

Report on the 60th JASIC Asia Expert Meeting in Myanmar
On R16

Created: March 16, 2020

Dates: Thursday, December 19, 2019 10:00 -16:00

Friday, December 20, 2019 10:00 -16:00

Place: Heavy Industry Enterprise Meeting Room No. 1, Ministry of Planning, Finance
& Industry (MOPFI), Nay pyi Taw, Myanmar

Participants:

Myanmar:

MOPFI:

Mr. Yi Yi Kyaw, General Manager

and 19 other people (including those from RTAD)

JICA NSS

Mr. Yamada

Mr. Shunn Lei Wai

Japan:

Mr. Chihiro Tana, Type Approval Engineer, Automotive Type Approval Test
Department, National Traffic Safety and Environment Laboratory (NTSEL);

Mr. Naoki Fujisawa, JAMA

Mr. Nakatani, chief representative, JASIC Jakarta Office

Mr. Ishibashi, JASIC

Overview:

- At the request of MOPFI, a detailed explanation of the technical requirements and test procedures for R16 (Seatbelts) was given in two days, using both summary documents and the text of the regulation.
- MOPFI evaluated that the materials and the presentations were well compiled and

useful in understanding the technical requirements and test procedures in their whole and particularly helpful to future study in detail of the subject.

- The participants from Myanmar were mostly engineers who will work for the government's adoption and operation of 19 UNRs under the ASEAN MRA. They asked many questions with future operation in mind.
- The knowledge of Myanmar engineers on vehicle regulations and technologies is still limited. In the future, it would be better, when holding expert meetings on the remaining 18 regulations, to limit the number of regulations to be dealt with at a meeting and offer it as a study session for participants with summaries, texts of regulation, and actual devices (or illustrations, photos, etc.) to deepen their understanding.

Day 1: Thursday, December 19, 2019 10:00 -16:00

1. Opening Address by Mr. Yi Yi Kyaw, General Manager, MOPFI

Good morning everyone. First, I would like to thank JASIC experts for coming to Myanmar to support the development of the country. Last time, we learned about the 1958 Agreement and how motor vehicle regulations are being harmonized. As an ASEAN member, Myanmar must follow the rules and there is a lot to learn in technical terms. Today I hope we will learn a lot about R16. I hope everyone here from Myanmar will makes best of today's lectures and ask questions to clarify if any. We hope we keep developing this relationship between the two countries and that JASIC will keep supporting our efforts in the future.

2. Greeting by Mr. Ikuo Nakatani, JASIC Jakarta Office

I'm Ikuo Nakatani, head of JASIC Jakarta Office. First, on behalf of MLIT in Japan, I would like to thank the Myanmar government for hosting this expert meeting in

Myanmar today. As you all know, ASEAN is going to harmonize its automotive regulations as MRA and adopt international regulations soon. Out of various regulations to be adopted under MRA, we are going to study R16 today and tomorrow. It is not so often that we have an opportunity to have this much time to explain an UNR, so we'd like to make our presentation as detailed as possible. Please feel free to ask any questions at any time during the presentations. I hope this workshop will be useful to you all here. Thank you.

3. Technical requirements of R16

Mr. Fujisawa from JAMA presented what R16 on seatbelts is about as a whole, using both summary documents and the text of the regulation:

Q&A

Q: In Myanmar, people believe that the airbag won't deploy in an accident if you aren't wearing a seatbelt. Is it true?

A: No, the airbag opens even if you aren't wearing a seatbelt alright, but the point is, as it's written on it SRS, or *Supplement* Restraint System, an airbag is only of a supplementary function, i.e., an airbag works to its fullest only when you are wearing your seatbelt. So, be absolutely sure you wear your seatbelt. We recommend that all occupants wear their seatbelts, not only the driver, but the one in the passenger seat and all the others as well.

Q: Seatbelt manufacturers do their certification tests at their own labs and sell those which passed it to automakers. Are these seatbelts affixed acceptance label?

A: Every seatbelt has a tag with a letter "E" indicating compliance with R16. Automakers purchase seatbelts with this mark. An example of such a mark is shown in page 53, Annex 2.

Q: On Slide 23, you say R16 is linked with R14 and seatbelts are not tested under

R14. What does this mean?

A: Normally, an approval under R14 is taken by the bodywork manufacturer. R14 defines the requirements for strength of anchorage to the bodywork. When you evaluate compliance with the R16 requirements at the same time as you test a part under R14, you don't need to do R16 tests. In other words, if you don't seek an approval under R14, you have to separately test parts alone for compliance with the strength requirements of R16. There are a seatbelt assembly requirement and a strength requirement for the bodywork on which it is mounted, and R14 evaluates the seatbelt and the bodywork as a set.

Day 2: Friday, December 20, 2019 10:00 -16:00

4. Tests and certification requirements of R16

Mr. Tana from NTSEL first introduces the organization and activities of NTSEL and then explains the test procedures of R16.

Q&A

Q: How is the buckle opening/closing test done after cold conditioning?

A: You wear gloves and manually you do that quickly from the cold chamber.

Q: Where is the opening and closing test facility for buckle buttons?

A: At the seatbelt manufacturer's place (NTSEL does not have all facilities). We attend the manufacturer's test.

Q: Do you perform or witness all the tests?

A: No, we don't attend all the tests. For some, we only receive certificates (or test reports).

Q: Who does calibrate test equipment?

A: It is responsibility of the manufacturer who owns the equipment to calibrate it.

NTSEL checks the calibration report for the equipment.

Q: How many major manufacturers are there for seatbelts?

A: There are four companies or so in Japan.

Q: How long does it take to complete the series of seatbelt certification tests?

A: About two months.

Q: What about parts from overseas manufacturers?

A: NTSEL checks the certificate.

