

EUROPEAN NEW CAR ASSESSMENT PROGRAMME

# **Technical Bulletin**

# **Euro NCAP Supplier List**

**Version 3.2** 

**January 2022 TB 029** 

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#### **Preface**

DISCLAIMER: Euro NCAP has taken all reasonable care to ensure that the information published in this document is accurate and reflects the technical decisions taken by the organisation. In the unlikely event that this protocol contains a typographical error or any other inaccuracy, Euro NCAP reserves the right to make corrections and determine the assessment and subsequent result of the affected requirement(s).

#### EUROPEAN NEW CAR ASSESSMENT PROGRAMME (Euro NCAP)

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#### 1. Introduction

This Technical Bulletin provides an overview of the main test equipment and software used in official Euro NCAP testing, as well as their certified suppliers. The scope of this approval applies only to official Euro NCAP tests at accredited laboratories. It need not apply to in-house development or preliminary NCAP tests (so-called pre-tests), carried out at Euro NCAP laboratories or elsewhere. Data that is supplied as part of the official Euro NCAP rating, such as knee mapping and far-side data, is treated as inhouse data.

The document contains ATDs and targets, barriers and special instrumentation, and is structured according to the test in which they are used. Where the type of equipment is not specifically identified in this document, all suppliers are accepted, as long as the equipment meets the functional requirements.

At any time, Euro NCAP is open to add alternative suppliers for all items listed. Respective suppliers are requested to liaise with Euro NCAP directly and to follow the procedure outlined in the following section. Suppliers not mentioned in the list (or pending approval) must refrain from making any public comments or statements referring to the Euro NCAP Suppliers List.

#### 2. Update Procedure

Not being listed does not mean that the respective supplier's products are not compatible with Euro NCAP protocols, but that their products are not commonly used in Euro NCAP official tests. Over time this situation may change as new suppliers enter the market.

Suppliers that wish to be added to the Euro NCAP suppliers list need to contact the Euro NCAP Secretariat (twg@euroncap.com) to announce their interest and provide initial technical information about their equipment. Approval will be granted to equipment that is available and commonly used in the European market only.

After initial discussions, and any further steps identified by the Secretariat, the supplier must provide the Euro NCAP Technical Working Group with the following information as a minimum:

- a) Technical system specifications including o.a. drawings;
- b) Certification data of the equipment according to required Euro NCAP or other relevant procedures (where available),
- c) Repeatability and Reproducibility test results (where applicable);
- d) Full scale and/or subsystem physical (performance) test data, generated in co-operation with one or multiple Euro NCAP accredited Test Laboratories. This will be compared to existing 'benchmark' data (where available);
- e) Back-to-back comparison with an official Euro NCAP test (applicable test to be agreed and data to be provided by Euro NCAP);
- f) Where relevant, comparative data from development testing performed by or for an established vehicle manufacturer and/or tier-1 supplier. Data should preferably be based on several units and different test locations and cover a period of at least at least 6 to 12 months experience, depending on the complexity of the product or component.
- g) For products, that are (or will be) part of legislative compliance testing in Europe, USA or elsewhere or prescribed by any other NCAP, such as ATDs and crash barriers, additional compliance information with regards to those standards may have to be supplied. This also includes the relevant ISO requirements for ADAS & AD propulsion systems and targets.

Details need to be supplied in electronical format to the Euro NCAP Technical Working Group (twg@euroncap.com). The TWG will subsequently review the obtained information and may ask for additional data or evidence, if needed.

When approved, Euro NCAP will formally notify the supplier and add the supplier as an approved supplier for the relevant equipment to subsequent version of this Technical Bulletin.

