



**EGEA WG1 Meeting, 5th of December 2016, Brussels**

Official revision of EN1493

EGEA  
ASSOCIATION



## Potential conflict between PTI Directive 2014/45/EU & EN1493

- The sentence "*The standard does not mean that a person can enter into a raised vehicle for particular activities, PTI and lifts for railway vehicles*" was introduced to solve somehow the potential conflict between EN1493 and Directive 2014/45/EU
- This compromise solution is derived from the negative response of the CEN Consultant on the specific question.
- From this chance to get in the vehicle raised also it derives the inclusion of the note p to point 7.3.1, which refers to the user the need to make a special assessment of the risks in terms of means to enter / exit safely from the raised vehicle.
  - Action: The issue should be discuss in EGEA WG1 to be reconfirmed in next CEN/TC 98/WG 3 meeting. It is anyway advisable to keep a "low profile" on the subject to avoid drastic decisions such as that of preventing the use of lifters in field PTI

## Potential conflict between PTI Directive 2014/45/EU & EN1493

### European Commission's guidance is not very conclusive:

- Neither the use of the standard EN1493:2010 is mandatory for vehicle lifts, as a standard is a non-binding technical specification according to Machinery Directive Article 2 (1).
- Nor is the use of such lifts during a roadworthiness test as an exclusive method. A pit can be used as an alternative method allowed for in Annex I of Directive 2014/45/EU.
- As of 1<sup>st</sup> January 2023, the minimum requirements of the premises and the equipment will have to be checked by the supervising bodies of the Member States.
- European Commission conclusion is that neither amendment of the standard EN1493, nor amendment of the Directive 2014/45/EU appear to be necessary.
- “In my view (EC), safety should be provided by respecting the already existing safety and user requirements for lifts and not by sanctifying an unsafe practice”.

## 3.1 >> Including or not motorbike in the standard

- Section 3-1 as it was also includes motorbikes.
- In point 31 of Doc N0021 , with respect to paragraph 5.7.4.2 of the standard, is clear the intention of Mr. Trabold not to include motorbikes with 2 wheels but to include motorbike with more than 2 wheels:

“...In the Scope of EN 1493 lifting platforms for 2-wheel-motorbikes shall be excluded, because on these lifts nobody works under the lifted load and therefore some of the hazards of “normal” vehicle lifts don’t exist.

These lifting devices shall be regarded as lifting tables according to EN 1570-1.

Remark: Instead of changing the scope Trabold proposes to put this exclusion in the definition of the vehicle lift (clause 3.1).The definition than would read:

Vehicle lift: lifting device with guided load carrying device for lifting land based means of transport such as cars, motorcycles with more than two wheels, lorries, buses, trams, rail vehicles, industrial trucks and similar, in the following named vehicle, and designed for working on or under the load”

- **To be discussed:** if bikes with more than 2 wheels must be included in the standard, in addition to changing the definition in paragraph 3.1, also the normative vehicle will be affected. To be considered also that in paragraph point 5.7.2.1d of the standard motorcycles are considered (it seems that this was included in the latest version of the standard: in the 98 version was not there. To be clarified)
- **Other considerations:** if bikes with more than 2 wheels must be included in the standard, having to relate to a completely different type vehicles would be appropriate to assess whether convenient to split the norm in general and various specific parts dedicated to different types of vehicles

## 5.4 >> Control position

- It reiterates the need to reorganize the whole paragraph providing for the revision of 5.4.1 and 5.4.2 to better define the aspects related, among the other things, to the use of remote control (wired or wireless), the visibility, the safety distances of the place control, the possibility of being under the vehicle to the lift in motion
- **Some points to be considered:**
  - Visibility: must be best defined to avoid having to provide for remote control or double operator even in the case of car scissor lifts (the side opposite the vehicle operator remains hidden)
  - The use of a remote control raises the possibility of the presence of persons in the dangerous area.
  - With remote control, likely misuse become more predictable (i.e.: operator under the load)
  - In case of use of remote control, a warning device (acoustic or optical) could be activated, to remind potentially hazardous condition.
  - Restrictions on the use of the remote control should be introduced to avoid unpredictable proper misuse (i.e.: Limit the remote control operation only for the initial 300mm stroke)
  - With remote control in use automatically the speed of the lift is reduced to that permitted value in case of presence people under the load in motion.
  - FM aims to rewrite the text and share it with EGEA WG1 members.

## 5.7.1 >> Allowable inclination of vehicle in chassis supporting vehicle lifts

- With lifts loaded with nominal load the inclination of the level of the pick-up device shall not exceed 3 ° from the horizontal.
- Manufacturers (especially of two-post-lift) will check possible reachable values to avoid too restrictive requirements.