Q: Who issues the certificate (certificate of approval)?

A: Test reports are issued by NTSEL. Licenses are issued by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT).

Q: What is the relationship between NTSEL and MLIT?

A: NTSEL is the only testing agency for certification designated by MLIT. NTSEL is an extra-governmental organization under MLIT.

Q: Who designs deliberative bodies or subcommittees under JASIC?

A: Subcommittees are set up by JASIC in accordance with the working group categories at WP.29.

Q: Could we get a copy of test reports NTSEL submits to MLIT. What we want is the format, not the contents.

A: You got it.

Q: We produce vehicles, but it's just knockdown. There's hardly any parts or members we manufacture ourselves in Myanmar. So, we aren't ready yet to test any of those things. You said there are more than 120 regulations in place in Japan, but the most urgent task for us is to introduce 19 regulation under ASEAN MRA. Large vehicles come with a lot of parts and components. If we are to produce them here in Myanmar, we have no idea how we should do the tests. So, we would appreciate if you could show us how you do yours in Japan.

A: A way you can check your vehicles under the 19 regulations without having any testing equipment is you ask someone to do that who can do those tests. The other way is to introduce equipment and do the tests yourselves. These are the two ways

you can have test reports. To check the test reports written by someone else, you first study how to yourselves at MOPFI and then check if the report is correct.

Q: Do vehicles from outside come with test reports?

A: There are two cases: one is where test reports written under ASEAN MRAs come in and the other is where they come from other places than ASEAN like Japan and Europe. What you will have to check is these two kinds of reports. The first thing you need to do is learn what are requirements for the 19 regulations and what kind of test results are required.

Q: The text for R16 you gave us include also related regulations such as R14, R44, and R129. There are also ISO and so on. Understanding what these regulations and standards say can be quite a task.

A: The most important for you for the time being is to understand the details of the 19 regulations. As to related regulations, it is sufficient if you know, for example, that R44 is a regulation on CRS. Then you can deal with R16. It won't be too late even if you work on this and that related regulations as necessity arises.

Q: How many employees work for NTSEL? How many of those are engineers? How many private testing labs are there in Japan?

A: NTSEL has 40 employees. Of those, experts are about 30. For each of three categories of testing, i.e., emissions and fuel consumption testing, brakes and noise testing, and other testing, there are about 10 people.

As for the private sector labs, Japanese automakers have facilities of their own to conduct tests and, with NTSEL attending their tests, they can write test reports for obtaining UNR approval. Engineers at manufacturers do both development and tests, so number of engineers at each company may amount to several hundreds.

Q: There are endurance tests prescribed in regulations, but how long can you actually use your vehicle (how long is the warranty period)?

A: The manufacturer ensures a durability that is sufficient to ensure stated performance through the life of the vehicle.

Q: On slide 25, I see N stands for Newton, but what is G?

A: Gravitational acceleration. 1 G is 9.8 m/S²

Q: Slide 59 was very informative. In Myanmar, there is no classification of seatbelt types.

A: The regulations clearly states which seats must be three-point belts and which ones two-point belts. So please keep them in mind.

Q: I see this for outside seats but, for the center seat, where is the shoulder belt of the 3-point seatbelt?

A: Generally, there are two types: one is where the retractor is built in the ceiling and the other is where the retractor is built in the seatback.

Q: When Shakyamuni Buddha laid down the rules for his disciples, he laid them down all at once, but how about the Japanese automobile laws? I would like to know how you proceeded to adopt each of those regulations.

A: Generally speaking, in Japan, we had a lot of traffic accidents and regulations were developed and put in place to address these issues. The accumulation of such efforts forms the laws and regulations as we have now.

For motor vehicle-related legislation, drafting and implementing a nice regulation doesn't work if there aren't technologies that support what it says. Motor vehicle legislation today in Japan is the result of piling up such regulations one by one just like building bricks to address individual issues. In Japan, legal environment for occupant protection has been almost established and from now on efforts will be directed to develop environment of preventive safety.

Q: Do you pass all the tests? Do they fail by chance?

A: Manufacturers build their vehicles to pass the tests, so basically, they pass, but, as rare as it is, there may be inadequate test equipment or inadequate vehicle construction resulting in failures or test failures, which were remedied tested again. Japanese car manufacturers are very good at eliminating potential risks, so they develop their vehicles with a good leeway to avoid being rejected.

Q: Is cold impact testing of rigid parts not performed these days because they can't get caught in the seat and door?

A: This applies to all belt rigid parts. The most probable one is tongues, which is retracted by the retractor to return to the retracted position, so there is no risk of getting caught in the middle. Therefore, it has almost no track record in certification.

Q: Do domestic belt manufacturers use a deceleration type?

A: Some companies use the acceleration type and some use the deceleration type. They say deceleration type is cheaper than accelerated type in overall cost.

Q: Do you use a 10-year-old dummy or a CRF?

A: We use both for certification. However, we use CRF more often than not.

Q: I'm running out of time today, so I'll send you a summary of additional questions if we have any.

5. Closing Speeches by Mr. Yi Yi Kyaw, GM

Thanks a lot to Mr. Nakatani, Director of JASIC Jakarta Office, and Mr. Yamada of NSS, for giving us this opportunity to study such an important issue for such a long time. We are all grateful. I am also thankful to Mr. Fujisawa for explaining the requirements of R16 and Mr. Tana for explaining the test procedures. Your explanations about R16 have been extremely helpful to us all. We look forward to being able to keep working with you in the years to come. I would like also to ask all participants from Myanmar to keep supporting us in the future meetings, because we all know that we must keep following this path. It is essential our automobile industry deepen its understanding of UNRs. In closing, as a representative of the Myanmar government, I would like to express my gratitude again to the people of Japan for their support.

Meeting scene:



Commemorative photo

