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PALEA NEWSLETTER No 6 Special Edition – Final Asia Pacific comment for the draft EN81-20

This newsletter is brought to you courtesy of the Management Committee of PALEA.

The aim of this newsletter is as follows:

- To keep members informed of current and future local and international standards, codes and regulations and to keep members informed regarding the latest news that affect our industry.
- To be a forum to discuss and exchange ideas relating to:
 - Local and International harmonised codes
 - Product safety on both new and existing installations
 - Risk management of product safety
- To be a way of gathering information from any country in the Asia Pacific area which may want to exchange ideas in regards to the revision of EN81-1/2

Glenn Barnes
Editor and PALEA Secretary

Message from the President

During the months of February and March the PALEA management committee held workshops in ten Asia Pacific countries to gather, collate and submit comments to CEN TC10 on the draft version of EN81 part 20 that was out for public comment.

Countries belonging to the CEN/TC10 ad hoc 17 committee (China, Japan, South Korea and USA) were not included in the project as they already had their own means of communication with CEN.

All members of the PALEA management committee attended various meetings and to avoid any perception of partiality or personal prejudice, intentional or not, no committee member attended or administered all workshops and all documents used in the workshops were supplied by the CEN TC10 committee.

The workshops were all well attended by a diverse cross section of the lift industry including national code writers, enforcers and regulators, manufacturers, lift owners, consultants etc which resulted in a high degree of interest in the new standard which resulted in robust discussion and interesting comments.

While many of the comments were similar it was interesting to note that each country viewed them from a different and unique perspective. While the objectives of the project were fully met, more importantly the interest in full adoption and acceptance of EN81 as the basis for national and world-wide codes was simulated in all countries visited. I am convinced that this project will lead to a significant new wave of total harmonisation with EN81 and ISO standards throughout the Region.

I would to thank all committee members for their tremendous effort in making this project successful and in particular our secretary, Glenn Barnes, for his tireless efforts and efficient organisation of complex logistics and attention to detail which made the project possible.

PALEA will continue in future to support the implementation of the revision of EN81 and continue to promote code harmonisation throughout the Region.

Ian Todkill
PALEA President



EN81-20 Comment Stage

The draft for the Comment Stage was released 24th November 2011 and the final date to have all comments submitted was 30th April 2012. Note that the 30th April deadline was met so the comments of the 10 different AP countries have been received by the CEN EN81-20 revision committee.

PALEA Seminars & Feedback Workshops

To ensure that effective feedback from Asia Pacific was provided, all the members of the PALEA Management Committee were invited to attend as many meetings as possible and so act as coordinators of the feedback. Note that some members of the PALEA Management Committee could not always attend so it resulted in different people coordinating different meetings.

The material that was presented came originally from CEN TC10 WG1 but some of it had to be simplified because of the different languages used in Asia Pacific. We are extremely grateful to the CEN committees for their cooperation and help in this matter.

Obviously there were some language difficulties at some of the meetings so, where required, we had help from the many people who offered to provide translations. PALEA really appreciated the help from those who provided translations as they all provided this service in an extremely professional manner which resulted in many very effective comments regarding this new draft standard.

The comments were recorded meeting by meeting resulting in a set of comments for each individual country and so ten sets of comments were sent to CEN TC10 WG1.

Seminar and Feedback Workshops completed.

Date	City	Country	Government Attendance	Lift Industry Attendance	PALEA Attendance
14 -15 Feb	Mumbai	India	6	12	6
21-22 Feb	Kuala Lumpur	Malaysia	13	8	3
23-24 Feb	Singapore	Singapore	3	13	3
5-6 March	Taipei	Taiwan	4	17	2
7-8 March	Hong Kong	Hong Kong	3	21	3
13 th March	Auckland	New Zealand	2	15	2
15 th March	Sydney	Australia	1	17	2
19-20 March	Hanoi	Vietnam	15	6	5
22-23 March	Bangkok	Thailand	0	8	5
26-27 March	Jakarta	Indonesia	7	8	2



