

DRAFT REPORT

6th meeting of the GRSG informal group on Accident Emergency Call System (AECS)

Venue: Parkhotel Prague, Veletržní 1502/20, 170 00 Praha 7 (Czech Republic)
Chairman: Mr. Denis Zagarin (RUS) (zagarin@autorc.ru)
Secretariat: Mr. Olivier Fontaine (OICA) (ofontaine@oica.net)
Dates: 18-20 November 2014
Times: starting at 10:00 am on the 1st day, and finishing at 4:00 pm the last day

1. Welcome and Introduction

Approval of the agenda

Document: AECS-06-01 (Chair - Secretariat)

The agenda was adopted with the addition of an item dedicated to the presentation of the situation in national regions

2. Revision and approval of the draft minutes of the 5th meeting

Document: AECS-05-10 (Chair - Secretariat) Main outcomes of the 5th meeting

The minutes were adopted with no change.

3. Exchange of view on national situations

3.1. Russia

The Chair presented the situation in RUS.

The first crash tests of a vehicles, equipped with accident emergency call systems, were conducted at the NAMI' Testing Centre to evaluate certification testing procedures for assessing conformity with the requirements of the Customs Union Technical Regulations "On the safety of wheeled vehicles" for automatic activation of system in collisions, which will come into force on 1 January 2015.

The performance of the accident emergency call system which has been installed in a vehicle category M1 were evaluated during the crash tests in accordance with UN R94 and UN R95. During the tests the terminals of two different manufacturers have been installed (Cesar Satellite and Fort Telecom). All terminals survived after collision, two-way voice communication have been performed and correct MSD information has been transmitted.

The pilot tests at NAMI' Testing Center provided an opportunity to develop test method and now Testing Centre is ready to provide certification tests of complete vehicle in connection with the accident

emergency call system (by means of real mobile networks of mobile operators and test system of ERA-GLONASS).

Moreover NAMI have just received a simulator CMW500, which allows to improve the testing process. At the moment NAMI provides training for specialists operating it.

The Chair provided additional information concerning other works under this issue. By the experts of Testing Centre with the support of automakers and component manufacturers, as well as specialists of GLONASS UNION other investigations have been conducted to develop a test methodology for ensuring the requirements for a rollover accident, which will come into force from January 1, 2017.

NAMI analysed data obtained from the evaluation of the dynamic and static vehicle rollover of all vehicles of category M. As a result of investigation were proposed the criteria for determining of the accident moment and triggering automatic emergency call system (angle of rotation around the vehicle longitudinal or transverse axis was adopted as a relevant criterion).

The works are currently in progress and upon the completion of works, the methods developed will be recommended as certification tests. (M1, M2 - using a special, non-destructive, equipment for rollover, M3 category – in connection with the UN R66).

OICA questioned the progress in the definition of the rollover test.

RUS hopes the finalization to take 6 months, and the test procedure would be ready early 2016.

M1/M2: static RUS tests because the key criterion is the angle, M3: during UN R66 test, depending the approach chosen for the test.

The Chair expected that static test will be available around mid-2015 (as a first guess). M1/M2 static test could be non-destructive. The proposal is currently at the stage of a scientific research, then it will be presented to the Ministry, with the hope it will be accepted.

Angle could be 85° for M1 Category: the vehicle would be set on a holder, which would be rotated up to the relevant angle. Yet the manufacturers found this not well related with the current algorithms on-board the vehicle, where other parameters are taken into account. RUS reported about the discussions that have been held with OEMs to date. Yet the decision is not taken yet. The Chair informed that there is no plan to extend the tests to other scenarii. It is a decision taken at Custom Union level (i.e. RUS, Belarus and Kazakhstan (Uzbekistan and Armenia will join at a later stage).

3.2. European Union

The expert from the European Commission informed about good progress made towards getting the Ecall Regulation adopted by Council and Parliament. Large majority of issues solved, but two: Use of delegated/implementing acts in Article 6 of the proposal, which is internal cuisine, and date of application. Council and EP positions are converging, no final decision yet on the date of application, but assumption is that early 2018 would see mandatory Ecall for new types of M1 and N1 vehicles.

Council and EP agreed about mandatory compatibility with Galileo and Egnos, and mandatory permanent installed systems.

The European Commission was confident that the high-level regulatory discussions are closed by the end of 2014, then the technical items can be discussed further.

