**List of attendees:** M/s. Tipnis, Manokar, Viswanathan, Vispute, Praveena, Vishnu, Karthikeyan, Deepak, Nitin, TAK, Abhijit, Arun, Bhaskar, Meghna, Swaminathan.

The following items were discussed in the 89th meeting of the panel P4 & decided as below:

1. Recommendations of P4 on the comments by the chairman on the *draft* *Escalator Maintenance Document ETD 25 (11991) GUIDE FOR MAINTENANCE FOR ESCALATORS AND MOVING WALKS.*

**15 -12-2022: M/s Meghna pointed out that the published standard IS 17900 Part 6 refers to IS 14665 series of standards which would soon be replaced by IS 17900 series of standards, thus IS 17900 P6 needs revision. Mr Vishnu volunteered to make the draft with necessary changes. He would circulate it before the next meeting of the panel P4.**

**05-01-2023: Mr. Parashar promised to circulate the draft before the next meeting.**

**19-01-2023: The draft circulated by Mr. Balani on behalf of Mr. Parashar was discussed for the updating of the IS 17900 series in place of IS 14665 series of the Indian Standards. The panel approved this draft for further processing by Ms. Meghna.**

**16-02-2023: In the 29th meeting of ETD 25, it was decided to draft an amendment to reflect the changes. Mr. Parashar is requested to do the needful.**

**02-03-2023: Mr. Parashar promised to circulate the draft amendment by 10th March.**

**16-03-2023: The draft amendment was circulated. There are; & will be; several lifts installed as per IS 14665 which will follow IS 17900 P6. Hence, Ms Meghna would take care by putting appropriate effective date while gazetting the amendment.**

**3-04-2023: The draft amendment now containing QR code requirements was discussed. A note to be added indicating that the responsibility for issuing & maintaining QR code would rest with the Lift Authority of respective states. The draft amendment would accordingly be updated & circulated by Mr. Parashar/Mr. Balani.**

**20-04-2023: Revised draft amendment version 3.2 was presented by Mr. Balani which was approved by the panel for further processing by BIS.**

**11-05-2023: Mr. Lal would send the draft in wide circulation.**

**01-06-2023: The draft would be put up to the committee before sending in wide circulation.**

**15-06-2023: The draft would be put up to the committee before sending in wide circulation.**

**06-07-2023: In clause 9.1 b of the Draft Amendment No.1 to IS 17900 P6, “Type of lift” & “Drive Type” to be added. BIS to decide on “shall” / “should” in the clause.**

**13-07-2023: The document was read line by line & finalised with a few changes. The final document shall be circulated with version no. 3.4.**

**20-07-2023: Mr. Balani circulated the final document Amendment 1 to IS 17900 Part 6 with version no. 3.4. Mr. Lal to process it.**

**07-09-2023: Mr. Balani to send the final copy, assigning file name as “\_\_\_\_\_\_\_\_\_ \_\_\_Final for Committee Approval” to Mr. Tipnis for forwarding to Mr. Lal.**

**21-09-2023: Final copy received.**

**28-09-2023: Final copy forwarded to Mr. Lal.**

**19-09-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**18-01-2024: Mr. Lal to update the status.**

**07-03-2024: Amendment No. 1 IS 17900 P6 is under WC.**

**21-03-2024: The document would be put up to the committee for permission to print and publish.**

**25-04-2024: P4 members cleared the document for printing.**

**03-10-2024: It was informed by M/s Meghna that the document was published. She would circulate copy of the amendment to committee members.**

1. IS 14665 Part 5 to be adopted as Part ~~3~~ 5 of the adopted ISO 8100

**05-01-2023: Mr. Viswanathan circulated the draft. Mr. TAK Mathews suggested that the draft be sent to some persons in hydraulic lifts business. He also volunteered to do that.**

**19-01-2023: Mr. Viswanathan emailed the draft to Mr. TAK who would send it to concerned stake holders for comments.**

**16-02-2023: Mr. TAK has sent the draft to 3 parties doing business in hydraulic lifts. Responses awaited.**

**02-03-2023: Mr. Viswanathan would consider the comments from Blain Hydraulics & Moris; and do the needful.**

**16-03-2023: The comments were discussed and text finalized. Mr. Viswanathan would circulate the final draft for Ms Meghna to proceed with.**

**3-04-2023: Update was not available in absence of Mr. Viswanathan.**

**20-04-2023: Revised draft was discussed & approved by the panel for further processing by BIS.**

**11-05-2023: Mr. Lal would send the draft in wide circulation.**

**01-06-2023: The draft would be put up to the committee before sending in wide circulation.**

**15-06-2023: The draft would be put up to the committee before sending in wide circulation.**

**06-07-2023: The draft would be taken up for “line by line” reading in P4 meeting.**

**13-07-2023: The document reading could not be completed; will be resumed in the next meeting.**

**20-07-2023: The document reading could not be completed; will be resumed in the next meeting.**

**03-08-2023: The draft document (IS 17900 P5) reading was completed, changes decided.** **Mr. Viswanathan would revise the document & circulate. Mr. Lal to process the same.**

**10-08-2023:** **Mr. Viswanathan would revise the document & circulate. Mr. Lal to process the same.**

**17-08-2023: Mr. Viswanathan circulated the document. Mr. Lal to process it.**

**07-09-2023: Mr. Viswanathan to send the final copy, assigning file name as “\_\_\_\_\_\_\_\_\_ \_\_\_Final for Committee Approval” to Mr. Tipnis for forwarding to Mr. Lal.**

**21-09-2023: Final copy received.**

**28-09-2023: Final copy forwarded to Mr. Lal.**

**19-09-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**28-12-2023: Sectional committee on 11th Oct. approved the draft for wide circulation. It was circulated on 16-12-2023. Last date for comments is 18-02-2024.**

**07-03-2024: The WC period is over. The document would be put up to the committee in the next meeting scheduled in the second week of April 2024 for approval to print.**

**21-03-2024: The document would be put up to the committee for permission to print and publish.**

**25-04-2024: The document is under process for printing at BIS.**

1. Proposed Amendment No 2 to the IS 15259 Home Lifts.

**17-03-2022: Amendment No. 2 to IS 15259: 2002 Installation & Maintenance of Home Lifts – Code of Practice: *Final PDF processed for gazette notification***

**05-05-2022: Amendment published.**

**19-05-2022: Point closed.**

1. Review of all ISO documents under circulation by BIS to be adopted as Indian Standards

**17-03-2022: IS 17805 (Part 1): 2022/ ISO 8102-1:2020 Electrical Requirements for Lifts Escalators and Moving Walks: Part 1 Electromagnetic Compatibility With Regard To Emission:** ***PUBLISHED***

**IS 17805 (Part 2) : 2022/ ISO 8102-2 : 2020 Electrical requirements for lifts escalators and moving walks: Part 2 Electromagnetic compatibility with regard to immunity:** ***PUBLISHED***

**IS 17106 (Part 3) : 2022/ISO/TR 22201-3:2016 Lifts (elevators), escalators and moving walks — Programmable electronic systems in safety related applications — Part 3: Life cycle guideline for programmable electronic systems related to PESSRAL and PESSRAE: *PUBLISHED***

**IS 17106 (Part 2) : 2022/ISO/TR 22201-3:2016 Electrical requirements for lifts escalators and moving walks Part 2 Programmable electronic systems in safety-related applications for escalators and moving walks PESSRAE: *PUBLISHED***

**IS 17806 : 2022/ ISO 7465: 2007 Passenger lifts and service lifts Guide rails for lift cars and counterweights T-type: *PUBLISHED***

**IS 17615 (Part 1) : 2022 Measurement of ride quality : Part 1 Lifts (elevators):** ***PUBLISHED***

**IS 17615 (Part 2) : 2021 Measurement of ride quality Part 2 Escalators and moving walks: *PUBLISHED***

**05-05-2022: Point closed.**

IS xxxxx-~~1~~ 3 Lifts for the transport of persons and goods - Part ~~1~~ 3: Specifications for planning and selection:

Section 1: Passenger/service/hospital bed/stretcher lifts

Section 2: Goods lifts

**24-11-2022: IS 15330 rev 2 is under wide circulation,** **IS 17900 Part 3 Section 1 is under wide circulation.**

**16-02-2023: The finalized draft is under print.**

**02-03-2023: I****S 17900 Part 3 Section 1 is expected to be gazetted in a week or so.**

**16-03-2023:** **IS 17900 Part 3 Section 1 is expected to be gazetted in a week or so.**

**3-04-2023: IS 17900 Part 3 Section 1 is gazetted on 20th March 2023. Point Closed.**

**19-01-2023: The comments on the draft revision of IS 15330 discussed during Manthan were not yet received by panel members.**

**16-02-2023: The comments received on the revision document of IS 15330 in Manthan have been circulated by BIS.**

**In the 29th meeting of ETD 25 following was decided:**

**The panel recommendations with justifications for acceptance/non-agreement on the above comments shall be submitted by the Panel P4 which shall be circulated among committee members for their consideration.**

**Comments on the same shall specially be invited from ‘Department of Empowerment of Persons with Disabilities (Divyangjan) - Ministry of Social Justice and Empowerment’**

**Mr. Dandekar is requested to analyse the comments & put forward suggestions to the P4 panel members during the next meeting.**

