INTRODUCTION
ASEAN NCAP has conducted crash testing of cars since 2012 in various laboratories. This document serves as a guide to laboratory selection for future crash tests.

1.0 ASEAN NCAP Policy
All ASEAN NCAP tests should be conducted at the Southeast Asian region crash test facility. However, ASEAN NCAP will review the Southeast Asian facility capacity and capability of conducting the crash test. Each laboratory is required to sign an agreement with ASEAN NCAP prior to conducting ASEAN NCAP crash test as per Appendix I.

2.0 ASEAN NCAP crash test outside ASEAN Region crash testing facility
1) Test with official ASEAN NCAP laboratory
   The requirement of becoming ASEAN NCAP official laboratory is as follows;
   a. The laboratory or organization is required to sign an MOU with ASEAN NCAP or its stakeholders subject to agreement by ASEAN NCAP Steering Committee.
   b. Preferably the laboratory or organization which currently conducted other NCAP test such as ANCAP, JNCAP, KNCAP, Euro NCAP etc.
   c. The assessment will be conducted by ASEAN NCAP Technical Committee at the facilities. At least 1 crash test needs to be performed in front of the Technical Committee. The Technical Committee will judge the capability of the laboratory and will submit the report to Steering Committee for final judgment.
2) Testing at manufacturer request facility (independent or government own laboratory).
3) Testing at manufacturer’s crash testing facility.

3.0 Crash Test using ASEAN NCAP Official Laboratory
1) Vehicle appointed OR selected by ASEAN NCAP OR volunteered by Manufacturer.
2) Case that will be considered is CBU vehicle from origin country OR ASEAN Region crash testing facility having capacity or capability problem i.e. heavier vehicle etc.
3) Manufacturer to directly discuss the contract with the laboratory.
4) A fee amounting to RM 20,000 is required for the assessment by ASEAN NCAP. Manufacturer to directly submit payment to ASEAN NCAP for the purpose.
5) The appointed laboratory will arrange for the witness activity. In principal, 2 persons from ASEAN NCAP will witness the test. Depending on availability of inspector or ASEAN NCAP management, the flight schedule and hotel are to be decided. For purpose of planning, refer to table below for justification.

<table>
<thead>
<tr>
<th>Position</th>
<th>Flight Class</th>
<th>Hotel</th>
<th>Allowance per diem</th>
<th>Local Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>First Class</td>
<td>5-Star Minimum</td>
<td>USD 110</td>
<td>Required</td>
</tr>
<tr>
<td>Secretary General</td>
<td>Business Class</td>
<td>4-Star Minimum</td>
<td>USD 90</td>
<td>Required</td>
</tr>
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<td>Business Class</td>
<td>3-Star Minimum</td>
<td>USD 80</td>
<td>Required</td>
</tr>
<tr>
<td>Inspector</td>
<td>Economy Class</td>
<td>3-Star Minimum</td>
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6) The laboratory will finally charge the manufacturer on witness cost associated.
7) Final report will be issued by ASEAN NCAP Maximum 3 weeks from test date.
8) In the event ASEAN NCAP is sending representative other than above i.e. Steering Committee, Technical Committee or External expert, ASEAN NCAP will inform
manufacturer and determine equivalent level the representative as listed in the table above.

9) Should ASEAN NCAP require to sending more representatives, the cost will be borne by ASEAN NCAP.

4.0 Crash Test using manufacturer request facility (independent or government own laboratory)

1) Test with official Vehicle appointed OR selected by ASEAN NCAP OR volunteered by Manufacturer.
2) Manufacturer to officially request ASEAN NCAP to conduct the test in the independence or government laboratory.
3) Case that will be considered is CBU Vehicle from origin country and ASEAN NCAP Official Laboratory having capacity or capability problem i.e. heavier vehicle etc.
4) Manufacturer to directly discuss the contract with the laboratory.
5) A fee amounting to RM 20,000 is required for the assessment by ASEAN NCAP. Manufacturer to directly submit payment to ASEAN NCAP for the purpose.
6) Manufacturer will arrange for the witness activity. In principal, 2 persons from ASEAN NCAP will witness the test. Depending on availability of inspector or ASEAN NCAP management, the flight schedule and hotel are to be decided. For purpose of planning, refer to table below for justification.