There was no clue on whether the EU regulation would refer to the UN regulation, yet if the scope and technical requirements are compatible to the EU decisions, then nothing would prevent the EU regulations to make a complete reference to the UN regulation.

1st draft to become available for Industry is expected by “earlier than the 12 months that can be given to the Council and the Parliament to adopt the delegated act (there will be more than one act, 2 or 3). The European Commission needs the political decision rather than waiting for the publication in the OJ.

Reference to open platform will be present. DGMOVE started work on Open Platform.

3.3. Russia/China

The RUS delegate informed about political willingness to cooperate between RUS and China on several areas of activities, among which Ecall. Yet this is not closely related to the work performed within this informal group.

3.4. Republic of Korea

ROK presented their national approach to AECD homologation (see document AECS-05-08)

The experts had an exchange of view on the ROK presentation, notably the compatibility of the self-certification with the 58 Agreement.

4. Outcomes of GRSG-107 (30 September - 3 October 2014) and 164 session of WP.29 (11-14 November 2014)

A summary of the outcomes of GRSG-107 and WP29-164 was given to the informal group.

The Chair reported the discussions at GRSG-107 (GRSG-107-11), with the three possible options: Option 1: restricted scope, option 2: one regulation per region, option 3 classes of approvals. The relevant paragraphs in the GRSG report were mentioned: 38 to 40 in GRSG/86.

At WP29 the Chair of GRSG reported as above, and OICA presented document WP29-164-31 proposing to restrict the scope to the “red” components, supported by Japan and CLEPA. RUS was supporting the “classes approach”. WP29 then decided that the informal group should primarily focus on option 3, keeping the option 1 in mind. After discussions with the GRSG Chair, the informal group Chair proposed that the informal group works on the basis of Option 3, knowing that the situation can change in the future. Should it change, then the draft could be adapted accordingly (e.g. cutting some parts related to the connectivity). The Chair was reluctant to resume the debate about the scope because no further arguments could be added. The Chair still had the hope that some Contracting Party position evolve in the near future, making the situation clearer.

Debates with regard to the scope of the regulation:

The NL mentioned the OICA informal document at WP29 related that the Revision 3 of the 58 Agreement (WP29-164-23) clarifying that options for acceding to different parts of a regulation will be impossible in the future. Hence the only viable solution will be Option 1.

J informed about J internal discussions, where option 1 is favoured. The UN regulations should be based on performance requirements. Communication standards rapidly change, and with Option 3 they should be integrated into the UN regulation, and very often changed, while the relevant experts are not always present at GRSG and at the AECS informal group. The delegate recalled that at GRSG, J and D supported Option 1, and that at WP29, OICA, CLEPA did as well, and at this AECS-06 meeting NL does as well.

A debate took place on the way to proceed. The Secretary mentioned that the group could take the opportunity of the presence of the GNSS experts for informing a good decision.

OICA deplored that MNO (Mobile Network Operators) as one key party is not present.

RUS proposed that MNO experts are actively invited in this group. RUS was confident that the RUS part could be included into the draft text as it already exists in RUS.

OICA recalled the problem of updating of national communication standards, because these requirements will be fast obsolete. This would be a real concern for OEMs because they will have to comply with the UN regulation and simultaneously comply with the evolved national regulations. Continuing with option 3 will block OEMs from complying with the national requirements hence Option 3 would have no added value. The OICA spokesman insisted that the OICA position is not only a wish, it is a necessity within the UN 58 Agreement framework because the communication standards are out of control of the WP29 system. OICA was well aware that compliance with communication national standards will remain under the responsibility of the OEMs. UN requirements would add an unnecessary step, delaying the OEMs compliance with the national obligation.

It was also pointed out that the ITS informal group has the task of solving this issue because WP29 is unsure about the situation and the AECS informal group is in the middle of that debate.

CETECOM and Qualcomm informed about their knowledge and experience in the “blue parts” (see document WP29-164-31). The principle of mutual recognition was clarified to the “communication” experts, i.e. a vehicle approved in one Contracting Party should be accepted in any other Contracting Party. This system could not work with the current communication network standards because they are different in different countries. Qualcomm confirmed that mandating telecommunication standards would generate strong reactions from telecommunication companies.

The Chair was keen that the group makes a decision.

RUS recalled that option 1 would provide approval for only a part of the AECS. For the interface components, they would have to be regulated outside the regulation, hence at national level. The issue of an “incomplete regulation“ is that there is no guarantee the system works, hence would be of no value to a Contracting Party.

