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Position paper

Considerations regarding vehicle/machinery in scope of UN-R155 and type approved categories T, R and S

Summary

The European agricultural machinery industry is committed to implement the necessary future-proof cyber protection measures in their machinery and vehicles. A thorough assessment, as executed in this paper, is important to find in a neutral, non-biased way the right legal pathway for agricultural vehicles/machinery with regard to Cybersecurity.

The European agricultural machinery industry has deduced following conclusions from this assessment:

- The European Cyber-Resilience Act (**CRA**) **will become applicable** and create a level playing field for the technological industry at large, the off-road sector and for all agricultural vehicles and machinery.
- the CRA and related NLF legislation will provide at least an **equal level of protection** as the UN-R155.
- With the CRA applicable, inclusion in UN-R155 will create **double compliance and double work** for manufacturers.
- **A full assessment, why the stringent compliance requirements of the UN-R155** would be suitable for the agricultural vehicles sector, **is never done**.
- Discussions are ongoing in ISO to ensure that CRA compliance does not result in double compliance for manufacturers and suppliers.

Therefore, the **CEMA position** remains:

- That all vehicles/machinery should be in scope of one legislation, the CRA, that covers everything (all functions/ configurations/suitable compliance rules…). Reality learns that all agricultural machinery and vehicles are in scope of the CRA and are compliant to the CRA by mid-2027.
- That **global alignment** will be provided for the sector with a dedicated **ISO/NP 24882 Cybersecurity Engineering standard** which is under development and is of high priority.

Given the facts and without significant changes to the basis for discussion in UNECE, CEMA does not see an added value in the current UN-R155, including for global alignment and insists that **categories T, R&S remain excluded from UN-R155.**

CEMA aisbl - European Agricultural Machinery
Diamant Building, Bld A. Reyers 80, BE-1030 Brussels
T +32 (0)2 706 82 26 - F +32 (0)2 706 82 10
info@cema-agri.org - www.cema-agri.org

What follows in this document is a comparison between the UN-R155 and the EU Cyber Resilience Act (CRA) draft proposal, an investigation of the impact of double legislation / legal assessment of scope options, an assessment of the needs of SMEs and the impact on and alternative solutions for suppliers.

Comparison UN-R155 and CRA

Today, the UN-R155 is applicable only to on-road categories of type-approved vehicles. Agricultural and forestry vehicles and machinery are not in scope of UN-R155. Categories T, R&S were not included in the discussions and assessment prior to the publication of the final R155.

On the other hand, agricultural and forestry vehicle categories T, R&S and mobile machinery were from the start of the discussions in scope of the CRA and latter will be applicable as of mid-2027. The other on-road vehicle categories M, N, O and L are explicitly excluded from the CRA.

In support of making a well-informed decision **the following table compares the key requirements of both regulations.**

	UN-R 155	CRA
Version	**Rev. 3, Add. 154, 04/03/2021** **+ Amd. 1, Add. 154, 25/11/2022** **+ latest GRVA meeting 26/09/2023**	Commission Proposal published the 15.09.2022 + agreed amendments Council - European Parliament from 30.11.2023 based on latest Trilogue documents
Scope	**Section 1.:** Type-approved vehicle of categories: M, N, and for O when fitted with at least one ECU. Currently from level 3 onwards, categories: L6, L7 but expected is all L categories with at least one ECU. Proposal adopted in GRVA for inclusion of all L-categories with at least one ECU. **Amd 1, Section 7.3.1. and 7.3.4.:** Extension of type approvals first issued before 1 July 2024 are excluded from requirements of Annex 5 Part B or C. UN regulations are not providing clear technical requirements for the so-called “remote data processing solutions” (e.g. cloud systems or eCall emergency assistance) connected to vehicles (except for software update solutions with UN R156)	**Art. 2.1, 3 (1) and (2):** Products with digital elements that have or can have a direct or indirect data connection to a device or network. That includes all agricultural vehicles and machinery. Remote data processing solutions are in scope of the CRA and have to fulfil the same requirements as ‘products with digital elements’. **Article 2.2 (exclusion automotive sector):** Because of UN R155 and UN R156: vehicle subject to Regulation (EU) 2019/2144 and their software update solutions are excluded from the CRA. Article 54c Amendment to Regulation (EU) 168/2013 **(NEW exclusion L-category)** 1. Annex II to Regulation (EU) 168/2013 is amended as follows:

CEMA aisbl - European Agricultural Machinery
Diamant Building, Bld A. Reyers 80, BE-1030 Brussels
T +32 (0)2 706 82 26 - F +32 (0)2 706 82 10
info@cema-agri.org - www.cema-agri.org

		[table with direct UN-R155 reference for all subcategories]
Reference Management system	**Section 6.2, 6.3, 7.2, 7.3 as well as Annex 1, 2 and 4** The manufacturer is required to have a Cyber Security Management System (CSMS). The CSMS includes at least processes for cyber security management, risk assessment, secure development, validation of security features and vulnerability handling.	**Art. 10.2, 10.3, 10.5, 10.6, 10.7, 10.8, 10.9, 10.12 and Art. 11.1, 11.4, 11.7 and Art. 20, Art. 22, Art. 23, Art. 24 as well as Annex I, V, VI:** The CRA includes similar requirements that inherently require a management system process around the product: manufacturers must undertake a risk assessment, take into account the results during the lifecycle phases (planning, design, development, production, delivery and maintenance phases), fulfil essential requirements, handle vulnerabilities, provide security updates, ensure products remain in conformity, take corrective actions, report vulnerabilities to CSIRT / user / supplier, declare product conformity, draw technical documentation and to assess the conformity of the product (various schemes). To CE mark the product and draw the declaration of conformity, the manufacture must fulfil all these provisions. **NIS2 2022/2555** is covering the management system part related to the enterprise : audits at different level, governance, asset definition within the company, employee training, etc….
Risk assessment	**Section 5.1.1. (b), 7.2.2.2., Annex 5:** Required: identification, assessment, and mitigation of risks during product development based on a list of threats defined in the Regulation itself. The assessment must be documented and updated by the manufacturer.	**Art. 10.2, 10.3, 10.5, Art. 23 Annex I.1.3, V.3** The risk assessment in the CRA defines the applicability of the essential requirements. Manufacturers must undertake a risk assessment and the results must be taken into account during the planning, design, development, production, delivery and maintenance phases of the product. The risk

CEMA aisbl - European Agricultural Machinery
Diamant Building, Bld A. Reyers 80, BE-1030 Brussels
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info@cema-agri.org - www.cema-agri.org

		assessment must be included in the technical documentation by the manufacturer. Note: the European Standardisation Organisations will be developing a harmonized standard based on the EN ISO 12100 for the dedicated technical details.
Technical security requirements Standards	**Annex 5 Part A, B and C:** Threats are listed and considered in the risk assessment. Prescription of detailed and technology/algorithm agnostic countermeasures based on the threat.	**Art. 10.1 and Annex I.3:** The CRA contains technology/algorithm agnostic high-level requirements equivalent to cybersecurity goals. Similar to any EU NLF legislation detailed technical requirements are outlined in harmonised standards, common specifications, or European Cybersecurity schemes (CSA 2019/881).
Related Technical Standards	ISO 21434 is not mentioned in the legal text (only in a footnote as an example) There is a non-legally binding guideline available to connect requirements of the UN R155 to the current ISO 21434 standard, but no legal certainty for the manufacturer when fulfilling the ISO standard that the UN R155 is fulfilled too.	Ag industry started work at the level of the ISO TC23 SC19 AHG2 for an off-road standard harmonised to the CRA. European Standardisation Organisations will publish high-level harmonised standard(s) for the CRA. When fulfilled, a standard harmonized to the EU NLF legislations will provide presumption of conformity to the (essential) requirements of the legislation listed in annex Z of the standard. Harmonized standards, in accordance with NLF principles, must consider the state of the art and technologies implemented by other sectors. HAS consultants, who are independent from the EU conformity assessment bodies and industries, assess whether a new standard meets legal requirements. Once the HAS consultant approves the standard, it is considered harmonized with the legislation, and it can be published in the EU Official Journal.

