sale in Europe (the model release date).

2.3.2.2. The publication of the test results cannot be delayed beyond 3 months after the model release date.

Note: This requirement will be waived if the schedule cannot be met because of a test or other failure on Euro NCAP's part.

2.3.2.3. Where a manufacturer wishes to sponsor the testing of a vehicle model already nominated by a Member or third party, the following rule applies:

2.3.2.3.1. Up to 12 months before the model release date, the manufacturer has exclusive rights to sponsor the testing of that vehicle. Once the formal agreement to sponsor the vehicle is made, it cannot be cancelled and the manufacturer is obliged to inform Euro NCAP of any changes in the model release date.

2.3.2.3.2. After 12 months prior to the model release date, the manufacturer loses the exclusive right to sponsor the vehicle. A manufacturer may take over the sponsorship commitment from the Member, provided they agree to comply with the following requirements:

- The publication date is not delayed by more than 3 months;
- The choice of drive (LHD or RHD) and the choice of test laboratory are not changed.

2.3.3. Where a manufacturer chooses to sponsor a vehicle model already being sold, the following should be taken into account:

2.3.3.1. The publication of the results cannot be delayed to be later than 9 months after the date of the formal sponsorship offer. However, manufacturers may engage in informal discussions about sponsorship prior to this.

Note: This requirement will be waived if the schedule cannot be met because of a test or other failure on Euro NCAP's part.

2.3.3.2. Where a manufacturer wishes to sponsor the testing of a vehicle model already nominated by a Member or third party, the manufacturer may take over the sponsorship commitment from the Member or third party, provided they agree to comply with the following requirements:

- The publication date is not delayed by more than 3 months;
- The choice of drive (LHD or RHD) and the choice of test laboratory are not changed.

2.4. Third Party Sponsored Models

2.4.1. Where a third party wishes to sponsor the testing of a vehicle model already nominated by a manufacturer or Member, the manufacturer or Member will have the first right.

3. Specification of Test Vehicles

Even though different vehicle variants may offer different levels of protection, it is impossible for Euro NCAP to rate all variants of a vehicle model available in Europe individually. The star rating is intended to cover the most popular variant(s) and represent the lowest safety specification at the same time. For this reason, the test variant of the model is derived from manufacturers' data that includes model range availability and safety equipment fitted in Europe. The choice of test variant is independent from the sponsorship model.

3.1. Basic Level Safety

3.1.1. The test variant will have Basic Level Safety Equipment. The Basic Level will comprise those items are fitted as standard across the model range or meet the Minimum Percentage fitment requirement (see escalation of Basic Level, 3.3). Only safety equipment which is part of the Basic Level will be eligible for assessment and may contribute towards the scoring of the vehicle.

3.1.2. The Basic Level will be determined as follows. The manufacturer will be asked to complete an Equipment Matrix template, which will be supplied by Euro NCAP. In the matrix, the manufacturer must identify all items of safety equipment available in the model range and state whether they are standard on all variants or optional on some.

3.1.2.1. Where an item of safety equipment is not standard on all variants, the manufacturer must state whether or not that item:

- is fitted, or is expected to be fitted, as standard or optional equipment in the Minimum Percentage of sales across Europe on all variants;
- is available, at least as an option, on at least one variant covering each combination of body style and engine, in each country of Europe.

3.1.2.2. For items of equipment which are not standard across the Model Range, the manufacturer must provide:

- A breakdown of the model range for Europe, showing expected sales of those variants on which the equipment is standard and expected total sales of all variants
- Brochures and price lists for the vehicle from at least five of the main markets where the equipment is not standard. These must clearly show how the safety equipment is offered for sale in those five countries.

Note 1: in identifying the Basic Level equipment, Euro NCAP may exempt certain low volume variants where the fitting of such safety equipment cannot be expected. For example, this might include low sales volume variants specially produced for motor sport or other special purposes.

Note 2: Delete options are not allowed. An item of safety equipment offered with a delete option anywhere in Europe will be considered not to be standard equipment.