Qualcomm proposed performing the approval with one particular region-related set of components, and make references to the component related to other region that are certified for these regions (GCF certification – Global Certification Forum certification). The expert explained that the device supporting e.g. 2G and 3G is the same. Hence the only necessary requirement in the regulation would be the fitment and the resistance to crash.

J informed about document WP29-164-13 (Japanese Position on the draft UN Regulation on hydrogen and fuel cell vehicles) showing the importance of the scope of each regulation.

The European Commission pointed out that the Option 1 would imply the possibility for the Contracting Parties to implement national requirements for GNSS, mobile phone communication, data transmission and privacy and data protection.

A debate took place to determine the level of details for ensuring that the components are “identical”, i.e. guaranteeing same behaviour with regard to resistance to crash.

Qualcomm (Dr. Weber) explained the ERTICO proposed Ecall certification process via slide 13 of the CETECOM presentation (AECS-06-08). The question was raised about the members of the “certification body” as not any group of persons should self-declare as such. TRL informed that there is not yet decision at EU level, but it may happen, that all this certification process would become mandatory, where the certification body would become the Type Approval authority and the accredited lab the Technical Service.

The experts discussed the following proposal:

- Basic idea:
 - o last attempt to capture the telecommunication aspect of the “blue components” in WP29-164-31 scheme.
 - o avoid repetition of telecommunication certification tests as this aspect is already covered in the telecommunication world.

- Approval tests (crash, EMC, etc.) performed with one module telecommunication-certified to one particular region, and
- Some kind of “guarantee” in the regulation that all modules telecommunication-certified for other regions by an accredited body (tbd) will fulfil all the approval test requirements (crash, EMC, etc.).
- Parameters for the guarantee:
 - o Weight
 - o Mounting points
 - o Hardware layout
 - o Etc. (others?)
- Inherited communication-certification: the regulation relies on a certification performed by an accredited body.
- Question: parameters for determining “accredited”.

TRL wording proposal:

- AECD approval should avoid repetition of telecommunication certification tests as this aspect is already covered in the telecommunication world or by national telecommunication legislation
 - o For instance, network access could be considered as sufficient performance validation that GCF certification has been passed, therefore negating the need to repeat any GCF work.
 - o Out-sourcing of telecommunications must not compromise the responsibility of the technical service.
 - This still needs further consideration – if telecommunications aspects are to be regulated (noting that this may be at the national level under Option 1).
- Full-scale vehicle approval tests (crash, voice quality, HMI, antenna?, etc.) performed with one approved AECD module (may be that approval of the AECD is to one particular region)
 - o Ideally, vehicle tests are not repeated with different AECDs subject to the AECDs being equivalent in terms of the vehicle assessment
 - o Parameters allowing use of alternative approved AECD:
 - Weight
 - Mounting points
 - Etc. (others?)
 - o The potential need for vehicles to be retested when fitted with an alternative AECD is to be judged by the technical service (with information from manufacturer)
- Component-level AECD tests can be used to determine crash-resistance effects of small regional changes, etc.
 - o Different suppliers of elements to be fitted in same basic structure.
 - o The need for variants (for different regions, etc.) to be tested is to be judged by technical service (with information from manufacturer)

A debate took place on whether this above approach is compatible with the principles of the 58 Agreement. Several Contracting Parties could not accept the principle of inheritance of certification because the final responsibility of the approval must remain to the Contracting Party’s national Type Approval authority.

Radical Option 1	Option 2	Option 3	Comments
NL, J, ROK, D, I, CLEPA, OICA,	-	RUS, European Commission	- European Commission favours Option 3 as a long term goal but accepts Option 1 at the first phase.

			- RUS can accept Option 1 but still in favour of Option 3
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Conclusion: Informal group adopted Option 1 as defined in document WP29-164-31 in regards of communication components of the AECD

5. Revision of the main pending items

5.1. Scope of the regulation

J confirmed that their position did not change, i.e. AECS-05-03:

1. All M1 and N1 vehicles to be approved with regard to AECS must be equipped with manual triggering.
2. Automatic triggering must operate in all the applicable crash tests.
3. The automatic triggering requirement is not applicable to those vehicles to which neither UN R94 nor UN R95 applies.
4. At the request of the vehicle manufacturer, automatic triggering for frontal or lateral collisions may be approved under this Regulation even for vehicles to which neither UN R94 nor UN R95 applies, or to which only one of them applies.