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Legislation purpose	Cybersecurity in general, including anti-fraud and data privacy protection (see below). **Section 7.2.2.4 (b):** Without consent, protection of the data privacy during monitor and detection of new threat by manufacturer **Annex 5 Part A section 4.3.6 / 19 / 19.2 and Part B M8:** Protection against unauthorized access to the owner's privacy information and the payment account data.	**Article 1, 10.2:** All impacts of security incidents must be considered in the risk assessment including for the health and safety of users, and access management. **Annex I.1.3 (c):** CRA requires to protect confidentiality of personal data. Note: Synergies between CRA and GDPR (2016/679) are possible and encouraged in the Recital (17). GDPR is the dedicated legislation for the regulation of data privacy aspects. The RED DA 2022/30 ensures the protection from fraud (article 3(3) f). A harmonised standard will be available soon for this provision.
Compliance (Testing and certification)	**Section 5.1.1. and 5.1.3.:** The CSMS is verified through document checks and approved / refused by Technical Service or Approval Authority. **Section 5.1.2.:** Sample of Vehicle types are verified by Approval Authorities or Technical Services (both national) or in collaboration with the manufacturer. **Section 5.1., 5.1.3., 5.2. and Annex 2:** The type approval is granted, extended or rejected by the Approval Authorities who communicate the status to the Parties via Annex 2 form. **Section 7.4.2., 6.8:** CSMS compliance maintained or rejected based on reporting.	**Article 24 and Annex VI:** Manufacturer of Class I (critical) and Class II (highly critical) products, should demonstrate the product conformity: **Either** by a European notified conformity assessment body and by internal production control (Module B and C), **or** by approval of the quality system by a European notified conformity assessment body (Module H – full quality assurance). For other products, the manufacturer can demonstrate himself the product conformity (Module A - self-declaration). The self-declaration implies full liability by the company for the product. NLF offers possibility to use Type A, Type B and Type C harmonised standard and the presumption of conformity allows the manufacturer to test against a harmonised standard to comply the CRA.

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Reporting obligations	**Section 7.4.1.:** The manufacturer is required to report cybersecurity activities and new cyberattacks to the Approval Authority or Technical Service (national bodies) at least once per year. The manufacturer reports and confirms to the Approval Authority or the Technical Service that the cyber security mitigations implemented for their vehicle types are still effective and any required actions are taken by the manufacturer.	**Art. 11 and Annex I.2:** The manufacturer submits: • An early warning notification of actively exploited vulnerability / severe incident within **24h** to CSIRT and ENISA and eventually the dedicated Member State, • A vulnerability / incident notification with in **72h**, • And a final report within 14 days for vulnerability and 1 month for incident.
Vulnerability Handling	**Section 7.2.2.2.:** Processes must be implemented at the manufacturer's site to enable the remediation of threats and vulnerabilities in the product within a reasonable timeframe.	**Article 10.6** expected compromise text has an explicit definition of the 'support period' for vulnerability handling with notification to the user when support ends. This support period' must reflect the time the product is expected to be in use, taking into account in particular reasonable users' expectations, the nature of the product, including its intended purpose, as well as relevant Union law determining the lifetime of products with digital elements. Side elements: support periods taken for comparable products by other manufacturers, the availability of the operating environment, the support period of integrated components that provide core functions and are sourced from third parties…. All these elements should ensure a proportionality is choosing the support period.

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		The 'support period' should be at least 5 years.
Market surveillance	This is not regulated in UN-R 155. It is linked to the EU type approval legislation where market surveillance provisions are included similar to the 2019/1020 which is used for the NLF legislation that is the CRA. Technical services check the conformity of production at least every three years.	Following 2019/1020 Each member state must appoint at least one market surveillance authority. This authority can request access to the internal technical documentation of the products and carry out tests. It can specify corrective measures in the event of risks being identified. If the measures are not implemented, the market surveillance authority can ban the sale.
Implementation in the EU	Is defined in the EU type approval legislation for placing vehicles on the EU market. Not integrated into the EU legislation landscape (possible double-regulation between GDPR / RED DA / NIS2 and UN R155)	Based on the king available of the product on the market. Fully integrated into the EU legislation landscape avoiding double regulations (possible presumption of conformity with CSA 2019/881 to CRA, lots of touchpoints with the NIS2 2022/2555) Alignment of term definition across legislations (CRA is referencing 765/2008, GDPR 2016/679, NIS2 2022/2555 and 2019/1020 definitions) A standard can be harmonised to several legislations.
Responsibilities	The OEM is fully in charge and responsible. Any responsibilities of suppliers are arranged through their contracts with the OEM. This is an approach which works well in the automotive world but the balance of power in industrial settings is often different and in particular in the agricultural machinery sector with its many SME machinery manufacturers.	Manufacturer is responsible for the conformity of the product as a whole and proper integration of components. Suppliers of components that are also products with digital elements have their own responsibilities. This fits better the needs of the agricultural machinery sector and in particular its many SMEs that use off-the-shelf components.