**02-03-2023: Mr. Dandekar would circulate his recommendations on the Manthan comments before next meeting.**

**16-03-2023: Mr Dandekar presented the draft replies which were accepted by the panel. Mr Tipnis has given a few comments. Mr Dandekar would finalize the draft IS 17900 Part 7 Section 4 & circulate for Ms Meghna to proceed with.**

**3-04-2023: In absence of Mr. Dandekar update was not available.**

**Panel to finally decide whether IS 15330 number should be changed to** **IS 17900 P7 S4.**

**20-04-2023: The panel decided to change the existing standard number IS 15330 to IS 17900 P7 S4. Mr. Dandekar would make all the changes accordingly & circulate the final draft for the consideration of the panel.**

**11-05-2023: Mr. Tipnis has circulated additional comments on 8th May 2023. Mr. Dandekar is requested to update the draft & circulate asap.**

**01-06-2023: Mr. Vispute has kindly taken up the responsibility to urge Mr. Dandekar to complete the pending task asap.**

**15-06-2023: The draft is completed by Mr. Dandekar and would be put up to the committee before sending in wide circulation.**

**06-07-2023: The draft IS 17900 P7 S4 (IS 15330) would be taken up for “line by line” reading in P4 meeting.**

**10-08-2023: The draft was read line by line; changes as decided would be carried out by Mr Vispute. He would revise the document & circulate. Mr. Lal to process the same.**

**24-08-2023: The revised draft was circulated by Mr. Dandekar. The panel approved it for further processing by Mr Lal.**

**07-09-2023: Mr. Dandekar to send the final copy, assigning file name as “\_\_\_\_\_\_\_\_\_ \_\_\_Final for Committee Approval” to Mr. Tipnis for forwarding to Mr. Lal.**

**21-09-2023: Final copy received.**

**28-09-2023: Final copy forwarded to Mr. Lal.**

**19-09-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**28-12-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**Last date for comments is 09-02-2024.**

**07-03-2024: The WC period is over. The document would be put up to the committee in the next meeting scheduled in the second week of April 2024 for approval to print.**

**21-03-2024: The document would be put up to the committee for permission to print and publish.**

**25-04-2024: The document is under process for printing at BIS.**

**30-05-2024: Mr. Dandekar explained the comments received from DEOC on the Draft IS 17900 P7 S8 Lifts for persons with disabilities. Replies were finalised.**

**13-06-20124: With a few editorial comments from Tipnis, Mr Vispute would finalise the document.**

**27-06-2024: Mr. Vispute to send the finalised document after getting required input from Bhaskar (diagram), Nitish and TAK (Title).**

**11-07-2024: Input from Mr. Bhaskar received. Mr. Vispute to complete the document and send.**

**25-07-2024: Mr. Vispute submitted the document to Mr Nitish for further processing at BIS.**

**22-08-2024: Mr. Vispute reshared the final document to M/s Meghana for reviewing the title of the standard / finalisation & further processing at BIS**

**05-09-2024: M/s Meghna expects clarifications on the title from the concerned ministry soon. If it is not available before next panel meeting, it was decided to clear the document for printing with existing title.**

**03-10-2024: It was decided to clear the document for printing with existing title.**

**03-11-2022: Mr. Karthikeyan circulated the draft of *IS 17900 Lifts for the transport of persons and goods - Part 3: Specifications for planning and selection - Section 2: Goods Lifts* which received comments from Mr. Balani which were discussed in the meeting & concluded pointwise. Mr. Karthikeyan would revise the draft accordingly & recirculate. M/s Meghna to process it further.**

**24-11-2022: Mr. Karthikeyan will put the referred but missing clause numbers of IS 17900 P1 in the draft & circulate. The draft is then ready for further processing by Ms Meghna.**

**15 -12-2022: Mr. Karthikeyan would complete the draft asap.**

**05-01-2023: Mr. Karthikeyan via message, promised to release the draft on 6th Jan 2023.**

**19-01-2023: Mr. Karthikeyan is urged to circulate the draft as it is pending for very small corrections for more than 2 months.**

**16-02-2023: Mr. Karthikeyan promised to circulate the draft on the day of the meeting itself, i.e.; 16th Feb. 2023.**

**02-03-2023: In absence of Mr. Karthikeyan, Mr. More promised to take ensure action on the pending draft of IS 17900 Part 3 Section 2.**

**16-03-2023: Mr Karthikeyan circulated the draft which was accepted by the panel for Ms Meghna to proceed with.**

**3-04-2023: M/s Meghna / K.K. Lal to process the draft further.**

**20-04-2023: BIS to process the draft.**

**11-05-2023: Mr. Lal would send the draft in wide circulation.**

**01-06-2023: The draft would be put up to the committee before sending in wide circulation.**

**15-06-2023: The draft would be put up to the committee before sending in wide circulation.**

**06-07-2023: The draft would be taken up for “line by line” reading in P4 meeting.**

**17-08-2023: Mr. Karthikeyan completed the line-by-line reading. The document is cleared for further processing by Mr. Lal.**

**07-09-2023: Mr. Karthikeyan to send the final copy, assigning file name as “\_\_\_\_\_\_\_\_\_ \_\_\_Final for Committee Approval” to Mr. Tipnis for forwarding to Mr. Lal.**

**21-09-2023: Final copy from Mr Karthikeyan awaited.**

**28-09-2023: Final copy forwarded to Mr. Lal.**

**19-09-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**28-12-2023: Sectional committee on 11th Oct. approved the draft for wide circulation. It was circulated on 16-12-2023. Last date for comments is 03-02-2024.**

**07-03-2024: The WC period is over. The document would be put up to the committee in the next meeting scheduled in the second week of April 2024 for approval to print.**

**21-03-2024: The document would be put up to the committee for permission to print and publish.**

**25-04-2024: Mr. Karthikeyan to finalise the document.**

**30-05-2024: Mr. Karthikeyan to finalise the document.**

**13-06-20124: Mr Karthikeyan to circulate the document.**

**27-06-2024: Mr. Karthikeyan circulated the document. All members should go through and confirm the document in the next meeting.**

**11-07-2024: All members to confirm the document in the next meeting.**

**25-07-2024: All members to confirm the document in the next meeting**

**05-09-2024: Bhaskar was requested to send his comments once again. Mr. Karthikeyan to do the needful.**

**19-09-2024: Karthikeyan will circulate the updated draft today.**

**03-10-2024: The circulated document was cleared for printing.**

IS xxxxx-2 Lifts for the transport of persons and goods - Part 2: **Specifications for control devices, buttons, signals, indicators, and other fittings** (**IS 17900 Part 4** derived from ISO 4190 Part 5).

**05-01-2023: Mr. Viswanathan would complete the draft asap & send a separate mail to Ms. Meghna jotting all the changes that have been made so far so as to facilitate the wording of “introduction” in the final standard.**

**19-01-2023: Mr. Viswanathan raised several other related points in the draft which were discussed and decided upon. He would now revise the draft accordingly and circulate.**

**16-02-2023: Due to absence of Mr. Viswanathan, no update was available.**

**02-03-2023: Mr. Viswanathan will circulate the draft by 10th March.**

**16-03-2023: The proposed draft was discussed in the meeting & finalized. Mr Viswanathan would update & circulate the draft for Ms Meghna to proceed with.**

**3-04-2023: Update was not available in absence of Mr. Viswanathan.**

**20-04-2023: Revised draft was ready & would be circulated asap by Mr. Viswanathan.**

**11-05-2023: Mr. Viswanathan to circulate the updated draft asap.**

**01-06-2023: Mr. Viswanathan will make the remaining changes to the document as suggested by Tipnis; e.g. the stop switch, text about “recommendation” in connection with accessibility requirements; and circulate the same asap. This revised draft will be put up to the committee in the forthcoming meeting.**

**15-06-2023: The draft would be completed by Viswanathan soon and put up to the committee before sending in wide circulation.**

**06-07-2023: The draft would be taken up for “line by line” reading in P4 meeting.**

**10-08-2023: The draft was read line by line; changes as decided would be carried out by Mr Viswanathan. He would revise the document & circulate. Mr. Lal to process the same.**

**17-08-2023: Mr. Viswanathan circulated the document. There were a few editorial suggestions which would be incorporated & Mr. Viswanathan would circulate the document** **for Mr, Lal to process it further.**

**24-08-2023:** **Mr. Viswanathan to circulate the document for Mr. Lal to process it further.**

**31-08-2023: Mr. Viswanathan to circulate the document for Mr. Lal to process it further.**

**07-09-2023: Mr. Viswanathan to send the final copy, assigning file name as “\_\_\_\_\_\_\_\_\_ \_\_\_Final for Committee Approval” to Mr. Tipnis for forwarding to Mr. Lal.**

**21-09-2023: Final copy received.**

**28-09-2023: Final copy forwarded to Mr. Lal.**

**19-09-2023:** **Sectional committee on 11th Oct. approved the draft for printing.**

**Mr Lal to circulate, in all cases, the final copy in printing stage to members to ensure printing of the right document.**

**28-12-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**Last date for comments is 14-02-2024.**

**07-03-2024: The WC period is over. The document would be put up to the committee in the next meeting scheduled in the second week of April 2024 for approval to print.**

**21-03-2024: The document would be put up to the committee for permission to print and publish.**

**25-04-2024: Mr. Viswanathan to finalise the document with Mr. Nitish EOD.**

**16-05-2024: Doubts on gap between handrail and car wall, dB level of announcement were settled.**

**30-05-2024: Mr. Viswanathan to finalise the document.**

**06-06-2024: Mr Viswanathan to circulate finalised document.**

**13-06-20124: Mr Viswanathan to circulate the finalised document.**

**27-06-2024:** **Mr. Viswanathan to finalise the “STOP switch” in the document and circulate it.**

**11-07-2024: Mr. Viswanathan to finalise the “STOP switch” in the document and circulate it.**

**25-07-2024: It was decided to drop Stop Switch from the document.**

**05-09-2024: M/s Meghna to process the document for release.**

IS xxxxx-20 **Dumbwaiters** - Specifications and safety rules for planning, installation, operation, and maintenance.