- 3.1.2.3. For new models, the data in the completed Equipment Matrix must be based on sales forecasts over the period of 1 year from the date of the publication of the rating result. Euro NCAP will ask the manufacturer to confirm the projected fitment figures one year after publication and each subsequent year as long as the rating is valid (Annual review, see Application of Star Ratings protocol).
- 3.1.2.4. For models already on sale for one year or more, the data in the completed Equipment Matrix must be based on actual sales figures over the previous year. Euro NCAP will ask the manufacturer to confirm the fitment figures one year after publication and each subsequent year as long as the rating is valid (Annual review, see Application of Star Ratings protocol).

3.2. Test Variant

- 3.2.1. Regarding all non-safety related features and equipment of the vehicle, the test variant will be based on the best selling variant in Europe.
- 3.2.2. The best selling variant will be identified from the information supplied by the manufacturer. Where Euro NCAP chooses to test a particular, less common, variant such as “open-top” or “estate vehicle,” the choice will be restricted to the best selling variant of that type. Manufacturers can also sponsor such tests, provided that the vehicle model has already been rated without this constraint.
- 3.2.3. Where the best selling variant is fitted with safety equipment above the Basic Level, the choice of variant will be adjusted to obtain a Basic Level safety specification variant. The aim will be to minimise the extent of the other changes to the vehicle’s specification. This adjustment might be done in the following order:
- a) Change in the hand of drive;
 - b) Increase in trim level;
 - c) Reduction in trim level;
 - d) Change in number of side doors;
 - e) Increase in volume of the engine/transmission unit;
 - f) Reduction in volume of the engine/transmission unit;
 - g) Change in body style.

Note: Certain exceptions to the minimum standard safety equipment requirement may be necessary, e.g. an open top variant without a curtain airbag or with a substitute combined head/thorax airbag.

- 3.2.4. Where a vehicle, or the required variant, is to be available only in one hand of drive, that hand of drive will be tested. Where a manufacturer sponsors a vehicle model for publication at the time of its launch, and where only one hand of drive is available on that date, that hand of drive will be tested. In all other circumstances, Euro NCAP will be responsible for randomly choosing the drive layout for all vehicle models to be tested.

Note 1: Euro NCAP will report the proportion of vehicles tested in LHD and RHD to the Board of Directors. Overall, the aim will be to ensure that 20 percent of vehicle models tested will be in RHD configuration.

Note 2: the manufacturer is asked to supply information about the performance of the opposite hand of drive. Where necessary, the manufacturer will be asked to provide evidence that the necessary adjustments have not significantly affected the passenger compartment's intrusion or deceleration pulse.

- 3.2.5. Whiplash seats will be tested separately from the vehicle. The manufacturer will be required to supply Euro NCAP with details about the full range of seats available for that model of vehicle and of any differences between the driver and front passenger's seats in the Basic Level vehicle that might influence Whiplash protection. Euro NCAP will choose whether to test the driver's or front passenger's seat. Where no significant differences exist, this will be on a random basis. Where there are differences, the seat considered least likely to offer good protection will be chosen. Manufacturers are allowed to sponsor the testing of other versions of their seats and the whiplash ratings of those seats will also be published.
- 3.2.6. If the vehicle manufacturer does not submit the Equipment Matrix, Euro NCAP will test the vehicles with the best selling, lowest specification that can be readily obtained in Europe.
- 3.2.7. In order to continue to encourage manufacturers to fit new safety equipment, the option will remain for manufacturers to sponsor the additional testing of vehicles fitted with optional safety equipment, not meeting the minimum percentage fitment requirement. This will allow them to demonstrate the benefits of such safety equipment. However, only one star rating will be published, based on the vehicle fitted with the Basic Safety specification. Where additional tests are done with non-standard safety equipment, the same variant of vehicle will be used as for the Basic Level assessment. If this is not possible, other changes will be kept to a minimum to reduce their effect on the assessment. This option does not extend to the testing of the opposite hand of drive.