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		Manufacturer‘s liability is engaged in case of damage due to a defect of the product, independently from the conformity assessment.

Summary of the comparison CRA versus UN-R155:

	UN-R155	**CRA**
Scope	Does not allow to cover all agricultural vehicles and machineries.	Broader and more stringent, with point-to-point cybersecurity coverage (i.e. with machine to machine communication, etc…)
Management system		Equivalent when considering NIS2
Risk assessment	Equivalent and based on threats	Equivalent and based on cybersecurity goals, but less technical (covered by harmonised standard as required by the NLF)
Technical security requirement	Equivalent but prescriptive	Equivalent but less technical and more flexible on the implementation. As for any EU NLF legislation, technical requirements are covered by harmonised standard
Related Technical Standards	ISO 21434	ISO 24882 (draft to be harmonised) + harmonised status from the European Standard Organisation CEN. With harmonised standard, manufacturer gets legal certainty (presumption of conformity).
Legislation purpose	Cybersecurity in general, including Fraud and privacy violation	Cybersecurity in general, including Health and safety of the user. When considering all related EU legislations, also: fraud, privacy violation, interoperability, AI, etc…
Compliance	Full integration to the homologation (3rd party conformity assessment)	From self-certification to full quality assurance depending on the class of product (NLF) In all cases, the manufacturer is liable for a defect of the product
Reporting obligations		More stringent on the response time and the level of information
Vulnerability Handling		More stringent on the ‘support period’
Market surveillance	Equivalent	
Implementation in the EU	Based on type approval Vague requirement in case of overlap with EU legislations and other UN Regulations	Based on the making available Good integration in the EU legislations landscape

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Responsibilities	Manufacturer is responsible of the compliance of the vehicle including components	Equivalent, but shared responsibility with the EU supplier for integration of component in the product

Further points to be considered:

UN-R155 is not an EU legislation, as already indicated. There can be a direct reference to a UN regulation inside the EU type approval legislation which will allow the placing on the market of vehicles in the EU. This direct reference means that automatically the EU follows the new amendments and implementation deadlines. There is an alignment. For agricultural vehicles there exist not a single UN regulation directly referenced. Main reason is the speed of adaptation and the different needs between automotive vehicles and agricultural vehicles. Within 167/2013 there is **only reference to dated versions of UN regulations**, mainly on components and installation of components. All current installation regulations referenced in 167/2013 are **uniquely for agricultural vehicles**.

The stringency of the UN-R155 lies in the compliance rules from real time monitoring solutions (detrimental for SMEs) to external certification of the processes, periodic reporting, certified quality management system, etc... This is the stringency assumed necessary for vehicles as a result of an assessment of the contracting parties and industry. Within this assessment for 'vehicles', agricultural vehicles were not included. The decisions taken on these compliance rules are also as much political as technical inspired.

To be reiterated is that other focus points in the UN-R155 like **capabilities of financial transactions, protection of the public network or protection of privacy**, are also in scope of the Delegated Regulation (EU) 2022/30 under the **Radio Equipment Directive**. The CRA in Article 55 states that, on a voluntary basis until the Regulation comes into effect, its compliance shall be considered as also giving compliance to Delegated Regulation (EU) 2022/30. Latter regulation will be repealed by the European Commission at the same day as the date of application of the CRA.

Impact of double legislation/ legal and technical assessment of scope options/ issue of timeline in the EU.

Contracting parties, particularly from the EU27 but also beyond, should do the assessment what would be **adequate** for the sector of agricultural vehicles and agriculture **overall in terms of Cybersecurity for the long term**.