**27-06-2024: IS 17900 Part 20 Dumbwaiters published, point closed.**

1. **Lifts used for Construction:**

**21-04-2022: The draft of IS 17900 Part 7 Section 1 has been circulated.**

**24-11-2022: The draft is under wide circulation.**

**16-02-2023: In the 29th meeting of ETD 25 following was decided:**

**The committee approved the suggestion of Shri Mukesh Kumar Sharma, Electrical Inspectorate, Government of NCT of Delhi to specially invite comments from Electrical Inspectorates of all states (especially where Lift Acts and Rules are in place) and from DGFASLI.**

**M/s Meghna is requested to do the needful.**

**02-03-2023: M/s Meghna is in the process of collecting contact details to send special mails to the identified persons.**

**16-03-2023: M/s Meghna is requested to expedite the circulation of the draft to the identified persons.**

**3-04-2023: The panel decided to seek opinion of those persons whose contact details were made available by Mr. Mukesh Kumar Sharma as promised in ETD 25 meeting, without waiting any further for any additional names. M/s Meghna / K.K. Lal would do the needful accordingly.**

**20-04-2023: Mr. K.K. Lal to report progress.**

**11-05-2023: Mr. Lal will send reminder email to the two parties whom the draft had been sent, marking copies to Mr. Mukesh Kumar Sharma, & request for comments within one month. If no comments are received by then, the draft would be finalized & sent for printing.**

**01-06-2023: The draft would be put up to the committee before sending in wide circulation.**

**15-06-2023: Reminder would be sent to the parties to whom the draft has been sent for comments. The draft would be put up to the committee before sending in wide circulation.**

**06-07-2023: The draft would be taken up for “line by line” reading in P4 meeting.**

**17-08-2023: The draft is already in wide circulation.**

**19-09-2023: Sectional committee on 11th Oct. approved the draft for printing.**

**18-01-2024: Mr. Lal to update the status.**

**07-03-2024: The document would be gazetted soon.**

**25-04-2024: The document is under process for printing at BIS.**

**Rack & Pinion Lift: IS 17900 Part 7 Section 2.**

**25-08-2022: Mr. Bhushan was explained again the required structure & content thereof for the standard. It was suggested by Mr. TAK to have an offline detail discussion amongst Mr. Bhushan & Mr. Tipnis.**

**15-09-2022: Mr. Bhushan has requested some more time to complete the task of drafting** **IS 17900 Part 7 Section 2.**

**~~25-08-2022:~~ 29-09-2022:** **Due to absence of any representative from M/s Alimak no update was available.**

**03-11-2022: Due to absence of any representative from M/s Alimak no update was available.**

**24-11-2022: Mr. Pankaj would like more clarity on the structure. He would draft a small part as sample & would organise a phone meeting with the convener & others as required, for clarity, on 28 or 29th of Nov.**

**15 -12-2022: Mr. Pankaj did not arrange the phone meeting as required by him, neither he was present in the meeting. The panel expressed dissatisfaction over the repeated absence of the member from Alimak & the tardy progress of the**

**work, especially in view of the recent accidents. The member is urged to complete the tasks assigned & also attend the meetings regularly.**

**05-01-2023:** **There was no representation from Alimak in the meeting.**

**19-01-2023: There was no representation from Alimak in the meeting.**

**16-02-2023: Mr. Tipnis informed the members that he had 2 meetings with M/s Pankaj Bhushan & Venkata Sateesh of M/s Alimak regarding the preparation of the draft. M/s Alimak observed that the IS 16900 P1 & P2 was a huge**

**document, hence requested that a draft based on this mother standard be prepared by somebody by referring to the information shared by Alimak so far. Accordingly, Mr. Tipnis prepared & shared the draft. M/s Alimak would add the**

**specification for the Rack & Pinion Machine; and the Rack & Pinion Safety Gear in the draft & circulate it by 17th Feb 2023.**

**In the 29th meeting of ETD 25 following was decided:**

**M/s Universal Rack and Pinion may be co-opted. The working draft shall be expedited in consultation with both M/s Alimak and M/s Universal.**

**The draft shall be submitted by Panel P4 within 3 months.**

**02-03-2023: Mr. Rao & Bhushan presented the draft requirements on the rack & pinion safety device & machine prepared by M/s Alimak. After discussions Mr. Rao suggested that Ms. Alimak would quickly share certain documents related to the rack & pinion lifts along with the updated draft so that other experts can improve the draft.**

**16-03-2023: M/s Alimak shared certain documents with Mr Tipnis who would study those & help Mr Pankaj to complete the draft standard.**

**3-04-2023: In the meeting on 30th March with Mr. Tipnis, M/s Bhushan was clarified about the draft revised based on the documents submitted by Alimak.**

**Mr. Tipnis raised some technical points which Mr. Bhushan promised to collect information on & revert.**

1. **Automatic rescue device in case of power failure…..? (Clarity on the brake release device to gradually bring the car down in steps; located on car top only)**
2. **In case of safety gear operation, the authorized person has to go to car top & release the safety. During drop test, however, a temporary cable is provided to the car top & the machine raised up to release the safety. Question is:**

**why the motor cannot be energized from the auxiliary panel located at the ground floor with suitable controls, to release the safety?**

1. **To have a close look at the car area & ratings as per IN 17900 P1 vis a vis EN & ASMI standards shown in a table provided by Alimak and confirm.**

**Mr. Bhushan was also requested to confirm other points in the draft especially regarding the safety device; the rack & pinion machine.**

**In absence of Mr. Bhushan no update was available in the meeting.**

**20-04-2023: In absence of Mr. Bhushan no update was available. The panel requested Mr. Tipnis to expedite the completion of the draft.**

**11-05-2023: Mr. Tipnis circulated the draft. Mr. Bhushan requested further one week time for sending comments, if any. If no comments are received Mr. Lal may send it for wide circulation.**

**01-06-2023: The comments on the draft were received by Mr. Tipnis and Mr. TAK which were discussed in the meeting. Due to the absence of Mr. Pankaj, an email reply would be sent to him.**

**15-06-2023: The email reply to Alimak was sent. There was no Alimak representative in the meeting nor there has been any response to the email from Alimak who are urged to respond immediately & help finalise the draft as early as possible, but surely before the next panel meeting which is scheduled on 6th July when it is expected to be finalised so that it can be put up to the main committee.**

**06-07-2023: Mr. TAK argued that the rack & pinion technology was different. If so, it would be reviewed if the same falls in the domain of ETD 25.**

**03-08-2023: There was discussion on how the standard could be formulated; what it may contain, and what not. Mr. Bhushan would revise the draft & circulate asap.**

**31-08-2023: Mr. Bhushan circulated his comments on the draft. Mr Tipnis to process it further.**

**07-09-2023: Mr. Tipnis awaits certain clarifications from Mr. Bhushan.**

**21-09-2023: A separate joint meeting and a site visit along with Mr. Dambe is proposed.**

**28-09-2023: The revised draft circulated by Mr Tipnis was discussed with Mr Bhushan who promised to resolve the contradiction in the maintenance check-list regarding checking of the wear of the safety device and other points. He promised to comeback with all comments before the next meeting.**

**5-10-2023: Comments from Mr Bhushan awaited.**

**19-09-2023: Comments from Mr Bhushan awaited.**

**26-10-2023: It was decided to process the *“draft not having maintenance check list incorporated”* due to non-availability of clarifications from Mr. Pankaj.**

**28-12-2023: Sectional committee on 11th Oct. approved the draft for wide circulation. It was circulated on 11-12-2023. Last date for comments is 09-02-2024.**

**07-03-2024: The WC period is over. The document would be put up to the committee in the next meeting scheduled in the second week of April 2024 for approval to print.**

**21-03-2024: The document would be put up to the committee for permission to print and publish.**

**25-04-2024: The document is under process for printing at BIS.**

1. Updating of IS 14665 P2 S1 clause no 8.3.14.1 b (which refers to IS 3809 for fire resistance test) to IS 1751~~7~~ 8-2.

**07-04-2022: No further update.**

**21-04-2022: No change in status.**

**05-05-2022: Spectro Analytical Labs Pvt Ltd. G. Noida received NABL approval for fire testing of lift landing doors as per IS 17518-2, ISO 3008-2, EN 81-58.**

**02-06-2022: M/s Meghna updated the status.**

**14-07-2022: As the new standard IS 17900 is under print, no new amendments would be considered for the existing standards. Point Closed.**

1. Re-numbering of amendments ARD (#9.5), EEO (#9.6 with subsequent sub-clauses appropriately) & TOC Guardrail (#9.7 with subsequent sub-clause and cross reference clause numbers) of IS 14665 Part 3 Section 1.