Asia Pacific comments received by PALEA

Main Comments	Clause	Country
Many clause numbers are too long and are cumbersome to use. E.G. Clause 5.12.1.5.2.1 j) Suggest renumber as per old EN81, if possible	General	All
In some clauses, references are made to EN only. The standard should also reference ISO and IEC standards as these standards are able to be used in Asia Pacific	General	All
When referencing other standards the words "or equivalent local standard" should be added to the end of the sentence because in many countries there are local standards E.G. Local Electrical standards	General	All
Automatic Rescue Devices (ARDs) are very common in AP and so some guidance should be in the standard for when these devices are used.	General	All
Guidance is required for alternative suspension means. Under 50% of lifts now sold use steel wire ropes so this standard must include guidance for the other types of suspension	General	All
The average weight of a passenger in AP can also be 65 or 68 Kg. This fact needs to be mentioned in the standard	0.2.5	IN, TW ID, SG
The negotiations between designer and owner regarding the loading and intended use of a goods lifts need to be thoroughly documented in the Instruction Manual	0.3.1	AU, NZ
As well as the assumptions regarding component design some parameters (Factors of Safety) should be provided for structural members of the lift.	0.3.2	SG, NZ TW, IN
A definition is required for "Safety Volume",	New	AU, NZ
A definition is required for "Balustrade"	New	AU, NZ
A definition is required for "Manufacturer"	New	AU
A definition is required for "Designer"	New	AU
Definition of Authorised Person. Need to mention "owner or owners representative" as the actual owner may not be easily contactable or even live in the same city	3.2	AU
Definition of Authorised Person. The wording should be changed to also include authorised by a lift company	3.2	MY, VN
Definition of Brake set. Delete the words "and pole piece" as it just confuses the issue.	3.5	AU, NZ
Definition of Competent Person. Who can designate that a particular person is competent. This requires further clarification	3.8	TW, HK
Definition of Competent Person. This clause needs to be expanded as in a number of AP countries the competent person has some legal implications and must therefore be certified, tested and registered by the local authority	3.8	NZ, MY, TW, HK
Definition of Maintenance. . Change "manufacturer" to "manufacturer or designer" because the manufacturer may have had little to do with the actual design	3.29	H.K.
Lighting in the well. Requires more guidance on how effective lighting can be achieved and how the lighting level can be measured. Also what about guidance for lighting fitted to the underside of car	5.2.1.4.1	AU
Lighting on the car roof. Suggest that lighting level on car roof should be at least 100 lux.	5.2.1.4.1	IN, TW
Lighting on the car roof. Suggest that at least 200 lux is required to work on door locks – This could be achieved by a permanently wired lead light kept on top of the car	5.2.1.4.1	NZ, TH

Note: To further understand comments please refer to attached pr EN81-20 draft standard
 AU - Australia HK - Hong Kong ID - Indonesia IN - India MY - Malaysia
 NZ - New Zealand SG - Singapore TH - Thailand TW - Taiwan VN - Vietnam



Main Comments	Clause	Country
The location of the inspection panel in the pit should be specified. This panel will have a stop switch fitted but is it necessary to have another stop switch in the pit fitted at say the top of the pit ladder	5.2.1.5.1 b)	ID
Add words "permanently mounted and wired" to this clause otherwise you could fit a corded station or even a plug-in station	5.2.1.5.1 b)	AU
For deep pits words could be added to allow for a pit over travel bypass device which would allow the lift to be moved past the final limits so work could be done on the bottom of the car in a safe manner.	5.2.1.5.1	AU
Vietnam, due to safety considerations do not agree with the fitting of a control station in the pit	5.2.1.5.1 b)	VN
Even though the use of glass is covered in many clauses no mention is made of glass mirrors and their fixation. Appropriate words need to be added for glass mirrors.	5.2.1.8.3	ALL
Remove words "and if layout of building so permits" For lift worker safety reasons (using long vertical ladders) pit access doors should be mandatory for pits over 2.5m deep	5.2.2.3	AU, NZ
It is not acceptable to use a ladder to gain access to machinery spaces in New Zealand	5.2.2.4	NZ
Maximum height of ladders in machine rooms in HK are 1.5 m - after this height stairs must be used	5.2.2.4	HK
AP does not agree with allowing emergency electrical operation instead of having emergency doors every 11 m. How can we gain access to the people entrapped in a lift car if the car cannot be moved due to any one of a number of factors including an earth quake	5.2.3.3	ALL
Thailand raised the matter of the guarding of the sides of the counterweight when the counterweigh rails are more than 300mm away from the lift well wall	5.2.5.5.1	TH
What is the reason for limiting the distance of the lowest point of the counterweight screen above the pit floor to a minimum of 0.30m? Whereas in the case of clause 5.8.1.1 the screen can extend to the pit floor but not more than 100mm above the pit floor.	5.2.5.5.1	NZ, IN
Many clauses use both terms "Safety Volume" and "Safety Spaces" The correct term is "Safety Volume"	5.2.5.7	AU, NZ
There is confusion with the requirements in this whole section, especially the drawings and we feel that a major re-write is necessary	5.2.5.7	ALL
On top of car. Do not agree with painting the area outside of the safety volume with yellow and black stripes. Suggest that the area/s of the safety volume/s be outlined on the car roof with 40mm yellow lines and inside the area to be marked with a pictogram indicating whether it is a standing or crouching space	5.2.5.7.1	ALL
Regarding an area where someone can stand. Does this include the crosshead of the car frame as this normally offers a standing space even though due its configuration it may offer a smaller area than stipulated?	5.2.5.7.2	ALL
Safety volume is the correct term not safety space	5.2.5.8	NZ, AU
Crouching spaces in pits should also be allowed	5.2.5.8.1	ALL
In the pit do not agree with painting the area outside of the safety volume with yellow and black stripes Suggest that the area/s of the safety volume/s be outlined with 40mm wide yellow lines and inside the area to be marked with a pictogram indicating whether it is a standing, crouching or laying volume. It is also felt that the type of safety volume should be clearly indicated so that in an emergency the person in the pit would instantly know exactly what position to adopt.	5.2.5.8.1	ALL
In New Zealand stairways must be provided once the difference in floor levels exceeds 1 m – ladders are not acceptable	5.2.6.3.2.4	NZ