There were two legal options on the table in the EU:

- The **CRA**: scope includes all agricultural machinery and vehicles and does not make a separation between in-field or on-road functionalities. It works on the principles of the New Legislative Framework. The final text has been agreed upon by the legislators.
- Framework Regulation (EU) **167/2013** for EU type approval with a possibility in future to make reference to UN-R155 for following (sub)categories:

- category **T1** (classic tractor > 600 kg), **T2** (narrow-track tractor), **T3** (small tractor < 600 kg) and **T4.3** (low-clearance tractor) have mandatory EU type approval **for both in-field and on-road functionalities**.
- categories **C** (tracked tractor) and **other T4** (special tractors) have optional type approval for both in-field and on-road functionalities, meaning that deviating national requirements could be chosen by the manufacturer including in relation to cybersecurity.
- categories **R&S** (agricultural trailers and agricultural interchangeable towed equipment) have optional type approval **for on-road functionalities only**.

Note: UN-R155 defines the term 'Cyber Security' as "condition in which road vehicles and their functions are protected from cyber threats to electrical or electronic components". Therefore, UN-R 155 is focussing on functions dedicated to the road circulation.

Further, Non-road Mobile machinery (self-propelled machinery) are similar to categories R&S, with work functionalities under the Machinery Regulation. Mobile machinery, which includes different designations for agricultural, construction, material handling, municipal and garden work, are in scope of the CRA and are never taken up in the debate for inclusion in scope of UN-R155.

In relation to future autonomous vehicles/machinery: UN-R155 and the work in the UNECE GRVA is very future oriented to build a solid basis to ensure the highest level of cybersecurity for more and more automated, and fully autonomous vehicles that can communicate and interact V2V/X on-road. It is oriented towards high volume vehicles that are only or mainly designed to move on-road.
Framework Regulation (EU) 167/2013 currently does not include any technical requirements for autonomous driving on-road. Priority for industry is first to get full autonomous behaviour in-field before working towards autonomous behaviour on-road. There will not be any step in between with assistant system for drivers being on-board the vehicle, as the main function on-road is to move from field-to-field and not moving passengers.

Assessment on scope
Cybersecurity has to be seen in relation to the intended use in the particular working environments. This can be in-field and/or on-road. It is therefore also **linked to road safety and /or functional safety** in-field/on-farm.

For category **T (tractors)**: inclusion in scope of UN-R155 would, by reference within 167/2013, create a clear legal basis for exclusion from the CRA as both road safety and functional safety are in scope.

For categories **R&S (agricultural towed equipment)**: inclusion in scope of UN-R155 would, by reference within 167/2013, create a legal basis for exclusion from the CRA **for on-road safety only**. For functional safety (in-field) this legal basis would be not existing, meaning that the CRA would continue to be applicable. If an OEM opts for national type approval the CRA will apply as it only allows exclusion of scope if another Union legislation provides an equal or higher level of protection.

CEMA aisbl - European Agricultural Machinery
Diamant Building, Bld A. Reyers 80, BE-1030 Brussels
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info@cema-agri.org - www.cema-agri.org

As a result, the UN-R155 will never deliver one single set of rules for all agricultural vehicles and machinery (see also below table).

Table: what CS 'legislation' would apply for what category of agricultural vehicle/ machinery?

Category	**T1, T2, T3, T4.3**	**T1, T2, T3, T4.3**	**R, S**	**R, S**	**T4.1, T4.3, C**	**T4.a, T4.2, C**	**NRMM**	**NRMM**
Use environment	**In field**	**On road**	**In field**	**On road**	**In field**	**On road**	**In field**	**On road**
167/2013	CRA/R155	CRA/R155	x	CRA/R155	CRA/R155	CRA/R155	X	X
Machinery Regulation	X	X	CRA	X	X	X	CRA	X
NRMM road circulation Regulation	X	X	X	X	X	X	X	CRA
National type approval legislation	X	X	CRA	CRA	CRA	CRA	X	?