**17-03-2022: Amendment No. 4 to IS 14665 (Part 3/Sec 1): 2000 Electric Traction Lifts: Part 3 Safety Rules, Section 1 Passenger and Goods Lifts: *UNDER PRINT***

**07-04-2022: Members noted the status.**

**21-04-2022: No change in status.**

**19-05-2022: Update requested from M/s Meghna.**

**02-06-2022: M/s Meghna updated the status.**

**04-08-2022: The amendment is published.**

**Point closed.**

1. 26-08-2021: a) The mail from Paresh Dixit of Trio, IEEMA requesting clarifications on the use of the chart for “K” in clause nos. 5.3.2.3.1 & 5.3.2.3.2 of ISO 8100-2.

**11-11-2021:** Mr. Dandekar replied to Mr. Paresh Dixit.

**The point is closed.**

1. Scope of ETD 25 committee: The scope statement was discussed & finalized as below:

Standardization of all aspects, including safety, of lifts, **~~service lifts~~ dumbwaiters**, escalators, moving walks, and similar apparatus, as well as components thereof.

Excluded : continuous mechanical handling equipment and lifts in mines.

**16-9-2021:** **The point is closed.**

1. **30-09-2021:**  The following ISO drafts are to be commented upon:

1) ISO TC 178 ballot - ISO/DIS 8102-20 'Electrical requirements for lifts, escalators and moving walks — Part 20: Cyber security

2) ISO TC 178 ballot - ISO/FDIS 8100-34 'Lifts for the transport of persons and goods — Part 34: Measurement of lift ride quality.

3) ISO TC 178 ballot - ISO/FDIS 8103-9 Escalators and moving walks — Part 9: Measurement of ride quality

It was decided to give final comments from P4 in the next meeting of P4 scheduled on 14th Oct 2021. Members who have comments to offer shall email the same to all members before 7th Oct 2021.

**21-10-2021:** No comments were received. M/s Meghna may proceed.

**11-11-2021:** M/s Meghna to proceed.

**23-06-2022: Point is closed.**

1. Formulae B10 and B11, B20 and B21, B30, 5.10.6 in modified ISO 8100-2 (Doc ETD 25 (16077))

**06-01-2022: As per MOM of 26th meeting of ETD 25, the typo errors have been taken care of**

**23-06-2022: Point is closed.**

1. **06-01-2022:** P4 recommendation on the implementation of the adopted ISO 8100-1 & ISO 8100-2.

**After a lot of deliberations, the panel decided following as the recommendation to BIS on the implementation plan for the adopted ISO 8100-1 & ISO 8100-2.**

***“Any lift whose material delivery begins at the latest 2 years from the date of publication of the adopted ISO 8100-1 & ISO 8100-2 shall comply fully with those adopted standards***

**17-02-2022: Members expressed concern over the implementation schedule of the adopted standards. In case there is no QC order, members suggested that the above recommendation on the compliance of the standards be included in the gazette notification itself. M/s Meghna to confirm the execution.**

**07-04-2022: No further update.**

**21-04-2022: No change in status.**

**19-05-2022: Update requested from M/s Meghna.**

**16-02-2023: IS 17900 P1 & P2 are published. The withdrawal date for the existing standards IS 14665, IS 15785, IS 14671 is Dec. 2023.**

**The point is closed.**

1. **20-01-2022: Touchless operation of lifts:**

**Following topic was suggested for development of an Indian standard**

***Code of Practice based on the Standard Operating Procedures’ being adopted by various manufacturers, builders, architects and consultants for touch-less or minimum-touch operation of lifts given the ongoing Covid-19 pandemic.***

**As the subject is quite new & different solutions are only being tried out currently by different manufacturers, the panel felt that it was a bit premature to formulate a standard on the topic at the moment.**

**16-02-2023: The chairman has circulated a note on the subject. Panel P4 may check where these requirements can be accommodated into the existing Indian Standards as an informative annexure.**

**02-03-2023: It was decided to send the suggestion to NBC panel for inclusion of touchless operation feature in the NBC as the present lift standard is a safety standard whereas NBC gives information of the features of lifts.**

**16-03-2023: The panel requested Ms Meghna to write to NBC panel suitably.**

**3-04-2023: Ms. Meghna informed that the NBC-2016 was under revision & if any points to be taken up with CED 46 that should be done. Mr. TAK would call a meeting for brainstorming.**

1. **24-02-2022: Proof reading of IS 17900-1 & IS 17900-2.**

**24-11-2022: Ms Meghna informed that the communication from ministry has been sent to all chief secretaries of those states where there is no Lift Act promulgated as yet, to form it.**

**The secretary Consumer Affairs has been sent the note about the relationship of car area with the rated capacity of lift. He agrees that it is a safety issue & as such would communicate to the Hon’ble Minister.**

**15 -12-2022: M/s Meghna is hopeful that the hold on publication of the Standards IS 17900 P1 & P2 will be lifted soon.**

**05-01-2023: Ms. Meghna is hopeful that IS 17900 P1 & P2 will be published very soon.**

**19-01-2023: IS 17900 P1 & P2 have been established by BIS on 21st Dec. 2022 & gazetted on 23rd Dec. 2022.**

**The point is closed.**

1. **05-05-2022: Lift Door-Contact bypass:**

**The proposed amendment by DMRC on the topic of bypassing lift car/landing door contacts to rescue persons trapped in the lift due to problems in the functioning of lift door was discussed at length.**

**Finally, the panel felt that it was not desirable to have such a provision in the code making it universally applicable to all lifts; hence the same was not accepted.**

**02-06-2022: After review of the item, the point was unanimously closed.**

1. **19-05-2022: ISO 8104-1: Draft SNEL Code:**

**Query: *Whether India would like to have an annex so that the ISO could be adopted by India as such.***

**02-06-2022: Point is closed.**

**23-06-2022: It was noted that the ISO 8104-1 would refer to ISO 8100-1 & ISO 8100-2 which would not be suitable for India as these ISOs are numbered as IS 17900-1 & IS 17900-2 respectively while adopting in India. Also, there are**

**differences in IS 17900 & ISO 8100. Hence ISO 8104-1 will have to be renumbered while being adopted by India. Thus, no separate annex is required in ISO 8104-1 by India.**

**Point is closed.**

1. **04-08-2022: Advisory on Fire Evacuation Lifts:**

**The new advisory on Fire Evacuation Lifts issued by the Chief Electrical Inspector, IEL Dept; Maharashtra State, was discussed in details. The panel noted that there appeared some mix up of the requirements & the specified intent for the lifts. The specified intent is the Total Evacuation of The Occupants of the building & the requirements specified for the lifts are those of Fire Fighters’ Lifts. Whereas the main purpose of Occupant Evacuation Lifts is to evacuate, either partially or fully, the affected building, and that too *before* arrival of the fire brigade; the main purpose of Fire Fighters’ Lifts is the use of the lifts by the fire fighters to fight the fire. The Fire Fighters’ Lift could be located in a Fire Tower along**

**with staircase, provided with firefighting control Phase II; whereas the Occupant Evacuation Lifts are normal lifts provided with Evacuation Control; and the lift lobbies, shafts, machine rooms provided with heat, smoke sensors; etc.**

**The panel identified non availability of standards on the** **Fire Fighters’ Lifts & Occupant Evacuation Lifts as a possible reason for the issue under discussion. Thus, it was decided to undertake the development of these two new standards**

**on priority. It was thought that the representation of Fire Experts from all India in the panel would be beneficial for the development of the standards. M/s Meghna consented to do all the needful to achieve the goal.**

**15 -12-2022: Mr. Viswanathan presented the draft of OEL & promised to circulate it asap.**

**Mr. Nimish would complete the draft of FFL before 15th Jan 2023.**

**05-01-2023: Mr. Viswanathan circulated the draft of OEL. Members needed time to go through the draft. All members are requested to go through the draft diligently and with their views/comments/suggestions contribute to the formation of the new Indian Standard. It was decided to send the next revision of the draft standard to Mr. Santosh Warick for his comments as a fire expert.**

**19-01-2023: Mr. Viswanathan explained the draft in detail. Several novel ideas came out in the process. Mr. Viswanathan would revise the draft & circulate.**

**16-02-2023: Due to the absence of M/s. Viswanathan & Nimish the updates were not available. Mr. Nimish is requested to circulate the first cut draft as soon as possible.**

**In the 29th meeting of ETD 25 following was decided:**

**Panel P4 would work in consultation with CED 46 panels P2 and P16 on these subjects. Member Secretary will help co-ordinate with the two CED panels to get inputs & vet the drafts.**

**02-03-2023:** **In absence of Mr Nimish, update of FFL was not available. Mr. Viswanathan would circulate the revised draft before 10th March.**

**16-03-2023: Mr Viswanathan circulated the draft. All P4 members are requested to study & put forward their comments before next meeting.**

**In absence of Mr Nimish, update of FFL was not available.**

**3-04-2023: Mr. Tipnis had submitted his comments on the draft which were discussed in the meeting. Mr. Viswanathan to update & circulate the draft asap.**

* **In absence of Mr Nimish, update on FFL was not available.**
* **20-04-2023: Revised draft is ready. Mr. Viswanathan would circulate it asap. It was decided that there was no need to develop separate standard for FFL as the same was covered in the NBC-2016 in the form of lift(s) in a fire tower. If necessary, any updates would be carried out in the revision of the NBC which is due.**

**11-05-2023: Mr. Viswanathan would circulate the draft asap.**

**01-06-2023: The draft would be put up to the committee before sending in wide circulation. The draft would be immediately sent from BIS to fire experts including those who are members of the ETD 25 committee, e.g. M/s Warik, Mr. Mishra, etc. with a note urging the perusal of the document and subsequently input to the same.**