Main Comments	Clause	Country
The second bullet point of this clause states that a ladder could be one of the means of climbing down from the car roof into the car- must the ladder be permanently stored on the car top and if so what are the requirements for fixing and for the ladder itself. In the case where handholds are required are "stepping spaces" also required	5.2.6.4.3.1 c) 1)	IN, SG
This clause should mention the operation of the door open button in the car as there have been a number of incidents over the years. Suggest that the Door open" button should remain operative during "nudging" operation as stated in clause 5.3.6.2.1.1 d)	5.3.6.3	All
Landing door access device and key/tool. In general, the landing door will have provision to open from outside the car by a key device. Some manufacturers have other means to open the landing doors like a special tool, This clause should also mention that other type of opening devices be allowed as long as they meet some minimum criteria.	5.3.9.3.1	ID, VN TH, IN
Egress from the pit via the pit ladder. How and where can we measure this 1.0 m horizontal distance. Ladder could be increased in height to comply with requirement. Perhaps the best way forward is measurement should be in an arc from the top ladder rung	5.3.9.3.5	AU
Egress from the pit via the pit ladder. When exiting from the pit and standing on the pit ladder when you have 2700 mm high doors then even when complying with the 1000 mm horizontal dimension the door locks cannot be safely reached. This clause needs to be re-drafted to overcome this issue.	5.3.9.3.5	VN
Is a force needed to hold the doors closed also required when car door locking is fitted	5.3.15.1	All
Is a car door restrictor also required when car door locking is fitted	5.3.15.4	All
How to measure lift car internal dimensions. Inside measurements of the car should be inside the finishes of the car and not the structural car wall. Measurement will be difficult once the lift has been installed. It is not practical to measure inside the car and exclude the finishes.	5.4.2.1	IN, NZ AU
How to measure lift car internal dimensions. Can you disregard the area of a stretcher recess in the floor area calculation if the floor of the recess is sloping at say an angle of 30 degrees and no person could stand or sit there?	5.4.2.1.1	NZ
More detail is required in the standard to safely design and install goods lifts as different type of loading require different designs	5.4.2.2	ALL
The special requirements/conditions for Goods Passenger and Goods lifts should also be stated on the lift load plate which is fitted inside of the lift car as per clause 5.4.2.3.2	5.4.2.3.3	NZ
To ensure that glass is secured during all shock conditions encountered we need to reword the text	5.4.3.2.4	AU
Lift car side emergency doors should not be allowed due to the numerous associated risks and even local OH&S regulations.	5.4.6.3	ALL
Balustrade on top of lift car. A strength parameter is required for the balustrade	5.4.7.2	ALL
Components on top of car. This clause is not understood and so requires a complete re-write	5.4.7.2.2	ALL
The height of the balustrade should be standardised to 1100mm as it is considered that 700mm is too low to avoid the risk of falling irrespective of the distance of the car from the lift-well wall. This also conforms to standard hand rail heights	5.4.7.3 c) 1)	SG
Emergency light in car. 1 lux is considered to be too low for emergency lighting so 2, 5 and 10 lux were suggested	5.4.10.4	ALL