The other Contracting Parties confirmed their positions of the last meeting, i.e. inclusion of the sentence: “Vehicles not in the scope of UN R94 and UN R95 and not fitted with an automatic triggering system shall be excluded from the scope of this regulation”.

The European Commission recalled their position: to make the most possible benefit from Ecall by equipping as many M1/N1 vehicles as possible, i.e. only those not in UN R94 or UN R95, and those having no automatic triggering system (i.e. in practice having no airbag) will be exempted. There is no economic justification to mandate manual triggering for these rare vehicles.

J subsequently could understand this approach but could not accept it for Japan. Therefore J found that this does not achieve international harmonization, hence requested that the group re-consider the position.

OICA clarified that the concern was more for some M1 derived from M2, or other types as special series. OICA did not support the EU necessity to apply the same rule (i.e. same scope and requirements) for automatic and manual triggering. To help discussions in the group, TRL requested OICA to provide figures of the number of vehicles excluded by the EU/OICA approach or that would be fitted with manual triggers according to the Japanese approach.

RUS recalled their position: since Customs Union Technical Regulation includes provisions for both automatic and manual-only triggering, RUS would accept EU approach as long as AECS regulation wording would permit applying regional (national) regulation for any vehicles not in scope of AECS regulation.

Some debate took place on the criteria for defining the scopes at UN level vs. national level. According to the OICA proposal, the vehicles not in scope of UN R94/95 and not equipped with automatic triggering system, should be excluded from the scope of the regulation.

The European Commission shared the EU wording: “*vehicles which cannot for technical reasons be equipped with an appropriate Ecall triggering mechanism, as determined in accordance with paragraph 2. The Commission shall be empowered to adopt delegated acts in accordance with Article 9 to identify vehicles or classes of vehicles of categories M1 and N1 which for technical reasons cannot be equipped with an appropriate Ecall triggering mechanism, on the basis of a cost/benefit analysis carried out or mandated by the Commission and taking into account all relevant safety and technical aspects*” (2013/0165 (COD) - Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning type-approval requirements for the deployment of the eCall in-vehicle system and amending Directive 2007/46/European Commission)

The group then discussed the inclusion of the following sentence into the scope description: “*Vehicles not in the scope of UN R94 and R95 and not fitted with an automatic triggering system shall be excluded from the scope of this regulation. These vehicles can be approved at the request of the manufacturer.*”

The experts identified the following concerns:

- Full harmonization not achieved.
- What about those vehicles nevertheless equipped with manual triggering as the European Commission links manual and automatic triggering (either both or no triggering system)
- Definition of technical feasibility of fitment of automatic triggering system

Conclusion:

- General agreement to exclude those Vehicles not in the scope of UN R94 and R95 and not fitted with an automatic triggering system.
- OICA and European Commission to identify the vehicles that may be excluded according to the OICA/EU approaches. Note the necessary criteria for correctly identifying these vehicles.
- Item to be finalized at next meeting.
- J to confirm acceptance of the concept at next meeting.

5.2. Vehicle homologation: type of triggering, functional testing and procedures of homologation

Background:

- Question on whether manual triggering mechanism should be in the scope of UN Regulation.
- vehicles without triggering system

This item was not specifically discussed.

5.3. AECD homologation

Document: AECS-06-02-Rev.1

5.3.1. Mechanical resistance

Background: Question on detailed requirements for device resistance under sled test conditions

The group amended the CLEPA original proposal as follows:

“6.7. *Resistance to impact*

The AECD shall remain operational after ~~frontal~~ impact. This shall be demonstrated according to Annex B”.

Subject to the final scope, the CLEPA proposal well matches the concept of “safe zone” presented by OICA.

RUS recalled their position that the safe zone concept without crash test should be restricted to the rare cases of vehicles not in scopes of UN 94/95. OICA challenged that opinion. RUS supported TRL approach where components impact tests are accomplished with higher deceleration values compared to those typically occurring during UN R94/95 tests. In this approach component testing ensures AECD survives a severe crash, while UN R94/95 tests are focusing on installation (mounting, cabling, antenna placement, etc.) and ability to stand deformations.

Conclusion on general requirements: item to be further discussed at next meeting.