**15-06-2023: The draft has been sent to 4 -5 fire experts by BIS and would be put up to the committee before sending in wide circulation.**

**06-07-2023: The draft would be taken up for “line by line” reading in P4 meeting.**

**31-08-2023: Mr. Viswanathan completed the Line-by-line reading of the draft IS 17900 P7 S6. He would circulate the updated draft with a few editorial changes suggested in the meeting.**

**Mr. Dambe informed that the draft would be discussed next week with BMC fire authorities.**

**07-09-2023: Mr. Viswanathan to send the final copy of the “Occupant Evacuation Lifts” , assigning file name as “\_\_\_\_\_\_\_\_\_ \_\_\_Final for Committee Approval” to Mr. Tipnis for forwarding to Mr. Lal.**

**Comments of BMC Fire dept were made available by Mr. Dambe. It is apparent that for buildings having height > 70 M, the Mumbai fire dept. requires a fireman’s lift with enhanced protections such as fire-resistant enclosure with staircase**

**attached, in the same enclosure (Fire Tower), for firefighting as well as for rescue operation. It was clarified that the “Occupant Evacuation Lift” was basically for evacuation of occupants *before* the arrival of the fire brigade to the**

**affected building so that in case of fire incident, the building would be evacuated as much as possible *before* the arrival of fire brigade using general lifts as long as it is safe to operate them.**

**Thus, it was decided to study the requirements put forward by BMC fire dept, & put them in the specifications of “Fireman’s Lift for Building Height > 70 M”. Mr. Nimish is requested to lead this project.**

**21-09-2023: Final copy received.**

**28-09-2023: Final copy forwarded to Mr. Lal.**

**19-09-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**28-12-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**Last date for comments is 18-02-2024.**

**07-03-2024: The WC period is over. The document would be put up to the committee in the next meeting scheduled in the second week of April 2024 for approval to print.**

**21-03-2024: The document would be put up to the committee for permission to print and publish.**

**25-04-2024: The document is under process for printing at BIS**

**16-05-2024: Mr. Nitish would update on the emails which were to be sent to Fire Officers of Delhi and other regions to get their feedback on the document.**

**30-05-2024: Mr. Nitish would follow up for the feedback from Fire Officers.**

**06-06-2024: Mr Nitish was requested to get feedbacks from fire officers.**

**11-07-2024: No feedback available.**

**08-08-2024: M/s Meghna is requested to get the comments/feedback from the fire authorities.**

**22-08-2024: M/s Meghna is requested to get the comments/feedback from the fire authorities.**

**03-10-2024: M/s Meghna has addressed and circulated the document to more than 50 fire personnel gathered at NITS for training programme.**

1. **03-11-2022: Status of development of various draft standards is given in the attached file prepared by Ms Meghna.**
2. **05-01-2023: SNEL Code IS 17491: 2020 revision: Updating IS 14665 references to IS 17900.**

**Ms. Meghna had suggested to revise the SNEL code to update the Indian Standard references from IS 14665 series to IS 17900 series. Mr. Dandekar has kindly volunteered to carry out the task.**

**19-01-2023: Mr. Dandekar would do the needful.**

**16-02-2023: Mr. Dandekar requested for one month time to complete the task.** **It was decided in the 29th meeting of ETD 25 to revise it as IS 17900 (Part 11).**

**02-03-2023: Mr.** **Dandekar would complete the task by 10th March.**

**16-03-2023: Mr Dandekar would complete the task before the next meeting.**

**3-04-2023: Mr. Vispute informed that the work was ready & would be circulated shortly.**

**20-04-2023: Revised draft & comments from Mr. Tipnis were discussed. Mr. Vispute would update & circulate the draft.**

**11-05-2023: Mr. Vispute would circulate the draft asap.**

**01-06-2023: Mr. Vispute will circulate a clean copy of the draft which would be put up to the committee before sending in wide circulation.**

**15-06-2023: The draft was circulated by Mr. Vispute and would be put up to the committee before sending in wide circulation.**

**06-07-2023: The draft IS 17900 P 11 would NOT be taken up for “line by line” reading in P4 meeting. Members are requested to go through the draft by themselves.**

**17-08-2023: Mr. Lal to process the document.**

**07-09-2023: Mr. Vispute to send the final copy, assigning file name as “\_\_\_\_\_\_\_\_\_ \_\_\_Final for Committee Approval” to Mr. Tipnis for forwarding to Mr. Lal.**

**21-09-2023: Final copy received.**

**28-09-2023: Final copy forwarded to Mr. Lal.**

**19-09-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**28-12-2023: Sectional committee on 11th Oct. approved the draft for wide circulation. It was circulated on 16-12-2023. Last date for comments is 14-02-2024.**

**07-03-2024: The WC period is over. The document would be put up to the committee in the next meeting scheduled in the second week of April 2024 for approval to print.**

**21-03-2024: The document would be put up to the committee for permission to print and publish.**

**25-04-2024: The document is under process for printing at BIS.**

**02-05-2024: Mr. Nitish raised two queries: 1) About reference to other standards (IS 15330, etc.) for drives and 2) about the word “(environment) damage”. Mr Praveena would talk to Mr Jain and settle the issues.**

**16-05-2024: Praveena and Nitish settled the issue.**

**27-06-2024: IS 17900 Part 11 SNEL code is under printing.**

1. **19-01-2023: IS 17386: 2020 Replacement of Existing Passenger and Goods Passenger Lifts in Existing Buildings:**

**Updating of IS 14665 references to IS 17900. Mr. Sachin More volunteered to do the needful & circulate the draft.**

**16-02-2023: Mr. Sachin More is requested to complete the task as soon as possible. It was decided in the 29th meeting of ETD 25 to revise IS 17386 as IS 17900 (Part 10).**

**02-03-2023: Mr. More would complete the draft before next meeting.**

**16-03-2023: Mr Tipnis offered a few comments on the draft. Mr More would update & circulate the draft for finalization.**

**3-04-2023: Update was not available in absence of Mr. Sachin More.**

**20-04-2023: Mr. More confirmed having received comments from Mr. Tipnis. He would revise the draft & circulate asap.**

**11-05-2023: Mr. More would circulate the draft asap.**

**01-06-2023: Mr. More would make a few minor corrections and circulate it asap. The draft would be put up to the committee before sending in wide circulation.**

**15-06-2023: The corrected draft was discussed in the meeting. The draft would be circulated by Mr. Sachin More in a day or two, and would be put up to the committee before sending in wide circulation.**

**06-07-2023: The draft would NOT be taken up for “line by line” reading in P4 meeting. Members are requested to go through the draft by themselves.**

**17-08-2023: Mr. Lal to process the document.**

**07-09-2023: Mr. More to send the final copy, assigning file name as “\_\_\_\_\_\_\_\_\_ \_\_\_Final for Committee Approval” to Mr. Tipnis for forwarding to Mr. Lal.**

**21-09-2023: Final copy from Mr. More awaited.**

**28-09-2023: Final copy forwarded to Mr. Lal.**

**19-09-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**28-12-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**Last date for comments is 14-02-2024.**

**07-03-2024: The WC period is over. The document would be put up to the committee in the next meeting scheduled in the second week of April 2024 for approval to print.**

**21-03-2024: The document would be put up to the committee for permission to print and publish.**

**25-04-2024: The document is under process for printing at BIS.**

**30-05-2024: Mr Karthikeyan to finalise the document on behalf of Mr More.**

**25-07-2024: Mr Karthikeyan to circulate the document.**

**19-09-2024: Karthikeyan circulated the document. As there are no further comments, the document is cleared for printing by BIS.**

**03-10-2024: The document is cleared for printing.**

1. **19-01-2023: IS 15259: 2002 Installation and Maintenance of Home Lifts — Code of Practice:**

**As per the suggestion of the Chairman; instead of revising the standard IS 15259 for updating IS 14665 references to IS 17900, it was decided to rewrite and upgrade it from Code of Practice to a proper standard. Mr. Tipnis has volunteered to do it.**

**16-02-2023: Mr. Tipnis informed that the work on writing the draft had been started and that he would need 2 – 3 weeks to complete the same****. It was decided in the 29th meeting of ETD 25 to revise it as IS 17900 (Part 7/Sec 3).**

**02-03-2023: Mr. Tipnis circulated the draft which was discussed. It was decided to keep it open for comments till the next meeting.**

**16-03-2023: Mr TAK would offer comments on the scope shortly.**

**3-04-2023: The scope was finalized.**

**Mr. TAK put forward concern about the car doors not being provided. It was agreed to specify the same in the draft.**

**20-04-2023: Mr. Dandekar requested for back up data of the new Coated Steel Ropes. Mr. Tipnis to circulate the same.**

**11-05-2023: Mr. Tipnis circulated all necessary details such as Third Party Notified Body TUV certification of the CSR, etc. for the consideration of the panel.**

**01-06-2023: The comments received on the draft from M/s Otis & TKE were discussed. Mr. Tipnis would update the draft with the accepted comments & circulate it asap. The draft would then be put up to the committee before sending in wide circulation.**

**15-06-2023: The comments from TAK & OTIS were discussed. The same would be finalised in the next panel meeting and would be put up to the committee before sending in wide circulation.**