Main Comments	Clause	Country
Australia considers that a broken strand switch for normal steel wire ropes is also required. These have been in use in Australia for many years as a good safety feature and has prevented many small problems before they turned into large problems	5.5.5.3	AU
Clause regarding traction sheaves at top of well is not understood and needs to be re-written as it is not clear as to what is actually required	5.5.8	TW, AU VN, NZ
Guide rail fixings. If guide rail brackets are rubber isolated then the design must include means to ensure that if the isolation fails then the brackets will keep in tolerance to ensure that cars or counter weights will not move enough to reduce safety. Words should be included to minimise this known risk.	5.7	HK, AU
To clarify the operational requirement for one set of brake devices to stop and hold lift car the sentence should read: "If one of the components (brake sets) is not working, a sufficient braking effort to decelerate, stop and hold the lift car, travelling downwards at rated speed and with 105% rated load in the lift car shall continue to be exercised."	5.9.2.2.2.1 Paragraph 2	AU, ID
Brake release. In the case of a MRL the brake lifting means should be pulsed or the lift should have electrical motor braking to ensure a safe reduced lift speed. Perhaps the maximum lift speed should also be stated. Reference should also be made to clause 5.2.6.6.2 c) which requires direct observation of lift speed, direction and reaching an unlocking zone	5.9.2.2.7	NZ, AU
Electrical equipment. "or equivalent local standard" should be added to the end of the sentence because all countries have their own electrical codes	5.10.1.1.2	ALL
Stopping accuracy. This requirement only specifies that if 20mm is exceeded then it shall be corrected. However, it does not limit the amount of the instantaneous levelling difference and it can go high up to over 50mm difference momentarily when the lift is oscillating during loading/unloading phases for high buildings. Therefore, it is suggested to add a limit to the transient overshooting value at the end of this clause as follows: "The transient overshooting value of 40 mm should not be exceeded at any time including during loading and unloading phases."	5.12.1.1.4	HK
Considering the inspection control station in the pit, the safety procedure for entering the pit should be clarified – for example for deep pits the technician would have to activate the stop switch near the top of the pit then climb down activate the stop switch on the control station and then climb back up to release the stop switch at the entry of the pit so that the car can be moved from the control station and then climb back down the control station to be able to control the car. Singapore feels that there is no requirement for a control station in the pit.	5.12.1.5.1.1	SG
Inspection operation. Propose adding buzzer and light signals when lifts are moved during inspection similar to the requirement for BYPASS in clause 5.12.1.8.3 g). We feel that this becomes necessary as now two inspection panels are available, one on the car roof and one in the pit and if one is activated and the other not activated then the person working in the area where the inspection panel is not activated could be taken by surprise if the car starts moving. This feature would provide a safer environment for people working in the lift well.	5.12.1.5.2.1	MY
On Inspection operation the lift must slow down or stop when the free vertical distance above the safety volumes reaches 2.0 m. After reaching the set distance and the lift stops should the lift re-start at 0.6 or 0.3 m/s only?	5.12.1.5.2.1 f) 2) and g) 2)	ALL
Door Circuit Monitoring. Prevention of normal operation of the lift with faulty door contact circuits. This clause is not clearly stated, Can you please explain what is the intention of this clause and /or reword in order to make it clear to all readers..	5.12.1.9	MY, VN SG, IN



Main Comments	Clause	Country
Emergency alarm device and intercom system in car. It is of no use referring to EN81-28 – because AP countries do not refer to it – It would be better if the parameters were still in the appropriate clause Suggest adding all the text of the existing clause back into 5.12.3 and adding that using EN81-28 gives compliance	5.12.3	All
For safe operation when using inspection control stations an intercom system should be mandatory at all locations regardless of the lift travel	5.12.3.3	NZ
For ladder types Type1, Type 2a & Type 2b reword so that a ladder rung should be substantially level with the lowest landing door sill to enable safe entry and egress from the pit	Annex F2.2	TH
This clause suggests that ladder rungs are not required above the level of the lowest landing door sill. This is totally unacceptable especially after reading Clause 5.3.9.3.5 which deals with the safety issues when exiting the pit via the pit ladder and being able to safely open the door locks	Annex F2.3	TH

Direct to CEN comments from other Asia Pacific countries

Main Comments	Clause	Country
Landing doors and car doors mechanical strength. Why shall both a force of 300N and 1000N be required? What are meanings of each static force test?	5.3.5.2.1	South Korea
In additional for horizontal sliding landing doors, with their locks, and side frame that are wider than 150 mm and car doors with glass panels. We think that vertical sliding doors shall be excluded from pendulum shock test because vertical sliding should not be used at passenger lifts. After Soft pendulum test why are static force tests required?	5.3.5.2.2	South Korea
Unintended car movement protection means. Self monitoring could also include verification of braking force as an option	5.6.7.3 Paragraph 3	South Korea
Push buttons used for inspection control. Why should these buttons have to comply with a test for 1 million operations	5.12.1.5.2.2	South Korea
Lift well lighting The clause states “At least 20 lux outside the locations defined in a) and b)”. This is very unclear and requires further clarification.	5.2.1.4.1 c)	Japan
Laminated glass Why must glass be only of the laminated type? We would like to suggest wired glass like JIS R3205 and glass filmed with a scatter protected sheet which is accepted in Japan.	5.2.1.8.3 5.3.5.2.5 5.4.3.2.3 5.4.7.5	Japan
They shall withstand 1000 N horizontal static force on an area of 0,30 m x 0,30 m at any point without permanent deformation. Could you explain the rationale of “1000 N horizontal static force” and “an area of 0,30 m x 0,30” ?	5.2.1.8.3	Japan
Could you explain an example of “durable material” and “material not favouring the creation of dust”?	5.2.1.9	Japan
What is the reason for limiting the distance of the lowest point of the counterweight screen above the pit floor to a minimum of 0.30m? Could you explain a rationale of “The width shall be at least equal”?	5.2.5.5.1	Japan
There is a discrepancy between clause 5.2.6.4.3.2 and clause 5.2.6.4.4.3. Could you explain why “brake tests, traction tests, or tests of ascending car overspeed protection means” is erased? There are requested in 5.2.6.4.4.3.	5.2.6.4.3.2	Japan
If there is an access door to the pit, then this clause is not necessary	5.2.6.4.4.2	Japan
Could you explain as an example of “be constructed in such a way that they will not become deformed over the course of time”?	5.3.5	Japan
Could you explain why both “pendulum shock test” and “a force of 1000 N test of mechanical strength” are required	5.3.5.2	Japan