3.3. Escalating Fitment Requirements

- 3.3.1. In the upcoming years a number of optional emerging Safety Assist technologies will be allowed as part of the Basic Level Safety on the basis of escalating fitment requirements. The escalation will be as follows:

	Result published from 1st January			
	2014	2015	2016	2017
Speed Assistance Systems	50%	70%	100%	100%
AEB (Inter-Urban)	50%	50%	70%	100%
Lane Departure Warning / Lane Keep Assist	50%	50%	70%	100%

4. Vehicle Selection and Status of Test Vehicle

To ensure that the rating remains credible at all times, it is essential that the vehicles selected for testing are exactly the same as those vehicles offered for sale to consumers. Ideally this means that test vehicles are taken from the production line. Many times, however, this is conflicting with the manufactures' time line where ratings must be available at model release

date and small adjustments to production are made during ramp up of production. The following provides guidance on these matters.

4.1. Status of Test Vehicle

4.1.1. The vehicles tested must be of the same production status as for those offered for sale to consumers at or before the time of publication of the new result.

4.1.2. The method of procuring test vehicles of the correct specification will be chosen by Euro NCAP. The vehicles selected for testing must be:

- Fully type-approved (i.e. a certificate of conformity should be available for the vehicles, if requested)
- From serial production.
- Capable of being legally sold, new or in the aftermarket, to the general public without modification

Note: New models are generally produced in small numbers during the early stages of production (“ramp-up”), leading to full-volume production within a few months. Vehicles from such early production phases are acceptable, so long as they comply with the requirements set out above.

4.1.3. At least three seats are required for Whiplash testing, which may be procured separately from the vehicle. Where unrealistically high charges or long lead times for the selected test seats are quoted by the manufacturer, Euro NCAP is given discretion to refrain from testing seats. In such cases, the Whiplash score will be set to zero.

4.1.4. The manufacturer may advise Euro NCAP that a vehicle scheduled for testing will have certain safety components changed prior to the expected publication date. Where this happens, the updated components may be retrofitted to the test vehicles, provided the following requirements are met:

- The components are installed to the same standard as used in production.
- The components are manufactured using production procedures. Prototype components are not allowed.
- Where the component has to be certified by an approval authority, such certification has been carried out.
- Once a vehicle has been tested, assessment and testing of modified components are subject to the requirement of section 5.2.

4.2. Fitment of Non-standard Components

4.2.1. The fitment of non-standard or prototype components is not allowed, whether safety related or not. Where non-standard or prototype components are thought to have been fitted to any of the vehicles tested (e.g. ‘sample’ or ‘prototype’ labels are found during inspection), the following actions may be taken:

4.2.1.1. Euro NCAP may carry out an audit of the production plant to understand the cause of the anomalous parts or labels.

- 4.2.1.2. The manufacturer may be required to sponsor an audit test. This will be a repeat of one of the main impact tests on a vehicle which is known to have come from mainstream production. The results of this test will be compared with the original test.
- 4.2.1.3. Where the manufacturer does not agree to sponsor testing of the standard specification vehicle, its testing may be sponsored by Euro NCAP and the presence of prototype components will be published.

5. Testing, Retesting and Reassessment

5.1. Testing

- 5.1.1. Euro NCAP will be ultimately responsible for choosing the test laboratory for all vehicles. A vehicle will be tested at the laboratory chosen by the sponsor unless there are compelling reasons to do otherwise. Such reasons could include cost or operational factors influencing the timing of publication or over-use of a single laboratory by the same manufacturer.
- 5.1.2. All tests will be carried out according to the latest protocols published on Euro NCAP's website. The laboratory is responsible for accurate application of the protocols and keeping test equipment up to date.
- 5.1.3. Before each test, the laboratory must check that vehicles and other components scheduled for testing meet the vehicle test specification (see 3). Testing of vehicles that do not meet the test specification may invalidate the result and lead to retesting at the expense of the laboratory.