**06-07-2023: The draft would be taken up for “line by line” reading in P4 meeting.**

**17-08-2023: It was decided to make two drafts ready; one with CSR in the annexure of the draft & the other assuming that the CSRs are included in the mother standard IS 17900 P1. Mr. Tipnis to do the needful. Depending on the progress of the proposed amendment no. 1 to IS 17900 P1, the appropriate draft of the home lift would be further processed.**

**28-09-2023: Regarding CSR getting included in the standard IS 17900 -1, reference shall be made to point no. 26. There was no unanimous decision on whether home lifts should be permitted to use CSR. To be decided in the next meeting of P4.**

**5-10-2023: In absence of unanimity, it was decided to refer inclusion of 6 mm rope for the home lift application to main committee.**

**19-09-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**28-12-2023: Sectional committee on 11th Oct. approved the draft for wide circulation.**

**Last date for comments is 18-02-2024.**

**07-03-2024: The WC period is over. The document would be put up to the committee in the next meeting scheduled in the second week of April 2024 for approval to print.**

**21-03-2024: The document would be put up to the committee for permission to print and publish.**

**25-04-2024: The document is under process for printing at BIS.**

**02-05-2024: M/s Kumaraswami of Monteferro sent a mail to BIS for inclusion of hydraulic drive in the draft. Since IS 17900 P7 S3 is based on the Mother Standard IS 17900 P1 which includes hydraulic drives, it is not necessary to repeat types of drives in IS 17900 P7 S3.**

**During the discussion on the provision of pit (as per the email), it was requested by some members to allow some time for review of all provisions of the draft standard IS 17900 P7 S3 afresh. Accordingly, it was decided to request BIS to hold**

**the printing of the draft standard which was cleared for printing by the ETD 25 committee in the meeting No. 31 on 12th April 2024. The review would be done in the next P4 meeting.**

**16-05-2024: Review of the draft was postponed to next meeting.**

**30-05-2024:** **Review of the draft was postponed to next meeting.**

**06-06-2024:** **Review of the draft was postponed to next meeting.**

**13-06-20124:** **Review of the draft was postponed to next meeting.**

**27-06-2024: Review of the draft was postponed to next meeting**

**11-07-2024: Review was carried out with excel file (attached). To be concluded in the next meeting.**

**08-08-2024: M/s. Balani and Vishnu put forward TK Elevator comments/ suggestions which were discussed. Mr. Balani to update the Excel sheet with decisions taken/pending and circulate to all P4 members.**

**22-08-2024: M/s. Balani and Vishnu put forward TK Elevator comments/ suggestions which were discussed. It is reported in meeting that the safety factor of proposed 6dia x 4 nos ropes to be reviewed to comply IS 17900 Part 2 also. Mr. Balani/Vishnu will come back on details and to update. Tipnis suggested to relook at Fatigue life requirements (Part 2) in case of Home Lifts looking at low traffic/low rise /low speed application.**

**05-09-2024: It was decided to conduct Risk Analysis of all the Risks, as per*ISO 14798 Lifts (elevators), escalators and moving walks — Risk assessment and reduction methodology* by listing and recording all the apprehensions and changes that are being proposed with associated risks; and measures/solutions proposed to mitigate the identified risks to acceptable levels.**

**It was decided to conduct two online brain storming sessions on 12th and 19th September to carry out the exercise before a physical meeting on 24th October to be combined with ETD 25 committee meeting. M/s Meghna was requested to make available copy of the ISO 14798 to the P4 members.**

**19-09-2024: The risk analysis was presented by Deepak. The updated version of the RA as per the discussions will be circulated by Deepak/Nitin.**

**03-10-2024: Risk analysis would further be carried out in the physical meeting scheduled on 24th October 2024.**

1. **16-02-2023: Stairlifts and inclined lifting platforms intended for persons with impaired mobility: In the 29th meeting of ETD 25 following was decided:**

**Panel P4 agreed to initiate preparation of working draft on the subject. Shri TAK Mathews, volunteered to help identify expert organizations working on this product and Panel P4 was authorized to co-opt them in the panel for assisting in preparation of the draft.**

**Mail sent to ISO TC 178 for developing standard on the subject.**

**02-03-2023: ISO reply awaited.**

**3-04-2023: Mr. TAK agreed to follow up with concerned party for their participation in P4.**

**20-04-2023:** **Mr. TAK requested for a copy of the mail sent to the party by BIS.**

**11-05-2023:** **In the absence of Mr. TAK, feedback was not available.**

**15-06-2023: In the absence of Mr. TAK, feedback was not available.**

**15-06-2023: Mr. TAK requested for a copy of the mail sent to the party by BIS.**

**11-07-2024: Mr. TAK himself has started to work on the assignment.**

**08-08-2024: M/s Meghna is requested to circulate the ISO 9386 P1 Vertical Lifting Platforms and P2 Stair Lifts to all P4 members for their study and taking decisions on adopting the same as IS standards.**

**22-08-2024: M/s Meghna circulated the ISO 9386 P1 Vertical Lifting Platforms and P2 Stair Lifts to all P4 members for their study and taking decisions on adopting the same as IS standards.**

**05-09-2024: Mr. Dandekar pointed out that the standard specifies 5 mm dia. rope. It was decided to discuss it after the risk analysis exercise for 6 mm dia. rope for home lifts was carried out.**

**03-10-2024: The draft has been circulated to a few concerned persons from the industry by M/s Meghna.**

1. **16-02-2023: Lifts subject to seismic conditions****:**

**In the 29th meeting of ETD 25 following was decided:**

**It was decided to circulate ISO TR 25741:2008 among committee members for 15 days for an initial review and comments. Panel P4 shall also review the standard and submit its recommendation whether: - ISO TR 52741:2008 may be adopted as an Indian Standard with/without any change within 30 days.**

**Mail sent to ISO TC 178 for developing standard on the subject.**

**02-03-2023: ISO reply awaited.**

**16-03-2023: Ms Meghna to circulate ISO TR 52741:2008.**

**3-04-2023: Ms Meghna circulated the document on 4th April, 2023.**

**20-04-2023: Members to go through the ISO TR 5274:2008 document.**

**11-05-2023:** **Members need more time to study the document.**

**01-06-2023: Members need more time to study the document.**

**15-06-2023: Members would take a decision in the next panel meeting.**

**06-07-2023: As the report is only a technical report not directly aligned with other Indian Standards, it was decided not to adopt it as an Indian Standard. Point Closed.**

**02-07-2024: It was decided to remove engineering part of Seismic Protection to Lifts from the NBC-2025, hence to prepare an Indian Standard on Seismic Protection to Lifts covering technical and engineering requirements.**

**07-03-2024: Mr. Dandekar volunteered to draft Indian Standard on the seismic protection for lifts.**

**18-04-2024: Mr. Dandekar circulated the draft of IS 17900 P7 S7: Lifts Under Seismic Conditions on 27th March 2024.**

**13-06-20124: All members are requested to review and comment on the draft so as to finalise it as soon as possible as this topic would be deleted from the proposed revision of NBC-2025.**

**27-06-2024: Mr. Viswanathan to circulate the main points of change in the EN standard with reference to earlier edition.**

**25-07-2024: Mr. Viswanathan explained the changes. Document to be finalised.**

**08-08-2024: It was decided to proceed further with the draft. Ms Meghna to do the needful.**

**22-08-2024: Comments received from Tipnis only on draft circulated. Dandekar to go thru the comments to do needful & circulate final updated draft to all P4 & Ms Meghna to do the needful.**

**05-09-2024: Since there were no further comments, Mr Dandekar was requested to update the document according to the available comments and circulate it.**

**03-10-2024: The document was finalised. M/s Meghna to process it further.**

1. **16-02-2023: QR Code:** **In the 29th meeting of ETD 25 following was decided:**

**Comment from Secretary (CA) regarding marking requirements in the form of QR code in lift car:**

***"Marking requirements should also emphasize on labelling in the form of QR code which gives the details of information to passengers regarding the maintenance details of the lift etc., instead of affixing such details on the wall of the lift".***

**The committee decided that these requirements may be added as an amendment to IS 17900 (Part 1). Panel P4 was asked to draft a list of the information which can be detailed out in the QR code.**

**Mr. Parashar has consented to study the suggestion & work out a proposal for the consideration of P4 members.**

**02-03-2023: There was a lot of discussion. Mr. Parashar will accordingly make a proposal for the consideration of the panel.**

**16-03-2023: Mr Parashar presented the approach paper which was accepted by the panel. He would now work further to proceed with the same.**

**3-04-2023: Point covered with point no. 1).**

1. **16-02-2023: Comment from CEI, Karnataka reg. incorporation of IoT solutions as part of IS specifications: In the 29th meeting of ETD 25 following was decided:**

**ISO 8201-20: 2022 ‘Electrical requirements for lifts, escalators and moving walks—Part 20: Cybersecurity’ must be adopted as an Indian Standard. It was decided to put ISO 8201-20:2022 in Wide circulation for 60 days.**

**The maintenance processes given in IS 17900 (Part 6) must then make a reference to the above adopted Indian Standard in order to ensure safe IoT solutions and safe travel in lifts.**