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#### 3. General

#### 3.1 Data Acquisition

Software	Approved Suppliers	References/Comments
Data Analysis	- MeasX X-Crash	Euro NCAP Technical Bulletin TB021

# 4. Adult & Child Occupant Protection

#### 4.1 Frontal Barrier Test [MPDB]

Dummies	Approved Suppliers	References/Comments
THOR-50M	<ul><li>Humanetics Innovative Solutions</li><li>Kistler Instrumente</li></ul>	Modified Spine and HIII-50M lower legs as specified in Euro NCAP Technical Bulletin TB026
HIII-50M	<ul> <li>Humanetics Innovative Solutions</li> </ul>	Roller ball bearing knees and foam neck shield as specified in the Euro NCAP Frontal MPDB Test Protocol
Q6	<ul><li>Cellbond ATD</li><li>Humanetics Innovative Solutions</li></ul>	wiki.unece.org/display/trans/Q- Dummy+drawings
Q10 (Standard)	<ul><li>Cellbond ATD</li><li>Humanetics Innovative Solutions</li></ul>	wiki.unece.org/display/trans/Q- Dummy+drawings
Q10 (2020 Upgrade kit)	<ul><li>Cellbond ATD</li><li>Humanetics Innovative Solutions</li></ul>	New shoulder liner, Scapula, Modified pine box, Pelvis replacement parts, Modified upper and lower legs
<b>Specific Instrumentation</b>	Approved Suppliers	References/Comments
Displacement measurement device	<ul> <li>ATD LabTech [S-Track]</li> <li>Humanetics Innovative Solutions [IR-TRAC]</li> <li>Kistler Instrumente [KIR-TRACC]</li> </ul>	For THOR-50M, Q10 and Q6
Barrier Face	Approved Suppliers	References/Comments
MPDB	<ul> <li>AFL Honeycomb Structures</li> <li>Cellbond Composites Ltd</li> <li>ARGOSY International</li> <li>Showa Aircraft Industry</li> </ul>	Euro NCAP Technical Bulletin TB022

#### 4.2 Frontal Full Width Rigid Barrier Test

Dummies	Approved Suppliers	References/Comments
HIII-05F	<ul> <li>Humanetics Innovative Solutions</li> </ul>	49 CFR Part 572, Subpart O. Neoprene neck shields, harmonized jacket, and lower leg cavity as specified in the Euro NCAP FW  Test Protocol

#### **4.3 Frontal Kneemapping Tests**

Dummies	Approved Suppliers	References/Comments
HIII-95M	Humanetics Innovative     Solutions	Build level D

#### **4.4 Side Moving Deformable Barrier Test**

Dummies	Approved Suppliers	References/Comments
WorldSID-50M	Humanetics Innovative     Solutions	Upgraded Suit (ISO)
Q6	<ul><li>Cellbond ATD</li><li>Humanetics Innovative Solutions</li></ul>	Including side Impact kit
Q10 (Standard)	<ul><li>Cellbond ATD</li><li>Humanetics Innovative Solutions</li></ul>	Including Side Impact kit Both S-track and IR-Tracc are accepted
Q10 (2020 Upgrade kit)	<ul><li>Cellbond ATD</li><li>Humanetics Innovative Solutions</li></ul>	New shoulder liner, Scapula, Modified pine box, Pelvis replacement parts, Modified upper and lower legs.
Specific Instrumentation	Approved Suppliers	References/Comments
Displacement measurement device	<ul> <li>ATD LabTech [S-Track]</li> <li>Humanetics Innovative Solutions [IR-TRAC]</li> <li>Kistler Instrumente [KIR-TRACC]</li> </ul>	For WorldSID-50M, Q10 and Q6
Barrier Face	Approved Suppliers	References/Comments
AE-MDB	<ul> <li>AFL Honeycomb Structures</li> <li>Cellbond Composites Ltd</li> <li>Plascore, Inc</li> <li>Showa Aircraft Industry Co.</li> </ul>	Euro NCAP Technical Bulletin TB014

#### 4.5 Side Oblique Pole Test

Dummies	Approved Suppliers	References/Comments
WorldSID-50M	Humanetics Innovative     Solutions	Upgraded Suit (ISO)