5.2. Retesting

- 5.2.1. In some cases, a retest may be requested by Euro NCAP, the laboratory or manufacturer. A re-test may be allowed under the following circumstances:
- 5.2.1.1. Where a test does not meet Euro NCAP Test Protocol requirements it will be repeated unless the failure does not materially affect the rating of the vehicle.
- Where the failure is the responsibility of the test laboratory, they shall be responsible for carrying out the retest without charge.
 - The responsibility for funding the replacement vehicle and components is that of the test's sponsor.
- 5.2.1.2. Modification and re-testing is allowed if an Unexpected or Undesired Vehicle Performance problem is identified at a Euro NCAP test carried out not later than four months from the time when public customers first take delivery of their vehicles. In such case, the following conditions must be met for a re-test to be allowed:
- The manufacturer has identified deficiencies and can satisfy Euro NCAP and inspectors that the proposed modifications will significantly improve safety.
 - The improvement will be incorporated in all production vehicles by the time Euro NCAP publishes its assessment of the vehicle.
 - By an official recall or by equivalent market action acceptable to Euro NCAP, the manufacturer makes provision to update all vehicles already in use in the Europe.

This includes vehicles which have not been offered for sale to the public but have been provided on loan to the press, management etc. The recall must be specific to the identified problem and must be initiated by the time the assessment is published.

- The results of the retested vehicles are available prior to the vehicle being first offered for sale in the European Union.
- Publication of the vehicle's assessment is not delayed by more than 3 months.
- The manufacturer funds all work related to the retest.

Note: Where there is a failure, or partial failure, of safety related equipment, Euro NCAP may withhold publication of the test results, pending investigation of the failure.

5.3. Reassessment

5.3.1. A vehicle model which has previously been rated may be reassessed under one or other of the following circumstances:

5.3.1.1. A manufacturer wishes to have the vehicle reassessed to reflect changes which have been made to the performance of the vehicle. Reassessment in such circumstances is allowed if:

- The result of the vehicle has not been re-calculated in the same calendar year;
- The manufacturer can demonstrate that there has been a significant improvement to safety, either through better performance (e.g. improved knee protection or airbag response) or to fitment (e.g. standardisation of ESC)

5.3.1.2. A vehicle's original rating is no longer considered valid as a result of an annual or facelift review (see Application of Star Ratings protocol) or because the original rating is more than six years old. In such cases, the vehicle becomes eligible for reassessment by a Euro NCAP member, the vehicle manufacturer or third party.

Note: A vehicle model is not eligible for reassessment if, at all annual and facelift reviews, its original rating is considered valid for the current vehicle.

6. Publication of Results

6.1. General Guidelines

6.1.1. Under normal circumstances, once the vehicle has been tested and the data are available and verified, the results will be published by Euro NCAP. Manufacturers will not be able to propose further modifications leading to a retest and may not make use of the star rating, or make reference to it, until the result has been published by Euro NCAP

6.1.2. The rating with the details of the test vehicle specification will be published as part of the normal release schedule on the date agreed with the sponsor. Euro NCAP will publish the star rating and additional information (percentage scores, coloured men etc) on its website.

- 6.1.3. Safety equipment fitted to the Basic Level vehicle but not across the full model range will be detailed by Euro NCAP alongside the rating. Consumers will be encouraged to specify the fitment of such equipment to any vehicle they purchase.
- 6.1.4. Euro NCAP will inform the vehicle manufacturer in advance of the target date for publication of the result on the website. In general, this date will be no later than two months from the date of arrival of test vehicles at the laboratory.
- 6.1.5. Where a vehicle has been retested, the following applies:
- 6.1.5.1. The rating will, if possible, be published as originally intended. If the original release date cannot be met, the result will be published as soon as possible after the originally-intended launch date (but no more delayed than 3 months).
- 6.1.5.2. If all the above conditions are met and Euro NCAP is satisfied that no member of the public will receive a vehicle of the specification originally tested, Euro NCAP will not publish information about the problem identified or the manufacturer's actions. Where specific market action has been required by the manufacturer a part of the retest, Euro NCAP reserves the right to bring this to the attention of the consumer at the time of the publication of the result.
- 6.1.6. Where a vehicle has been re-assessed, the following applies:
- 6.1.6.1. The rating will be published as part of the normal release schedule.
- 6.1.6.2. The result of a reassessment will be published alongside the original rating, with a VIN identifying the first vehicle produced to which the new assessment applies. The original rating will identify, by means of a VIN, the final vehicle to which it applied.
- 6.1.7. Where an audit test is required, the following applies:
- 6.1.7.1. A vehicle's rating will not be published until the results of the audit test (including inspection) are known and demonstrate good correlation with the original test results.
- 6.1.7.2. The rating will be based on the original test data and published as part of the normal release schedule if the results of the audit test demonstrate that the performance difference is acceptable.
- 6.1.7.3. If the differences between the results of the audit test differ unacceptably from the original results, Euro NCAP may require that all relevant tests are repeated on vehicles whose production status is certain, and publication of the rating will be delayed.
- 6.1.7.4. Euro NCAP reserves the right to publish information about the presence of non-standard or prototype components.