Debates on Annex B (Frontal impact demonstration test for AECD)

Test conditions

CLEPA proposal:

“1. Preparation for the test

The main components of AECD shall be rigidly fasten on the test cart by means of the same elements of fastening which will be used for installation of the main components of the AECD on the vehicle, and this fastening shouldn't increase strength of the specified components.”

Discussions:

TRL supported the concept but found the wording ambiguous (“main components”).

OICA raised that in the frame of Option 1, “main components” means that Contracting Parties should not require to repeat crash tests. The expert suggested establishing an exhaustive list:

- Main module
- Fixation points
- Speakers and microphones, connectors when not tested per vehicle approval

D proposed to require “all”, and let the TS decide what to test.

Crash test for deformation (“all AECS components”), sled test (“all active electronic components”) for deceleration: OICA to provide proper proposal for next meeting.

Conclusion on test conditions:

- OICA, supported by the European Commission, to provide proper wording capturing the above concept.
- Deletion of requirements on relative humidity and air pressure.

Test deceleration

CLEPA proposal:

“1.2 Deceleration of the test cart is defined with the help of system measurement for frequency characteristics with a class 60, corresponding to characteristics of the international ISO 6487 (2002) standard.”

Wording of UN R129, as an example: *“In all cases the calibration and measuring procedures shall correspond to those defined in the International Standard ISO 6487-2012; the measuring equipment shall correspond to the specification of a data channel with a channel frequency class (CFC) 60.”*

D and RUS suggested to include the test proposed by TRL in their report NB-04-14-361-EN-N, i.e. 75G for at least 5ms (see page 67 of the report).

OICA had no opinion for the moment: OICA requested proper justifications on the curves and decelerations. TRL informed that there is indeed very limited justifications, only that the concept is to create really severe conditions. Usual UN R94 crash tests do not go higher than 40G (worse case in some small vehicles).

RUS informed that the value of deceleration might come from some AECD supplier internal tests which have been carried out within the pilot tests of vehicle equipped with AECD. RUS committed to provide information on that item at the next meeting.

Conclusion:

- Agreement on the concept of decelerations higher than those of UN R94/95, to a reasonable value.
- Final value to be decided at next meeting.
- Wording should be taken from existing text from regulations annexed to the 58 Agreement.

Test criteria and AECD operational requirements

Complete paragraph 3 mainly based on OICA approach of functional check (see document AECS-05-05). Possible simple reference to Annex 8 as proposed in document AECS-05-05 could be sufficient.

Conclusion:

- All to review OICA proposal per AECS-05-05 (Annex 8) as to whether it is relevant for section 3.
- OICA to provide update of this Annex 8 prior to next meeting.
- Item to be reviewed in depth at next meeting

CLEPA proposal for test requirements:

“3.1. The main components shall have no visible damage which causes their disability”

Discussions:

Proposed wording leads to interpretation. Main goal is that the Ecall is emitted.

Conclusion: agreed to delete this criterion.

Test method for navigation solution

The informal group agreed to align the decision with regard to this paragraph on the final decision with regard to the three GNSS constellations.

5.3.2. Navigation module requirements

Documents: AECS-06-03 (Qualcomm)

AECS-06-04 (Qualcomm)

AECS-06-05 (Qualcomm)

Background: Question on GNSS requirements and existing test methods

Discussions:

CLEPA presented document AECS-06-02-Rev.1, pointing out that as no GNSS test method currently exist, the CLEPA proposal is the 1st attempt in that direction. The experts were informed that a GNSS working group was established within CLEPA, mainly based on ERTICO expertise network.

GSA pointed out that accident location is possibly not part of the regulation in case of Option 1.

RUS indicated that Option 1 excludes all GNSS and telecommunication requirements, hence only the mechanical tests are relevant and to be performed in “radical” Option 1. RUS suggested earlier decision on selecting Option 1 was justified in respect of communication components but not GNSS, which are global and can therefore be harmonized. RUS favoured the TRL proposal as it seems more stringent.

The European Commission supported RUS and GSA comments. The European Commission also expressed its scepticism about the reference to TPS Ecall in OICA's draft.

Qualcomm was of the opinion that some level of accuracy in the content of the MSD with regard to positioning would be necessary for ensuring proper Ecall efficiency. A debate was held on the level of detailed requirements with regard to positioning in the case of Option 1.

OICA voiced that as there is no harmonization possible for GNSS, the CLEPA neutral approach was favourable.