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7) Final report will be issued by ASEAN NCAP Maximum 3 weeks from test date.
8) In the event ASEAN NCAP is sending representative other than above i.e. Steering Committee, Technical Committee or External expert, ASEAN NCAP will inform manufacturer and determine equivalent level the representative as listed in the table above.
9) Should ASEAN NCAP require to sending more representatives, the cost will be borne by ASEAN NCAP.

5.0 Crash Test using manufacturer’s crash testing facility

1) No ASEAN NCAP crash test is allowed to be conducted at manufacturer’s crash laboratory.
2) However, ASEAN NCAP may consider if below situation occurs.
   a. Primarily assigned and agreed Crash Laboratory unable to conduct crash testing due to unforeseen reason.
   b. Deadline event which requires the car to launch with ASEAN NCAP Star Rating.
   c. Other ASEAN NCAP official crash laboratory is unable to assist the task within the limited time frame.
3) Prior to crash test, ASEAN NCAP will assign its audit members to assess the manufacturer’s crash laboratory in order to provide a fair perspective for the crash test. The cost of audit to be borne by manufacturer.
4) A fee amounting to RM 20,000 is required for the assessment by ASEAN NCAP.
Manufacturer to directly submit payment to ASEAN NCAP for the purpose.

5) Manufacturer will arrange for the witness activity. In principal, 2 persons from ASEAN NCAP will witness the test. Depending on availability of inspector or ASEAN NCAP management, the flight schedule and hotel are to be decided. For purpose of planning, refer to table below for justification.

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6) Final report will be issued by ASEAN NCAP, Maximum 3 weeks from test date.

7) In the event ASEAN NCAP is sending representative other than above i.e. Steering Committee, Technical Committee or External expert, ASEAN NCAP will inform manufacturer and determine equivalent level the representative as listed in the table above.

8) Should ASEAN NCAP require to sending more representatives, the cost will be borne by ASEAN NCAP.
APPENDIX I

LABORATORY SERVICE AGREEMENT FOR ASEAN NCAP CRASH TEST

This LABORATORY SERVICE AGREEMENT ("Agreement") is dated this day of ________________, ___________ (the "Effective Date") by, and between ASEAN NCAP, and (Crash laboratory) and (hereinafter, the "Agreement"). ASEAN NCAP and Crash Laboratory are each hereafter referred to individually as a "Party" and together as the "Parties".

BACKGROUND
A. ASEAN NCAP offers car crashworthiness evaluation for new car assessment program for Southeast Asian car in the region.
B. Crash Laboratory offers crash test service to ASEAN NCAP.
C. ASEAN NCAP Test definition – Crash test according to ASEAN NCAP Protocol with ASEAN NCAP inspector presence to be used either for official data or back-up data for the official test.

THEREFORE, in consideration of the foregoing and mutual understandings, promises and agreements contained herein, the sufficiency of which hereby acknowledged, the Parties agree as follows:

Section I – Services; Responsibilities of the Parties
1. Services. Crash laboratory agrees to provide crash test services to ASEAN NCAP in, accordance with the latest ASEAN NCAP protocol for both frontal and side collision. All processes from the pre-crash until post-crash must conform to ASEAN NCAP testing protocol and ASEAN NCAP Assessment Protocol. Crash Laboratory shall provide all the necessary support and documents required by ASEAN NCAP Inspector.

2. Reports. Crash laboratory shall include at least the following: ASEAN NCAP completed crash test checklist, pre and post-crash vehicle measurements crash test data in ISO and DIAadem format, X-crash report, crash test videos in raw format and AVI format, dummy calibration reports, equipment calibration report (transducer, speed meter, and other equipment’s used for the test), and pre and post-crash photos.