Main Comments	Clause	Country
Permanent deformation (e.g. less than 1 mm); Please add the word of "visual" like clause 5.4.3.2.2 b) We think that "(e.g. less than 1 mm)" is not needed. Depend on the condition of the landing door size, construction, etc., the place of permanent deformation is changed. We can't always say "less than 1 mm".	5.3.5.2.1 a) 1	Japan
Could you explain the rationale of "For glass elements, there shall be no cracks of more than 40 mm in length"?	5.3.5.2.2 a) 5)	Japan
It is difficult to understand this sentence	5.3.6.2.1.1 g)	Japan
It is difficult to understand this sentence	5.3.9.1.2	Japan
The position of unlocking triangle. Please align with USA	5.3.9.3.2	Japan
Car walls made of glass or partly glass shall be laminated. Please add : Where a round shape glass is used, glass filmed with a scatter protected sheet may be used	5.4.3.2.3	Japan
The strength parameter for the lift car roof has been greatly increased Why has this been increased ?	5.4.7.1 a)	Japan
Components on top of car. This clause is not understood and so requires a complete re-write	5.4.7.2.2	Japan
Warning signs on roof top balustrade We feel that having to place a warning sign on each section is excessive	5.4.7.4	Japan
Emergency lighting car We do not agree that 1 lux is required at the centre of the car	5.4.10.4	Japan
Could you explain the rationale why means of metal or resin filled sockets is deleted?	5.5.2.3.1	Japan
Emergency braking of the car. This clause needs to be rewritten What does "the setting of the buffer" mean?	5.5.3 b)	Japan
Please clarify the assumed risk caused by abnormal relative extension in case of more than 2 ropes or chains, also the rationale why the lift is allowed to proceed to the next floor before stopping.	5.5.5.3	Japan
Compensation chains allowed up to 3.0 m/s This should be increased to 3.5 m/s as many products are on the market	5.5.6.1 5.5.6.2 5.5.6.3	Japan
Clause regarding traction sheaves at top of well is not understood and needs to be re-written as it is not clear as to what is actually required	5.5.8 a)	Japan
Do not agree with the changes – Add the following "d) The tripping speed of an overspeed governor for a counterweight or balancing weight safety gear shall be higher than that for the car safety gear according to 5.6.2.2.1.1. a) not, however exceeding it by more than 10 %."	5.6.2.2.1.1	Japan
ACOP. The means, comprising speed monitoring and speed reducing elements, shall detect uncontrolled movement of the ascending car at a minimum 115 %of the rated speed. There is no need to require "a minimum of 115% as this is up to the designer	5.6.6.1	Japan
ACOP. The means shall not allow a retardation of the empty car in excess of 1 <i>gn</i> during the stopping phase We suggest to define 2 parameters: 1. Average retardation (1g). 2. Duration of peaks in excess of 1g. = 2.5G – 0.04 Sec maximum (Same as Requirements for oil buffers	5.6.6.3	Japan
UCM. We suggest to define 2 parameters: 1. Average retardation (1g). 2. Duration of peaks in excess of 1g. = 2.5G – 0.04 Sec maximum	5.6.7.6	Japan
In the case of buffer(s) fixed to the car the impact area(s) of the buffer(s) on the pit floor shall be made obvious by an obstacle(s) Can a "fence" be used instead of an obstacle	5.8.1.1	Japan
However, the stroke shall not be less than 65 mm. Could you explain the rationale of Min. stroke: 65mm for Buffer with liner characteristics?	5.8.2.1.1.1	Japan