A footnote attached to paragraph 6.2. could mention that Contracting Parties are free to request national testing for positioning requirements. Yet the European Commission mentioned that an “agnostic” approach would jeopardise the possibility for Contracting Parties to nationally require compatibility to their GNSS. Hence only 2 options are possible: deleting any reference to GNSS testing, or mandating compatibility to the 3 existing constellations.

GSA challenged the red colour of the “position logic” box in the OICA scheme (document WP29-164-31). GNSS experts confirmed that a multi-constellation system can guarantee maximum quality with all three existing constellations. The quality of the positioning could then not be a reason for preferring the absence of GNSS testing. OICA then proposed that multi-constellation GNSS testing be added as an “if-fitted” requirement.

4 possibilities were then identified with regard to GNSS multiple constellations:

1. Deletion of GNSS references
2. Complete set of requirements for GNSS with no combination of the 3 constellations (to be deleted as it implies options in UN regulation.)
3. Complete set of requirements for GNSS with combination of the 3 existing constellations
4. If fitted requirements for complete set requirements for GNSS: “if the vehicle is fitted with GNSS capabilities, then it will fulfil the requirements of paragraph XXX [performance requirements detailing all performances related to the 3 existing constellations in combination]”.

There was a debate on the way to capture the current and future augmentation systems (e.g. Egnoss). Yet it was stressed that all augmentation systems are SBAS (Satellite-Based Augmentation System) compatible.

Positions of the parties:

GNSS multiple constellations possibilities	Parties	Comments
1. Deletion of GNSS references	J, OICA	OICA in balance with Option 4
2. Complete set of requirements for GNSS with no combination of the 3 constellations		Option to be deleted as it implies options in UN regulation
3. Complete set of requirements for GNSS with combination of the 3 existing constellations	RUS, European Commission	European Commission in balance with Option 4
4. If fitted requirements for complete set requirements for GNSS	D, I, European Commission, OICA	- Italian position to be confirmed - CLEPA willing to consider this possibility - European Commission stressed that Option 4 provides more flexibility to Industry - OICA to internally investigate
TBD	NL, ROK, CLEPA	

Conclusion:

- To be decided at next meeting
- RUS and GSA to construct a proposal on GNSS test method.

5.3.3. Emergency call assessment (Means of access to mobile networks)

Background: Question on requirements and existing test methods

Discussions:

The original CLEPA proposal was amended by the group into: “The AECD shall be fitted with a ~~non-removable~~ **an embedded** hardware allowing to get registered/authenticated and to ~~use~~ **access to** the mobile network”.

CLEPA justifications: SIM-chip or similar technology is targeted here for identification and authentication on the mobile phone network or the PSAP. No need for further details as telecommunication performances requirements will be out of the scope of the regulation.

Some experts questioned the necessity of a “non-removable” hardware. The antenna is not part of this paragraph as not part of Part I of the regulation. Yet the SIM chip should be non-removable.

Note of the Secretariat: TRL subsequently suggested editorial improvement: “*The AECD shall be fitted with an embedded hardware allowing registration/authentication on and access to the mobile network*”.

Data transmission and voice connection assessment

Background: Question on requirements and existing test methods

The original CLEPA proposal was amended by the group into:

“The AECD shall ~~first try to~~ send data and ~~then try to~~ establish voice connection with the PSAP.

*If the sending of data failed then the AECD **shall** retry sending the data.*

*If the AECD has successfully sent the data and then loses the voice connection, it **shall** try to reestablish voice connection.*

In case it was not possible to establish voice connection and/or send data using mobile communication networks, the AECD shall store the data in non-volatile memory and attempt re-transmission of the data and to establish a voice connection ~~until PSAP ends communication~~.

[Whenever, a third party emergency system is installed in the vehicle compliant with regional or national standards for private Ecall [e.g. for EU CEN 16102:2011 standard “Operating requirements for third party support” (TPS Ecall)], the driver has the free choice to use this system. It has to be ensured that there is only one system active at a time”].”

There was a debate on the necessary requirements to add for assessment of data transmission and of voice communication establishment. TPSs (Third Party Services) are not addressed in the draft regulation. CLEPA was keen that the data are not sent several times to the PSAP. The full paragraph was questioned as the connectivity will not be part of the regulation (Option 1). Yet there will be some necessary requirements for the after-crash capabilities.

As the CLEPA proposal does not go in sufficient details, it was not possible to assess whether it can be in line with the EU requirements and the related standard.

J was keen to keep this paragraph in the regulation in order to achieve the best harmonized level.