6.2. Recalculation

- 6.2.1. Euro NCAP gives manufacturers the exclusive right to update a vehicle's rating to a later assessment regime (year) than was originally applied, based on the original test data.
- 6.2.2. The following conditions apply for recalculation:
- 6.2.2.1. The safety performance of the vehicle to which the new rating applies has not changed compared to the original tested model.

- 6.2.2.2. The original test data are not older than 3 years.
- 6.2.2.3. The vehicle to which the new rating applies will be on sale for at least two more years.
- 6.2.3. If Euro NCAP's assessment scheme has not changed, no additional testing is required. In this case, the requirements (Minimum Percentage for Basic Level equipment, threshold, balance values etc) applicable will be used to recalculate the result. Euro NCAP will apply the latest safety fitment data, based on actual sales over the past year, for a re-calculation.
- 6.2.4. If Euro NCAP's technical assessments have changed or new tests have been added, additional tests may need to be done. By requesting a recalculation, the manufacturer agrees to sponsor the required tests.
- 6.2.5. Re-calculation of a vehicle result will preclude a reassessment in the same year.
- 6.2.6. The deadline for request to recalculate a vehicle rating shall be December 1 of the preceding year, allowing time for Euro NCAP to schedule additional tests, if required.
- 6.2.7. The results of recalculations will be released at the first opportunity in the year.

Appendix

Definitions

Model Range	All the variants (i.e. all body styles, engine and equipment grades) available across Europe under a common model name or designation
Minimum Percentage	The lowest proportion of sales, expressed as a percentage, which an item of safety equipment must meet as standard equipment to be included as part of the Basic Level equipment.
Model release date	The date set by the manufacturer at which a new vehicle is first being offered to consumers in any part of Europe.
Reassessment	A new assessment by Euro NCAP of a vehicle which has previously been rated but has undergone a significant safety update. The re-assessed rating is based on all requirements (Minimum Percentage for Basic Level equipment, threshold, balance values etc) applicable at the time of reassessment. Depending on the changes made to the vehicle, it may not be necessary to repeat all aspects of the assessment. The results of a re-assessment are published alongside the original rating.
Recalculation	The updating of a vehicle's rating to a later assessment regime than was originally applied where the vehicle's safety performance has not changed. The recalculated rating is based on all requirements (Minimum Percentage for Basic Level equipment, threshold, balance values etc) applicable at the time of recalculation. Additional tests may or may not be necessary, but the exercise utilizes results already obtained and applies the updated requirements to them.
Retest	A repeat of one or more parts of a vehicle's assessment which replaces the original result. The original invalid result is not published by Euro NCAP.
Safety Equipment	That equipment which is overtly aimed at improving safety. It includes but is not necessarily limited to: Restraint systems, including head restraints, child restraints and anchorages; Knee and leg protection; Breakaway pedal arrangements; Pedestrian friendly devices (unless they are only required for particular engine compartment packages); Seat belt reminder systems, Safety marking/labels and switches. <i>Note: It does not include: Engine/transmission volume; Road wheel/tyre size, Sun roof, etc.</i>
Variant	A unique combination of body style, engine and equipment grade or specification. An illustration is given in Annex 1.