Main Comments	Clause	Country
Could you explain why “e) fly-ball type overspeed governors” is erased? In Japan, this type of governor is used for high speed elevator.	5.9.1.2	Japan
This brake on its own shall be capable of stopping the machine when the car is travelling downward at rated speed and with the rated load plus 25%. Since there is a car overload protection devise, an assumption that car running with 125%of rated load is not needed. We propose as follows: a. static ability - 125% rated road to keep the car stopped. b. dynamic ability – the stopping and retardation should be required at 110% rated road.	5.9.2.2.2.1	Japan
Any solenoid plunger is considered to be a mechanical part, any solenoid coil is not. It should be clarified that brake (friction type) using hydraulic power to rerelease the brakes is included in electromechanical brake.	5.9.2.2.2.1	Japan
PESSRAL consisting of a controlling stage and a stage de-energizing the brake together fulfilling SIL3 requirements as given in 5.11.2.6; Could you explain more detail? Could you explain an example of a controlling stage and a stage de-energizing the brake?	5.9.2.2.2.3 a)3)	Japan
When the motor of the lift is likely to function as a generator, it shall not be possible for the electric device operating the brake to be fed by the driving motor. In case of the regenerative convertor system, the power from the driving motor is used to operate the brake indirectly through the power supply transformer. Therefore we would like to add the word “directly” to this text to prevent misunderstanding.	5.9.2.2.2.3 b)	Japan
With the brake manually released and the car loaded at 80 % of the value of the balanced load of the car, it shall be possible to move the car to an adjacent floor: a) Either by natural movement; or b) Manual operation consisting of: 1) Mechanical means, present on site, or 2) Electrical means, powered by supply independent from the mains, present on site. 1) Could you explain the rationale of 80 % of the value? 2) Does it mean that the car can be moved to an adjacent floor loaded at 80 % of the value of the balanced load of the car (=40% of rated load)? 3) Does it mean that the car cannot be moved at 41% - 59% of rated load? 4) Even if the balanced load of the car, the car should be moved.	5.9.2.2.2.8	Japan
PESSRAL consisting of a controlling stage and a stage removing the power which can cause rotation of the motor together fulfilling SIL3 requirements as given in 5.11.2.6; Could you explain an example of a controlling stage and a stage removing the power?	5.9.2.5.3c)	Japan
Safe torque off function according to EN 61800- 5-2, 4.2.2.2 fulfilling SIL3 requirements. Could you explain more detail of a safe torque off function?	5.9.2.5.3d)	Japan
To ensure adequate mechanical strength the cross sectional area of conductors should not be less than as shown in Table 5 in EN 60204-1:2006, except single core wires inside protective conduit, trunking or similar fittings shall not be less than 0,75 mm ² . Could you explain the rationale why single core wires inside protective conduit, trunking or similar fittings shall not be less than 0,75 mm ² ?	5.10.6.2	Japan
Abrasion of conductive material shall not lead to short circuiting of contacts. Could you explain the rationale?	5.11.2.2.5	Japan
Inspection control switches. Rotary control switches shall have a means of prevention of rotation of the stationary member. Friction alone shall not be considered sufficient. It is difficult to understand the meaning of “a mean of prevention of rotation of the stationary member”.	5.12.1.5.1.3	Japan
On Inspection operation the lift must slow down or stop when the free vertical distance above the safety volumes reaches 2.0 m. After reaching the set distance and the lift stops should the lift re-start at 0.6 or 0.3 m/s only?	5.12.1.5.2.1 f) 2) and g) 2)	Japan



Main Comments	Clause	Country
Protection for maintenance operations It is allowed that the control system is provided with means to give all floor calls,	5.12.1.7	Japan
Landing and car door bypass device Could you explain the rationale behind this clause	5.12.1.8	Japan
A separate monitoring signal shall be provided to check that the car door(s) is/are in the closed position in order to allow a car movement with bypassed car door closed contact(s). This applies also if the car door closed contact(s) and the car door locked contact(s) are combined; We think that: a separate monitoring switch should be added newly. There is no requirement of the electric safety devices. It is allowed to use a separate monitoring switch not to comply the electric safety devices?	5.12.1.8.3 d)	Japan
It is not always clear which clause is for hydraulic lifts	General	China
Standing area, safety volume, etc. are used in several clauses and it is not always clear which of those terms apply within the clause. Review and align the text of the clauses	General	China
It is not easily to understand the word "determined" Use other terms to clarify this clause, for example, "rated load"	0.2.5	China
Access way to machinery space etc. "properly lit" is not clear Could it be possible to specify the lux value of the lighting?	5.2.2.2	China
Need to clarify the definition of "access trap doors", or harmonise the use of these terms to eliminate ambiguity.	5.2.3	China
Is emergency electrical operation equivalent to emergency door in safety? In the event of power failure, safety chain faults or mechanical failure, how to move the car using emergency electrical operation? When the suspension ropes are broken, safety gear is activated to stop the car or traction conditions failure, how to achieve to rescue in these cases?	5.2.3.3	China
The counterweight or the balancing weight of a lift shall be in the same well as the car. Can panoramic lifts be an exception?	5.2.5.1.2	China
Figure 3 is confusing and could easily be misread. Need to redraft clause	5.2.5.3.1	China
Clause 5.2.5.5.1 says ".....This screen shall extend from the lowest point of the counterweight resting on its fully compressed buffer(s) or balancing weight in its lowest position to a minimum height of 2,0 m from the pit floor....." a) Why has this been changed from 2.5 m to 2.0 m? b) Why has the width of the screen been deleted?	5.2.5.5.1	China
a) No area requirement or this "a force of 300 N"; b) Balancing weight is missed after counterweight.	5.2.5.5.1	China
Distance of "In no case shall it be less than 0,30 m" under the screen may cause risk to the person in the pit	5.2.5.5.1	China
Safety volumes on car roof and clearances in headroom Current values are adequate and so see no need to increase	5.2.5.7	China
This clause is not clear	5.2.5.7.1	China
This clause is not clear	5.2.5.7.2	China
For machine room less lifts, because of the structure arrangement, the distance between balustrade and out edge of car may exceed 150mm, so there is need to set requirements for the condition of the distance over 150mm, to prevent a person from standing in this space,	5.2.5.7.3	China
This clause is not clear	5.2.6.4.4.2	China
The consequence of this clause is that the risk of entrapment is removed. Is there any need for remote alarm under the car?	5.2.6.4.4.2	China
This clause is not clear	5.3.4.2	China
This clause is not clear	5.3.5.2.2	China
It's unclear how to measure and calculate the car area. Dimensions for recesses and extensions is not given	5.4.2.1.1	China
How about to increase the requirements for other types of goods passenger lift which the available car area exceeds table 5?	5.4.2.2	China