**02-03-2023: M/s Meghna would circulate the Iso 8201-20 as soon as possible.**

**16-03-2023: Ms Meghna would do the needful to circulate ISO 8201-20.**

**3-04-2023: Ms Meghna / Mr K. K. Lal to circulate ISO 8201-20.**

**20-04-2023: Mr. K.K. Lal to circulate ISO 8201-20.**

**11-05-2023: Members to go through the document ISO 8201-20 to decide on further action.**

**01-06-2023: Members need more time to study the document.**

**15-06-2023: Members would take a decision on adopting ISO 8102-20 in the next panel meeting.**

**06-07-2023: It was decided to request Mr. Dandekar to lead the whole gamut of IoT.**

**24-08-2023: It was decided to adopt ISO 8102-20 on Cyber security as Indian Standard**

**31-08-2023: Mr. Lal to update status to the members in the next meeting.**

**19-09-2023: Mr Lal will expedite the adoption of ISO 8102-20.**

**07-03-2024: The WC period is over. The document would be put up to the committee in the next meeting scheduled in the second week of April 2024 for approval to print.**

**21-03-2024: The document would be put up to the committee for permission to print and publish.**

**04-04-2024: Mr. Vishwanathan would draft a letter to the CE of Karnataka; to be discussed in the panel.**

**18-04-2024: Mr. Vishwanathan circulated the draft.**

**25-04-2024: Mr. Nitin would circulate revised draft in a day or two.**

**02-05-2024: M/s Viswanathan informed that the draft would be processed.**

**13-06-20124: The letter has been sent to the Chief Electrical Engineer of Karnataka State from several companies.**

**27-06-2024: Mr. Viswanathan to check on the appropriate code for IOT.**

**08-08-2024: Mr. Viswanathan to circulate the proposed draft of code for IOT.**

**22-08-2024: Mr. Viswanathan updated that he is working on draft. Vishwanathan to circulate the proposed draft of code for IOT.**

1. **20-04-2023: Proposed amendments to IS 17900 - Part 1.**

**Mr. Viswanathan proposed following amendments:**

1. **Flame Exposure Time & Flame Exposure distance for Car materials:  ISO 11925-2 reference to be included instead of IS 12777 part 2.**
2. **Travelling cable reference:  IEC 60227-6 (Flat travelling cable & Round travelling cable) to be added and IEC 60245-5 to be removed.**

**11-05-2023: Mr. Viswanathan proposed further amendments to IS 17900-Part 1.**

1. **Car Emergency light Lux level to be considered as 10 Lux instead of 20 Lux.**
2. **Coated steel rope to be included as part of suspension mean.**

**01-06-2023: Mr. Viswanathan would draft the amendment combining all the proposals.**

**15-06-2023: Comments from Mr. Tipnis were discussed in the meeting. It is expected that the amendment would be finalised in the next panel meeting.**

**06-07-2023: The draft would be taken up for “line by line” reading in P4 meeting.**

**13-07-2023: There was some discussion on lux level of emergency lighting. To be finalised.**

**31-08-2023: The amendment was discussed; however, it was agreed to finalise the lux level requirement in the next meeting. Mr. Viswanathan may suggest a reference to seismic protection for lifts in the proposed amendment.**

**07-09-2023: It was decided to discuss & finalise 1) the emergency light lux level in car as per the recommendations of the lighting committee of the BIS – Mr. Lal to coordinate;**

**2) CSR, whether to include in IS 17900 Part 1 or in IS 17900 Part 7 Section 3: Home Lifts, in the next meeting.**

**21-09-2023: It was decided to take up this point at no.1 position in the next P4 meeting.**

**28-09-2023: There was no agreement on the minimum lux level of emergency light in the car, it was decided to refer it to the sectional committee.**

**CSR: It was decided to review the existing standard for the CSBs for making it more prescriptive. The CSR standard will be aligned to that of the revised CSB. Both may be introduced as the next amendment. OTIS to lead the project & circulate the drafts in a month.**

**5-10-2023: It was decided to make a comprehensive document for all suspension media including CSB, CSR, Steel Rope, etc., making it more prescriptive. A sub group of M/s Viswanathan (leader), Vispute, Nimish, TAK will circulate first cut draft in 3 to 4 weeks to P4 members.**

**19-09-2023: It was decided to discuss the forthcoming changes to ISO 8100-1 & -2 in the next meeting of P4 to finalise the approach.**

**26-10-2023: It was decided to work on the revision of IS 17900 part 1 & part 2 as per the drafts received from ISO. In view of that, it was also decided not to go ahead with the proposed amendment no.1 to IS 17900 part 1.**

**It was decided to create clause-wise comparison of revision-ISO 8100 with IS 17900 in excel sheets. Mr Viswanathan will allocate chapters to various members to carry out this task. The excel sheets will be discussed in next meeting of P4.**

**16-11-2023: Mr Tipnis would circulate the format of the comparison excel sheet incorporating IS 17900, Draft ISO 8100, ISO 8100 for everybody to follow.**

**18-04-2024: In view of pressing demand from the lift market including govt. tenders for provision of vision panels on automatic doors, some members requested a review of the existing provisions of IS 17900 P1 in that regard. This topic would be further discussed in the next meeting. Mr. Dambe is requested to share the correspondence that happened in Maharashtra legislative assembly in this regard.**

**25-04-2024: Mr. Tipnis urged all the members to carefully read the existing clauses related to the provision of vision panels on automatic door panels in IS 17900 P1, and also carry out risk analysis in the format provided or in any other format, in both cases: auto door panels provided / not provided with vision panels for discussions in the next meeting.**

**02-05-2024: M/s Manokar explained in details the existing provisions of the vision panel for both cases: manual doors, auto doors. It was decided that Mr Manokar and Mr. Swaminathan would jointly review safety in case of doors provided with vision panels.**

**16-05-2024: Review postponed to the next meeting.**

**30-05-2024: Mr. Manokar and Mr Swaminathan explained the existing provisions as per IS 17900 P1 and P2 of Vision Panels in case of manual as well as automatic doors with the help of a PPT.**

**13-06-20124: Members decided to come out with appropriate terminology to the *“Glass Window”* permissible on the auto-door panels as per IS 17900 P1 and P2, by next meeting.**

**27-06-2024: Members decided to leave the terminology unchanged.**

**25-07-2024: Mr Swaminathan explained the proposed amendment for speed Gov. Tension Device. He will update it as per discussions.**

**22-08-2024: Mr Swaminathan explained updated proposal for spring type gov tension device with explanation to the points raised by P4 for considering the Gov rope stretch & Tension device Spring failure monitoring to shut down elevator. Swaminathan to circulate the presentation & explanations to all the P4 members for review.**

1. **15-06-2023: Implementation of IS 17900-1 & 2.**

**Members expressed desire for discussions on possible extension of final date for withdrawal of IS 14665 series. Also, BIS is requested to present a White Paper on the Certification of Lift Components as per IS 17900-2 considering various aspects such as Quality Control Order, Grant of Licence for Conformity; Imported Components, Locally Manufactured Components, availability of Testing Laboratories; Multi-Lateral Agreements among Members of the International**

**Accreditation Forum (IAF) including The National Accreditation Board for Certification Bodies (NABCB) of India; etc. so that all stake holders are clear on the procedures as well as the likely dates for implementation.**

**06-07-2023: It was decided to add this topic in the agenda of the forthcoming committee meeting.**

**03-08-2023: The BIS requested P4 members to arrange for the visit of BIS and CMD persons to lift component factories to understand the lift components & their testing methods, etc. Members would put up proposals in the next meeting.**

**10-08-2023: It was decided to hold a special premeeting of P4 members on 14th Aug @ 10:00 am to discuss & finalise the questionnaire to be sent to CMD before the VC meeting of CMD & P4 members on the subject of QCO of lift components. Mr. Dandekar to send the meeting invite.**

**17-08-2023: The meeting convened & the questionnaire finalised.**

**31-08-2023: All manufacturers to send an email to BIS indicating what testing facilities for the safety components can be demonstrated in their respective factories (India/abroad) or testing labs, as soon as possible.**

**07-09-2023: All manufacturers have sent emails to the BIS.**

**21-09-2023: A joint meeting of P4 members with CMD of BIS is scheduled on 11th October.**

**19-09-2023: Sectional committee on 11th Oct. the meeting of P4 members with CMD took place.**

**25-01-2024: The members noted that the final date of withdrawal of IS 14665 series of standards was over. Members expressed their desire that BIS should follow up with the concerned ministry & get the gazette published extending the date of withdrawal of IS 14665 to Dec 2025 as decided.**

**08-02-2024: It was decided to seek appointment of DDG of BIS to discuss various issues including extending date of withdrawal of IS 14665 series and QCOs.**

**07-03-2024: The gazette notification extending the concurrent running period of IS 14665 and IS 17900 has been published.**

**22-08-2024: Discussion happened for requesting BIS formally in Oct for the further extension of one year (Dec 2025) for new code readiness per BIS earlier alignment. It is proposed to send letters from individual**

**organizations along with the letter from IEEMA to represent industry talking about readiness & needed extension. Viswanathan to discuss & circulate draft**

**05-09-2024: Mr Viswanathan presented the draft which was discussed.**

1. **Agenda of ETD 25 meeting scheduled on 11th October: It was decided that following topics be included in the agenda of the meeting.**
   1. **To decide the minimum light level in lux from Emergency Light in the lift car.**
   2. **To decide if 6mm dia. rope be allowed to be used in Home Lift application.**
2. **23-11-2023: Revision Draft ISO 8100-1 and ISO 8100-2.**

**Mr. Tipnis presented the comparison sheet of IS 17800-1, Rev. ISO 8100-1, and ISO 8100-1 for Introduction/Scope/Normative References/Terms Definitions. The whole subsection “Introduction” is deleted in the**