3. Crash Laboratory Responsibilities. Crash laboratory shall conform to all crash test requirements in ASEAN NCAP Protocol. The requirements shall include but not limited to, the following: impact speed, impact point (accuracy of impact alignment), dummy seating time prior to the test, dummy soaking condition and dummy calibration confirmation. The test will consider as invalid if the crash laboratory fails to conform to any of these requirements. Crash laboratory shall repeat the test at its own cost and bear the cost of the car including transportation cost from origin location to crash laboratory. Crash laboratory shall also bear the cost for ASEAN NCAP Inspector and vehicle manufacturer representative to attend this car crash test.

4. ASEAN NCAP Responsibilities. ASEAN NCAP shall arrange transportation of the vehicle to crash laboratory for the crash test. ASEAN NCAP shall provide vehicle setting information and any necessary documents related provided by manufacturer in order to
ease the test setup. Approval and acceptance of the test conducted by the crash laboratory shall be confirmed by ASEAN NCAP Inspector.

Section II – Confidentiality and Consent
5. Vehicle Information. Crash laboratory, its staff, employees or agents shall not disclose to any third party, except where permitted or required by law any vehicle information, record, photos, video, crash result and other related information.

6. Consent. Crash laboratory shall comply with all federal, state and local laws, rules regulations related to the circumstances under which informed consent must be obtained prior to the crash test.

Section III – Compensation and Billing
7. Fees. Upon acceptance of the test by ASEAN NCAP Inspector, ASEAN NCAP will pay the crash laboratory services based on the fee agreed by both parties.

IN WITNESS WHEREOF, the Parties have caused in this Agreement to be executed by their duly authorized representatives for the following crash tests.

<table>
<thead>
<tr>
<th>Test Organization:</th>
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<tbody>
<tr>
<td>Vehicle Make &amp; Model:</td>
<td></td>
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<tr>
<td>Vehicle Body No:</td>
<td></td>
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<tr>
<td>ASEAN NCAP Test Protocol:</td>
<td>Version:</td>
</tr>
<tr>
<td>Test Date:</td>
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</table>

Witnessed by:

__________________  ____________________
Signature : Signature :
Name : Name :
Title : Title :
Date : Date :
Members of ASEAN NCAP Technical Committee

Ir. Ts. Dr. Khairil Anwar Abu Kassim (Adjunct Prof.)
Malaysian Institute of Road Safety Research (MIROS)

Ts. Yahaya Ahmad
Malaysian Institute of Road Safety Research (MIROS)

Ts. Mohd Hafiz Johari
Malaysian Institute of Road Safety Research (MIROS)

Salina Mustaffa
Malaysian Institute of Road Safety Research (MIROS)

Zulhaidi Mohd Jawi
Malaysian Institute of Road Safety Research (MIROS)

Ir. Adrianto Sugiarto Wiyono
Politeknik APP

Dr. Annisa Jusof
Institut Teknologi Bandung (ITB)

Dr. Ir. Sigit P. Santosa
Institut Teknologi Bandung (ITB)

Dr. Atsuhiro Konosu
Japan Automobile Research Institute (JARI)

Ahmed Ismail Hj. Amin
Automobile Association of Malaysia (AAM)

Dr. Mohd Radzi Abu Mansor
Universiti Kebangsaan Malaysia (UKM)

Assoc. Prof. Dr. Wira Jazair
Universiti Teknologi Malaysia (UTM)

Assoc. Prof. Dr. Julaluk Carmai
The Sirindhorn International Thai German Graduate School of Engineering (TGGS)

Assoc. Prof. Dr. Saiprasit Koetniyom
The Sirindhorn International Thai German Graduate School of Engineering (TGGS)

Dr. Ly Hung Anh
Ho Chi Minh City University of Technology (HCMUT)

Najihah Wahi
Malaysian Institute of Road Safety Research (MIROS)

Nuur Sakinah Azman
Malaysian Institute of Road Safety Research (MIROS)