## 5.7.4.1 >> Alternative: load sensing device/normative vehicle

- The phrase written in red makes possible the alternative load sensing device/normative vehicle.
- If this alternative is to be provided it is necessary that the load control devices are normed.
- There should be comparability of results between the application of the load sensing device and normative vehicle.
- It also sees the risk of difficulties in defining the capacity of the lift, since it may depend on the characteristics of the vehicle.
  - *Action:* To be explored in the next meeting EGEA WG1



## 5.7.4.2 5.7.4.3 >> Adequacy of Normative vehicle

- Within CEN / TC98/WG3 there is widespread view that the normative vehicle is no longer appropriate to the current fleet.
- In both cases (5.7.4.2 wheel support vehicle lifts and 5.74.3 chassis supporting vehicle lifts) references to the Normative Vehicle could actually be no more aligned to the fleet since the various values were defined many years ago, and so it might be sensible to a new analysis of the same, maybe even introducing the vehicle types now absent (bikes, tricycles, quad, ...)
- FM underlined in many occasions the difficulties linked to the collection of the necessary data to doublecheck the actual provisions therefore demands the effective cooperation of EGEA WG1 members in this activity to be able to bring specific proposals to the next meeting of CEN / TC98WG3
  - *Action:* Mr Fijnvandraat will provide CEN/TC 98/WG with a table containing a comparison of the American standard and EN 1493 before next meeting

## 5.7.5.2 >> Sizing of synchronization ropes

- It would be good to establish a value of lateral imbalance of loads equal to 25% of the capacity of the lift, on which to perform the sizing of synchronization ropes, always in reference to the calculation method provided for in the standard ISO4308
  - *Note:* in the same way should also be considerations of other synchronization devices (torsion bar in scissor lifts, ...)

## 5.9.5 >> Arm locking device: Allowable play in positioning of pick up pads

- The total play at the fully extended arm shall not exceed one pick-up plate diameter.
- The restriction introduced on the maximum play in positioning of the pick-up pads seems acceptable, anyway it is good that each manufacturer make the necessary checks on their production to avoid too restrictive requirements

## 5.9.5 >> Arm locking device: strength test procedure

- Fully agreement on the modification of sizing criteria for arm locking device component:

“... arm locking systems shall be designed to resist a force of 4,5 % of the capacity of the lift without permanent deformation, ~~or~~ and to resist a force of 6,75 % of the capacity without breakage...”

- *Action*: A testing procedure should be specified: Mr. Garratt and Manganelli will prepare a proposal.
- To be discussed in EGEA WG1

## 5.9.6 >> Roll off safety device

- It shall not be possible that a wheel of a rolling vehicle puts an end stop out of function.
- In the new Table 4 a column with maximum wheel diameters shall be introduced

## 5.15 >> Asymmetries of the load

- The note on non-symmetrical load is removed while in similar considerations (synchronization ropes) a lateral imbalance of 25% of the capacity could be suggested.
- This issue could affect also normative vehicle, so far always considered symmetric respect geometrical axis of the vehicle
  - *Action:* To be reconsidered, perhaps with by analogy with the provisions of the ALI standards for testing "out of level"

## PROSAFE Initiative



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## PROSAFE Initiative – Brief report (1/2)

- In September, 2 independent experts were designated to assist the national authorities with the inspection of vehicle lifts: Mr. Christer Danielsson from Sweden and Mr. Jacques Ducasse from France. The work is being shared out between the 2 experts. Since both of them have worked in the past for Notified Bodies, they will not take part in any inspections of machines they have certified.
- Each participating authority has taken a share of lifts to inspect.
- In total, about 50 machines will be inspected, with twice as many 2-post lifts as scissor lifts
- The inspection teams carry out an agreed, common inspection programme based on EN 1493 (limited to avoid potentially destructive tests).



## PROSAFE Initiative – Brief report (2/2)

- General rule that each inspection lasts half a day on site and gives rise to an inspection report.
- The inspections have already started, to be finalised by the end of April 2017
- Next steps:
  - The project group will hold a meeting to analyse the findings and discuss the necessary follow-up action with economic operators.
  - Intention to hold a stakeholder session during that meeting to provide non-nominative information about the results of the inspections and to discuss their significance. I will send you the invitation early next year.