Main Comments	Clause	Country
<p>"The requirements of 5.4.2.1, except 3rd sentence, shall be applied" should be wrong.</p> <p>a) Table 5 should apply to goods passenger lifts;</p> <p>b) if Table 5 does not apply to goods passenger lifts, for traction driven goods passenger lifts, there are no requirements of rated load and maximum available car area.</p>	5.4.2.2.1	China
<p>Can overspeed governor rope be placed within this 300mm circle diameter? Max deflection shall be limited. How to measure the 300mm circle?</p>	5.4.7.2.2	China
<p>The position to measure the 0,15m is not clear in Figure 11.</p>	5.4.7.3	China
<p>Emergency lighting, it seems 1 Lux is too low. Perhaps 5 Lux is proper</p>	5.4.10.4	China
<p>In this new version, one kind of terminals "Swage terminals" is added</p> <p>1) Is there any standard for this Swage terminals?</p> <p>2) Is it cold machining or hot machining?</p> <p>3) Can these terminals be made on jobsite?</p> <p>"Metal or resin filled sockets" are still used by a few of lift companies in China in few goods passenger lift. Why are these now deleted, Is it because of not being environment-friendly or is it for safety? Are these kind of terminals still allowed in Europe?</p>	5.5.2.3.1	China
<p>It shall be possible to use slack rope device according to 5.5.5.3 to prevent the empty car or the counterweight to be raised. Performance and safety of Electric safety device, like slack rope switch, exceeds safety of machinery torque limitation by sw-parameter, which can be altered example when broken drive is replaced with a new spare part.</p>	5.5.3	China
<p>Current formulation doesn't provide adequate detail for design of a guard. Are there referenced standards for these three kinds of protections?</p>	5.5.7.1	China
<p>Hydraulic machine room less lift is not considered. The word should be "machinery space" instead of "machine room"</p>	5.6.3.7	China
<p>a) §5.9.2.2.2.1 writes "...shall be installed at least in two sets." Has this redundancy considered the risk of "common cause failure" or "common mode failure" of ISO 12100-2§4.13.3?</p> <p>b) According to §5.12.1.2.2, the max load of the car may be 110% of the rated load. But, the second paragraph of §5.9.2.2.2.1 says ".....If one of the components.....with rated load"</p> <p>c) 5.6.7.3 writes "...unless there is built-in redundancy and correct operation is self-monitored. Note: Machine brake according to 5.9.2.2.2 is considered to have built – in redundancy." In fact, this specifies the brake in two sets as the only way to stop the car.</p> <p>d) The requirement on the contacts of "self-monitored" is not clear, e.g. specify the requirement for the contacts, and how often the brakes should be monitored</p>	5.9.2.2.2.1	China
<p>Now there are a lots of sausage type gearless machine which the brake acts at rear side of motor (not immediate vicinity of sheave, but the same shaft). If the strength of the shaft is enough, is it necessary to require "act on the sheave directly or on the same shaft in the immediate vicinity of the sheave"</p>	5.6.7.4 d)	China
<p>"Free distance" is not clear to the reader Replace "free distance" by "vertical distance"</p>	5.6.7.5	China
<p>When the buffer is fixed on counterweight, and no pedestal on the floor of the pit, man's feet may go into the impacting area via 100mm space below the screen. There is a conflict between the requirements for 100mm and requirements for counterweight screen (0,3m).</p>	5.8.1.1	China
<p>Does "the retardation of the car" mean "average retardation of the car"?</p>	5.9.2.2.2.1	China
<p>In the condition according to §5.9.2.2.2.1, When the emergency brake happens, the ropes may slip on the traction sheave. Is it allowed to occur by the standard? While reduced stroke buffer is used, the rope slipping may be dangerous.</p>	5.9.2.2.2.1	China
<p>For manual operation, only the maximum force 400N is defined. Shall the maximum diameter of the wheel be limited as well?</p>	5.9.2.3.1	China
<p>It is difficult for multiple inspection control stations to achieve simultaneous operation on same push buttons.</p>	5.12.1.5.2.1	China
<p>This item is for hydraulic lifts, but it is not indicated clearly.</p>	5.12.2.2.4	China
<p>No test requirement on Safety Gear and Buffer according to 5.4.2.2.4</p>	6.3.4	China