**revision document. Excluded items from the scope of ISO 8100-1 are deleted in the revision document. Although the revised scope is closer to that of IS 17900, we need to know the thinking behind the deletion.**

**Mr. Manokar presented the comparison for Ladders, and partly for buffers due to lack of time. He will continue in the next meeting.**

**All members are requested to complete their assigned work items as soon as possible.**

**30-11-2023: Mr. Tipnis presented the comparison sheet for Car, C’wt, Balancing wt. Mr. Manokar presented for Buffers, Protection against electric faults; failure analysis; electric safety devices. Mr. Balani for Guide Rails.**

**All members are requested to expedite their part of assignment as soon as possible, preferably before the next meeting scheduled on 14th December.**

**Documents to be processed: There are several documents cleared by the ETD 25 committee for further processing, such as wide circulation, printing, etc. Mr. Lal is requested to expedite those all.**

**14-12-2023: Mr. Tipnis presented the comparison sheet for: Foreword, Introduction, Scope, references, Guide Rail Cal., Annex B.**

**All are requested to complete their respective portion of work as soon as possible so as to meet the deadline for submitting comments on the draft ISO 8100-1 & -2.**

**28-12-2023: M/s. Balani and Praveena presented their part of comparison. Mr. Praveena is requested to complete the part of comparison of Draft ISO 8100 with IS 17900.**

**All others are requested to expedite their allotted parts.**

**04-01-2024: It was decided to complete major portion of the balance work by 11th January 2024 as per agreed schedule and to complete the exercise by 18th January so that the official reply (comments) on the draft ISO 8100-1 & 2 can be**

**sent by January end through BIS.**

**11-01-2024: Mr. Praveena presented comparison on “Suspension” for deciding on comments. The exercise will be further expedited in 18th Jan. meeting.**

**18-01-2024: It was decided to prepare comments on the Draft ISO 8100 in the specified format received from ISO. Everyone who studied and made comparison of the clauses with current ISO 8100 as well as IS 17900 would prepare**

**comments for their respective areas to be sent to ISO through BIS. These would be reviewed in the next meeting for finalising.**

**25-01-2024: In view of the approaching deadline for sending comments on the draft revision ISO 8100-1 & -2, it was decided that everyone circulate their comments in the specified format before the next meeting as comments received**

**thereafter may not get processed. These comments will be finalized in the next meeting and handed over to BIS for further processing.**

**02-07-2024: Due to lack of time all comments received could not be discussed. Mr Tipnis would review and consolidate all comments in one document for each section of the Draft ISO 8100 and circulate for finalising in the next P4 meeting.**

**08-02-2024: The comments were discussed and finalised. Mr Tipnis would consolidate and forward to BIS for sending to ISO.**

**15-02-2024: The comments were finalised and sent to BIS for forwarding to ISO. Mr. Jain to do the needful.**

**07-03-2024: The BIS comments on Draft ISO 8100 Part 1 and Part 2 have been sent to ISO and the same now appear on the ISO portal.**

**25-04-2024: There was a need felt to collect and store the data on clauses or areas in existing Indian Standards which need revision: technical, editorial, etc.**

**Mr. Jain would guide members if this can be stored on BIS portal. Till then Mr Tipnis would maintain an excel file for this purpose.**

**06-06-2024: Mr Jain explained the process to register comments on the existing standards in the BIS portal.**

**13-06-20124: It appears there is some glitch in the software which does not allow the comments on the existing Indian Standards inputted in the portal to be saved them there. Mr Jain would look into.**

**11-07-2024: Mr. Manokar to verify if the software glitch has been removed.**

**25-07-2024: Mr. Manokar confirmed that the software was now ok.**

**19-09-2024: Manokar showed another problem with the data integrity in BIS portal. He has taken up this issue with BIS through Meghna.**

**03-10-2024: Mr. Manokar pointed out error in annex of ISO 8100-2 for calculating equivalent no of pulleys for double wrap machine. To be sent to ISO by BIS.**

1. **04-01-2024: Capsule Course on Elevators by BIS.**

**Mr. Lal informed the members about the intention of BIS to have a 2-day Capsule Course on Elevators which will be sponsored by BIS, to be conducted at various locations in India to educate persons such as govt. officials on elevator technology, installation and maintenance, etc. He requested members to contribute to the course by making available**

**course materials as well as delivering lectures. Members agreed to check with their respective management and come back on the proposal in the next P4 meeting.**

**11-01-2024: M/s OTIS, KONE, TKE, Schindler expressed their support for the programme.**

**18-01-2024: It was decided that Mr. Tipnis would do the coordination for the course. Mr. Lal to suggest the course content as soon as possible so that it can be discussed in the next meeting.**

**Possible Topics: Basics of Elevator, Indian Standards and Codes for Elevators, Lift Act and Rules in various states, Elevator Inspection and Licensing, Lift Contractor (Installation, Maintenance) Licensing.**

**Mr. Lal to confirm if Escalators and Moving Walks are required to be covered.**

**07-03-2024: Mr. Nitish would revert with details on the proposed course.**

**18-04-2024: Mr. Manokar of Fujitec expressed support for the programme. Mr. Tipnis would propose first cut programme for two days.**

**25-04-2024: In the next meeting the course content and volunteer trainers would be finalised.**

**30-05-2024: Mr Nitish suggested some changes in the course content and added that those would be delivered by BIS (Mr Nitish). He also suggested to have one alternative speaker for all the topics. Some members have indicated their willingness to be the trainers. More volunteers are invited.**

**06-06-2024: The members are requested to indicate their preferences to the topics by indicating the same on the training programme sheet.**

**13-06-20124: Members to indicate their preferences on the training topics to BIS asap.**

**27-06-2024: The course content would be published on the whatsapp group. Members would indicate their preferences for the topics on the same group.**

**22-08-2024: The course content was published on the whats app group. Ms Meghana requested members to provide final nominations module wise with clarity on sub topics preferences as leads.**

**05-09-2024: Tentative dates for the Capsule Course are 12th and 13th Nov. 2024.**

1. **15-02-2024: It was decided to get ISO 4344 on ropes for elevators adopted by MED. Panel P4 also needs the amendment to IS 2365 proposed by Usha Martin for study. Mr. Jain to coordinate with MED for this.**

**It was also decided to meet DDG of BIS to discuss issues about the extension of period of validity for IS 14665 series, QCO for elevator ropes, etc. Mr. Viswanathan to coordinate.**

**07-03-2024: The P4 members who wish to be members of MED would write individually to MED for co-option.**

**21-03-2024: Members from Usha Martin, Oriental Wire Ropes, etc., along with the Member Secretary of MED 10 were present for the discussion on elevator rope standard. It was conveyed to MED-10 that ETD-25 committee responsible for elevators wants MED-10 to adopt ISO 4344 for the elevator ropes as an Indian Standard replacing IS 2365.**

**04-04-2024: It was decided to put forth the request of adoption of ISO 4344 to MED-10 through ETD-25.**

**25-04-2024: A need was felt to push the development of Indian Standards on rope terminations with MED 10.**

**30-05-2024: Mr. Balani volunteered to explain the status including details of the products in the 81st meeting of P4.**

**13-06-20124: Mr Balani gave information on the rope terminals. In the next presentation he would focus on the rope terminations for elevator ropes.**

**27-06-2024: Mr Balani would further update info. on the rope terminals.**

**25-07-2024: Mr. Balani explained the rope terminations. To be discussed with MED 10.**

**22-08-2024: Mr. Balani updated that; a communication has been sent to MED10 with presentation explaining the elevator rope terminations. To be discussed with MED10. It was clarified that; MED 10 is expecting the draft from P4 only as it is elevator specific terminations standard.**

**19-09-2024: It was decided to distribute the work of drafting the Indian Standards amongst M/s Karthikeyan, Deepak, Nitin, Vispute.**

**03-10-2024: The division of work: 1) Mr. Karthikeyan – P8; 2) Mr. Deepak – P5; 3) Mr. Vispute – P1; Mr. Nitin – P6/P7.**

1. **10-04-2024: ETD 25 committee meeting:**

**The 31st meeting of ETD 25 committee meeting is scheduled on 12th April 2024. The comments received on the WC drafts were discussed. Since majority of the**

**comments are editorial in nature, it was decided that the comments will be incorporated by the respective primary authors of the documents in the word file of the drafts to be circulated by Mr. Nitish, and those files would be presented to the committee for their approval in the meeting.**

**18-04-2024: The committee approved all documents for further processing except the draft standard on Occupant Evacuation Lifts for which comments of various fire authorities would be again requested. Mr. Jain would write emails**

**to the new incumbent fire chief of Delhi and others for the purpose. Mr. Dambe would seek comments of fire officers from Maharashtra.**

**25-04-2024: In absence of Mr Dambe and Mr. Jain the update could not be obtained.**

**13-06-20124: Mr Dambe is urged to share feedback from Fire Officers from Maharashtra state on the draft of “Occupant Evacuation Lifts”.**

**Next meeting (Meeting No. 90) of the P4 panel will be held on Thursday 17th Oct. 2024 @ 10:00 a.m. IST.**

**Note: *It is urged that all members attend the meetings regularly so as to expedite the standardization work, avoid delays; bring out quickly, appropriate new standards /amendments after carrying out healthy discussions during the meetings.* Pravin Tipnis**