#### 4.6 Whiplash Tests

Dummies	Approved Suppliers	References/Comments
BioRID G/UN	<ul> <li>Humanetics Innovative Solutions</li> </ul>	Mutual Resolution No.1 (M.R.1) Concerning Test tools and Devices for Assessment of Compliance, Addendum 1 (Pending)

## 5. Vulnerable Road User Protection

#### **5.1 Pedestrian Impact Tests**

Impactors	Approved Suppliers	References/Comments
Adult Headform	<ul><li>Humanetics Innovative</li><li>Solutions</li><li>Cellbond ATD [skin only]</li></ul>	
Child Headform	<ul><li>Humanetics Innovative Solutions</li><li>Cellbond ATD [skin only]</li></ul>	
Upper Legform	<ul><li>TRL</li><li>Humanetics Innovative Solutions</li></ul>	
Flex-PLI GTR	<ul><li>Cellbond ATD</li><li>Humanetics Innovative Solutions</li></ul>	Mutual Resolution No.1 (M.R.1) Concerning Test tools and Devices for Assessment of Compliance, Addendum 3
aPLI	Cellbond ATD	ISO TC22 SC36 WG5. Under development
PDI-2	Concept Tech	
<b>Specific Instrumentation</b>	Approved Suppliers	References/Comments
Damped accelerometer	<ul><li>Kyowa</li><li>Endevco</li><li>TE Connectivity</li></ul>	For Headforms as specified in Euro NCAP Technical Bulletin TB003
Other	Approved Suppliers	References/Comments
Human Body Models		Euro NCAP Technical Bulletin TB024

#### **5.2** Autonomous Emergency Braking & Lane Support System Tests

Targets	Approved Suppliers	References/Comments
Adult Pedestrian Target	■ 4activeSystems "PA Adult"	<u>ISO 19206-2:2018</u>
Child Pedestrian Target	<ul> <li>4activeSystems "PA Child"</li> </ul>	<u>ISO 19206-2:2018</u>
Bicycle Target	<ul> <li>4activeSystems "BS Static Bicyclist"</li> </ul>	<u>ISO 19206-4:2020</u>
Motorcycle Target	■ [4activeSystems]	under development will become ISO 19206-5
Propulsion system	Approved Suppliers	References/Comments
Platform for - Adult Pedestrian Target - Child Pedestrian Target	<ul> <li>4activeSystems "SB surfboard platform"</li> <li>4activeSystems "XB extended range surfboard platform"</li> <li>AB Dynamics "Surfboard Platform (SPT System plus SR)"</li> </ul>	
Platform for - Bicycle Target	<ul> <li>4activeSystems "SB surfboard platform"</li> <li>4activeSystems "XB extended range surfboard platform"</li> <li>AB Dynamics "Surfboard Platform (SPT System plus SR)"</li> </ul>	
Platform for - PTW Target	• [4activeSystems]	

## 6. Safety Assist

#### **6.1** Autonomous Emergency Braking & Lane Support System Tests

Targets	Approved Suppliers	References/Comments
Global Vehicle Target	<ul> <li>4activeSystems "C2" version</li> <li>7.1</li> <li>AB Dynamics "Soft Car 360" Revision G</li> </ul>	ISO 19206-3:2020
Propulsion system		
Platform for - Global Vehicle Target	<ul> <li>4activeSystems "FB large"</li> <li>ABD "GST Platform"</li> <li>Humanetics Innovative Solution (DSD) "UFO"</li> </ul>	

**NOTE:** Not all possible combinations of targets and propulsion systems are approved. The Matrix below shows the approved combinations.

Target & Propulsion system	4activeSystems "FB large"	ABD "GST Platform"	Humanetics Innovative Solution "UFO"
4activeSystems "C2" version 7.1	$\checkmark$	X	X
AB Dynamics "Soft Car 360" Revision G	X	$\overline{\checkmark}$	<b></b>