Timeline on the different activities

The development of one ISO standard for all agricultural machinery and vehicles is under discussion. ISO/TC 23/SC 19 decided on the 34th plenary meeting on 26 October 2023 that a new standardization project will be initiated to address the topic of Cybersecurity Engineering. The standard will be started within ISO/TC 23/SC 19 under the name ISO/NP 24882 – **Agricultural machinery and Tractors – Cybersecurity Engineering**. Furthermore, a resolution to include other interested industries within a joint-working group has been passed. The standard is targeting the essential requirements of the CRA while listing best practice approaches from the ISO/SAE 21434 as optional.

On the CRA the three decision bodies in the EU have reached an agreement and there is no exclusion of any categories of agricultural vehicles. This means that **ALL** agricultural vehicles and machinery remain in scope and will have to comply by the **implementation deadline** of expectedly **mid-2027**.

Any desired exclusion from the CRA will come after its implementation, and thus after all types of agricultural machinery and vehicles were made compliant to the CRA. This will include necessary hard- and software changes and re-approval. The dedicated standard under development will have to be ready and will be used by industry as a harmonised standard for compliance to the CRA by mid-2027.

In contrast to the CRA, the UN-R155 gives no legal basis for agricultural vehicles, as this can only be given by the Regulation (EU) 167/2013. There is no indication that a revision of the Regulation is planned, and any such initiative can only be planned in after the European Parliament elections, not before 2025. Earlier discussions were limited to one meeting in the official group called the WGAT (Working Group on Agricultural Tractors), with no decisions or future agenda.

CEMA aisbl - European Agricultural Machinery
Diamant Building, Bld A. Reyers 80, BE-1030 Brussels
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Influencing factors for option selection

The push from some contracting parties for UN-R155 application may lie as well in the fear of the unknown or rather trust in the specific sectoral approach. Even the motorcycle industry, though it could perfectly fulfil the necessary CS requirements under the CRA, opted to go for UN-R155, as they are only familiar with the type approval procedures and not with e.g. the Machinery Directive. However, any rule under the 'old' approach can also be found back and be implemented in the 'new' approach with the New Legislative Framework. E.g. in the discussions on an EU road circulation legislation for mobile machinery, there was initially the option of NLF on the table from the European Commission when assessing the options, but in agreement with Member States it was opted for EU type approval. In terms of content and procedures it would be the same file. The end-result is an EU type approval regulation in which also self-declaration will be integrated for a large number of requirements. It should be reiterated that due to the higher presumption of conformity of a harmonised standard under NLF principles, as applied in the CRA, there is increased motivation with industry to work out a suitable standard and apply it.

The option of the CRA is one of self-**certification that provides a flexible and lean approach. Its provisions will apply for the entire technological industry. It will apply to all machinery and vehicles used in agriculture, construction, garden, material handling and municipal work… Any incidents reported of the large scope will be assessed on a European level. This will help to bring guidance to the whole technological industry on further protective measures.**

There are following conclusions from industry:

- The CRA will become applicable and EU legislators have concluded that it covers agricultural machinery and vehicles, besides other off-road machinery that use the road like construction machinery, material handling machinery, municipal equipment, and garden equipment. It creates a level playing field for all these machinery/vehicles.
- Given the CRA inclusion and the low likelihood that it will be amended quickly, any inclusion in UN-R155, as it stands, will create double compliance and double work for manufacturers. It might also mean that a new standard has to be drafted, besides the current ISO initiative, addressing the legal requirements under the CRA.
- CS risk mitigation is based on many factors, like the likelihood and impact of cyberattacks. These are determined by the vehicle, its use, its functions, its architecture. The CRA offers more flexibility to work on dedicated requirements while still benefiting of and learning from the larger scope of the technological industry.

Needs of SMEs

Automotive legislation is based on the needs of a large volume industry, and the need of authorities to control/ monitor compliance of such large volume industry and its impact on mobility. It is also influenced by the political desire to reduce traffic accidents to near zero.

In the EU27, an estimated 7000 companies produce agricultural machinery and vehicles, with a majority being SMEs. They hardly have a voice. It is important that such companies with extremely low volumes of production, often active in specialised niche markets, can continue to deliver their innovations to the market in support of farmers that often are also active in niche cultivations like

specialty crops. A lean approach is crucial for their survival, also on a global scene. Often, they are specialised but at the same time global players. Therefore the CRA, through self-certification, including through the ISO standard in preparation, provides them the necessary lean approach.