## Installation and inspection of vehicle lifts in EU – EGEA guidelines?



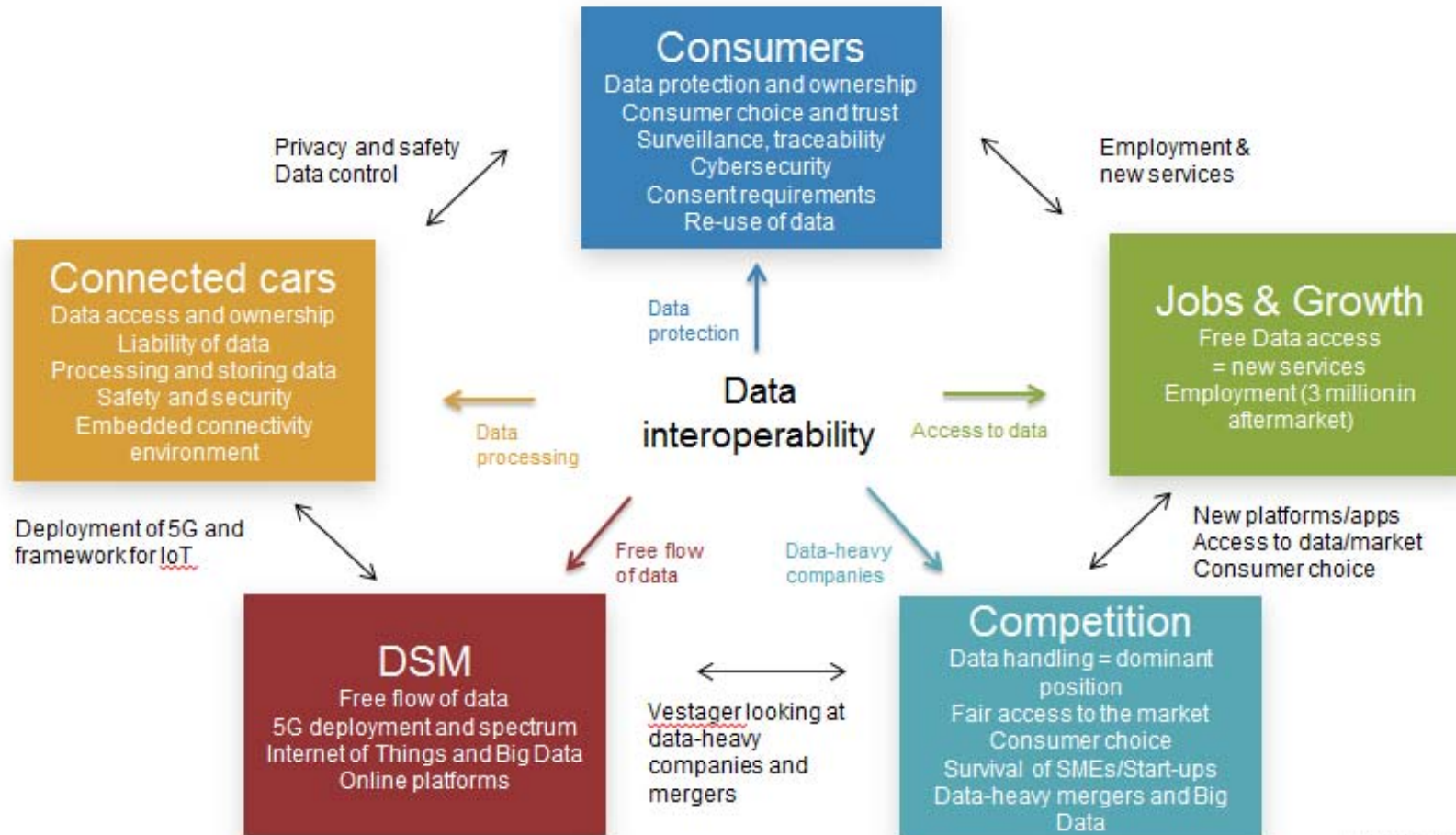
## Industry changes

## New EU initiatives - The need to change!

### Some key discussions in Brussels...

- Digital Single Market
- Industry 4.0
- The Internet of Things (IoT)
- Electric Vehicles
- Digitalization of Industry
- Robotics
- Cloud-based computing
- Digital Platforms
- Free flow of Data
- C-ITS
- Autonomous driving

# It's all about data control and functionalities



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## Digitalisation & Connectivity – what changes?

- Consumer expectations are increasing due to the remote connectivity, prognosis/predictive maintenance and diagnostics
- Focus is not on the repair side anymore but on the use of digital data, creating third party cross-sectoral services offered in and around the vehicle, this will increase with autonomous vehicles
- Not anymore speaking about ‘consumer goods’ but SERVICES.
- Innovation is taking place in the OBD dongles (e.g. for repair services, PTI testing, gathering vehicle data) but only possible if the OBD port remains open!
- Direct access to real-time in-vehicle data is key!

## Industrialisation – what does that change?

- Equipment for the manufacturing is not sold anymore but more and more leased/rented → new service provided!
- Multitask hybrid equipment will be created (the connected workshop)
- New training needed for human capital (technical competence)
- Increased level of intelligence in the process (artificial intelligence)
- Questions:
  - Are there new components/materials?
  - How will you ensure transition from 'old products' to the new digital products generation?
  - What about having sufficient human capital?
  - Any direct impact on emission testing?

## Industry changes – vehicle lifting equipment



Changes	Impacts
Lifts	<p>Only change would be the decrease of workshops and with Electric Vehicles the increase of more specialised workshops using more specialised equipment such as for battery carrier or replacement battery lift</p> <p>Access to data would allow to know in advance the localisation of the jacking points, or directly the weight of the vehicle</p>
Technicians	<p>Additional training for technicians to handle advance vehicle systems and using new garage equipment. Likely to need certification of their competency to work on new automated systems and vehicles</p>



Thank you!

**THANK YOU**

GRACIAS  
ARIGATO  
SHUKURIA  
JUSPAXAR  
TASHAKKUR ATU  
SUKSAMA  
EKKHMET  
MEHRBANI  
PALDIES  
BOLZIN  
MERCICI

DAN  
SNACHALHUYA  
NUHUN  
CHALTU  
YAQHANYELAY  
WABEEJA  
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