Main Comments	Clause	Country
In order to achieve a consistent level of safety specific parameters relating to Factors of safety, percentage Elongation before rupture, material properties etc. should be included in EN 81.	0.3.2 (a)	USA
Language not clear	3.26	USA
Language not clear	3.28	USA
Language not clear	3.29	USA
Language not clear	3.5	USA
No examples have been provided for machine parts and energy accumulation	4. Table 1	USA
Language not clear	5.1.1	USA
Clarification needed.	5.2.1	USA
Replace "Lamps" with "sources of illumination" in order to allow other solutions.	5.2.1.4	USA
Language not clear	5.2.3.5 e)	USA
The code should require that the foundation be sufficiently strong instead of merely communicating to the building owner.	5.2.5.4	USA
Clarification needed.	5.2.5.7	USA
No deformation should be allowed with this loading.	5.3.5.2	USA
No deformation should be allowed with this loading.	5.3.5.2.1	USA
It is not clear why a crack of 40mm in a glass panel is acceptable. Provide rationale or change the requirement.	5.3.5.2.2	USA
The force of 150N is considered to be on the high side. It is recommended that a maximum force of 135N be considered.	5.3.6.2.1.1 a)	USA
It is not clear whether the height referred to in d) 2) is height above floor, or the size of an object anywhere in the travel path of the door. 50mm is reasonable in the former but excessive in the latter as small body parts such as fingers could be missed. This requirement needs to be clarified.	5.3.6.2.1.1 c), d)	USA
Language not clear	5.3.6.2.1.1 c), d)	USA
There is no need to extend the unlocking zone to 0.35 m for mechanically coupled car and landing doors. The unlocking zone of 0.20 m is sufficient in all cases	5.3.8.1	USA
The element of the electric safety device proving the locked condition of the door panel(s) shall be positively operated without any intermediate mechanism by the locking element. It shall be foolproof but adjustable if necessary. Please let us know what the "positively" means.	5.3.9.1.2	USA
Use performance language and appropriate parameters rather than requirements for metal	5.3.9.1.4	USA
There is no added safety value to this test.	5.3.9.1.5	USA
The term "simple means" is not clear.	5.3.9.1.7	USA
Current wording is not clear.	5.4.2.1.1	USA
No deformation should be allowed with this loading.	5.4.3.2.2	USA
No deformation should be allowed with this loading. No rationale provided for 40mm crack length.	5.4.3.2.3	USA
Current wording is awkward.	5.4.5.3	USA
It is hazardous to conduct rescue operations to an entrance at side of the elevator cab. Side emergency doors should be prohibited.	5.4.6.3	USA
Language is too restrictive	5.5.3	USA
Language requires clarification	5.6.2.2.1.5	USA
Clarifications needed	5.6.4	USA
Clarifications needed	5.7.4.4	USA
Requires interruption of current to the brake be controlled by one of four possible means. However it appears that if means one is chosen, then you must also comply with means two (checking that both independent devices listed in method one are opening the brake circuit). Suggest that 1) and 2) be combined.	5.9.2.2.2.3 a)	USA
The wording "power supply" is not specific enough.	5.9.2.2.2.7	USA
For very small elevators, 20% of remaining unbalanced load is unlikely to exceed frictional forces. (40 kg is approximately half the mass of a person)	5.9.2.2.2.8	USA



PACIFIC ASIA LIFT AND ESCALATOR ASSOCIATION

Main Comments	Clause	Country
Language requires clarification.	5.10.1.1.6	USA
A list of devices for which an examination certificate is needed, is missing.	5.11.2.3.3	USA
ISO 22201-1 PESSRAL is available and should be included as an option to satisfy this clause.	5.11.2.6	USA
Speed and car position is mixed. Clarification is needed. What are the requirements for the speed monitoring and what are the requirements for the car position monitoring?	5.12.1.3.3	USA
It is not clear as to who the recipient of the document is. It is also not clear whether a separate document is required for each installation. This could be overly burdensome. It is also not clear what levels of drawings are required in the Annex B (e.g. Arrangement or detail drawings.)	6.1	USA
To harmonize with ISO 22201-1 change the following detection of the position of mechanical devices in the vicinity of moving apparatus from SIL 2 to SIL 3	Annex A	USA
To harmonize with ISO 22201-1 Change the following the detection of hinged hoistway doors from SIL 2 to SIL 3.	Annex A	USA
To harmonize with ISO 22201-1 change the following the detection of ascending car overspeed and Unintended movement SIL 1 to SIL 2.	Annex A	USA
To harmonize with ISO 22201-1 Change the following stopping devices in the vicinity of moving apparatus from SIL 1 and 2 to SIL 3.	Annex A	USA

Future PALEA Seminars in 2012

Seoul, South Korea 25th July

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