Issue of suppliers.

The supplier industry supports inclusion of T, R&S in scope of UN-R155, as they fear double legislation. Ignoring in the discussion the opinion of the final product industry, which will be much harder impacted than its large volume suppliers, is a non-appropriate and non-acceptable way forward.

Through the contracts with the OEM, the suppliers are fulfilling the UN-R155 requirements. It is assumed that supplier's fulfilment of UN-R155 and ISO 21434, should be sufficient to claim a certification (self-certification for most products with digital elements) under the CRA. It does not entail any changes to their products, only some administrative requirements and of course some responsibilities related to that.

In any case, there are multiple scenarios in which the suppliers will still be obliged to follow the CRA. In all these scenarios mobile machinery remains in scope of the CRA and therefore also their suppliers.

Work is ongoing within ISO/TC 23/SC 19 to **ensure compatibility with ISO/SAE 21434** and avoid duplication of work **for both OEMs and suppliers**.

Alternative solutions for global alignment

It is a right cause to wish for and act in favour of global solutions for agricultural machinery and vehicles, similar to the automotive industry. Remaining question is what the denominator for such global alignment would be.

With the latest agreement between European decision makers, the CRA final text is set in stone, being a frontrunner and setting a benchmark also on a global level. All major global agricultural machinery manufacturers will by mid-2027 be CRA compliant following the harmonised horizontal CEN-CENELEC standards and dedicated agricultural ISO standard. Any global alignment should therefore take into account the hardware and software changes already done according to the CRA and the harmonised standards. We expect non-EU countries to be inspired by the EU CRA for their respective national law to deal with Cybersecurity protection of their industrial companies. A good example is the UK legislation on Cybersecurity requirements for consumer goods, which is similar to the CRA, and a first step in further alignment. Recognition of the CE marking for the CRA is a valuable alternative in short term.

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For the agricultural industry, global standards have always been the preferred way for global alignment. Testimony are the many standards developed on global level, and used under the Vienna agreement, as harmonised CEN standards under the Machinery Regulation, or referenced as dated standards in the Framework Regulation (EU) 167/2013.

The dedicated ISO standard for agricultural machinery and vehicles will globally be the only one that will take fully into account the specificities of the sector. It is expected that it will be the benchmark as well.

As such the agricultural machinery sector does not see an added value in the current UN-R155. Only if a UNECE regulation can ensure that there is no redesign necessary from hard-and software point of view, as already executed for CRA compliance, and leaner requirements for compliance are introduced, it might act as an enabler for global alignment and create an added value.

Overall Conclusions from industry

1. In the EU27 the CRA, in combination with other NLF legislation, provides at least equal stringency on Cybersecurity rules compared to UN-R155. Applying UN-R 155 simultaneously on T, R, S categories would create an overlap of two regulations handling Cybersecurity, in the agricultural machinery sector.
2. CRA is by far the most suitable solution in the EU for SME's.
3. The reality learns that the CRA will become applicable for all agricultural machinery and vehicles by mid-2027. Any change of scope in near/mid-term will require a proper assessment and argumentation and will put extra, unnecessary burden on industry.
4. Without a proper assessment, no changes to that situation will be possible in the EU, At least if the final desired outcome is one set of legislation for the entire industry.
5. As the CRA is the first of its kind globally, the main international companies will follow-it and make the necessary hard- and software changes. Global alignment should be based on the CRA principles and the dedicated ISO standard under preparation to fulfil the CRA essential requirements.

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CEMA represents the **European agricultural machinery industry** which comprises about 7,000 manufacturers, most of which are SMEs, producing more than 450 different types of machines with an annual turnover of about €40 billion (EU28 - 2016) and 150,000 direct employees. CEMA companies produce a large range of machines that cover any activity in the field from seeding to harvesting, as well as equipment for livestock management.

CEMA aisbl - European Agricultural Machinery
Diamant Building, Bld A. Reyers 80, BE-1030 Brussels
T +32 (0)2 706 82 26 - F +32 (0)2 706 82 10
info@cema-agri.org - www.cema-agri.org