OICA tended to agree with Japan as all that is not telecommunication-related should and can be harmonized in the regulation.

RUS pointed that the harmonization could be achieved by adding all the existing requirements. In this regard, the expert recalled the document AECS-03-04 (RUS) and that at the 3rd meeting, the group agreed to scrutiny the Classes approach. Yet RUS could agree to keep the paragraph proposed by CLEPA with some further improvements, assuming detailed description of data transmission

mechanism and operational requirements are now excluded from the scope of the AECS regulation and are therefore regulated at the national level.

CLEPA stressed that their proposal is a “smallest common denominator” between EU and RUS and avoids any reference to telecommunication provisions, while in the same time sufficiently describing the nature of AECD.

EU and RUS agreed then to keep this paragraph.

NL proposed to keep the final sentence (relating to TPSs – in square brackets above) for placing it in the installation requirements. This was agreed. Yet proper wording needs to be found at the time of paragraph 15 discussions.

Italy challenged the possibility to have only one system active as this system could then be the TPS hence a non-homologated system.

Conclusion:

- Item not fully covered
- Informal group to invite ITU for their expertise in voice quality.
- Final sentence relating to TPSs (in square brackets above) for placing it in the installation requirements.

5.3.4. AECD information and warning signal

RUS pointed out that this provision applies to the installation requirements. Yet CLEPA explained that the proposal aims at ensuring that the AECS has the capability of providing warning signals.

OICA recalled that at AECS-05 the HMI could either be tested at installation level (paragraph 15) or device level (paragraph 6). It is hence necessary to ensure that the text present at this level is aligned on that of paragraph 15.

Proposal for paragraph 6.5.:

- “6.5. *AECD information and warning signal*
The following provisions are applicable if the AECD warning signal verification is not part of the installation approval of an AECD in a vehicle per Part II of this regulation.
- 6.5.1. *Information shall be provided regarding the status of the connection when the AECD is automatically or manually activated.*
- 6.5.2. *A warning signal shall be provided to the driver when the AECD is not functioning properly.”*

OICA committed to provide a revised wording for the next meeting.

TRL questioned the need to verify the installation of HMI in the vehicle. OICA supported that an approval to UN R121 should be sufficient.

Conclusion:

- wording adopted,
- wording of paragraph 15 to be aligned accordingly,
- OICA to confirm wording for next meeting.

5.3.5. Power supply

TRL raised that CEN recommends 60 minutes autonomy in post-accident conditions. CLEPA pointed out that the longer the time, the more expensive the AECD.

RUS recalled 60 minutes in standby + 10 minutes in voice communication. In addition, the backup battery is not mandatory in the RUS proposal, as long as the AECS has the ability to fulfil the relevant requirements. RUS found the CLEPA proposed 20 too short.

AECD		CLEPA	CEN	RUS	UNECE
Functioning on normal electrical circuit conditions	Call-back time (minutes) Def: time during which the device is registered by the network.		60 at the minimum 12 hours at the maximum	120 in standby	Not relevant for power supply management section
Functioning on post-accident electrical circuit conditions (no external power supply)	Voice communication autonomous operation (connected mode)	5 for 1 st call 5 for 2 nd call	60 maximum	Total: 10	10
	Standby time on battery	20	60	60	60 (justification: PSAP request time to have the capacity to support injured occupants)

The group reached principle agreement on the following provisions:

“6.6. *Power supply*

The AECD shall be able to operate autonomously for a period of first not less than 5 minutes in voice communication (definition to be added – Qualcomm future email) mode followed by 60 minutes in call-back (definition to be added) mode and finally not less than 5 minutes in voice communication mode.

This capability is tested in following conditions:

- *battery has to be fully charged at the time the test begins, at the discretion of the applicant;*
- *Ambient air temperature: (25 ± 10)°C*

5.3.6. Possible overlap between AECD and vehicle homologation (e.g. mechanical resistance of manual control)

Item not discussed.

6. Schedule for further IG meetings

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|---------------------------|--------------------------------------|---------------------------------|
| - 7 th meeting | 25-27 February 2015 | Paris |
| - 8 th meeting | 31 March to 2 April | Hyundai (Rüsselsheim - Germany) |
| - 9 th meeting | 7-9 July 2015 | St Petersburg |
| - Buffer meeting | [1-3 or 22-24 September or GRSG-109] | TBD or Geneva |