

BUREAU OF INDIAN STANDARDS

MINUTES

Name of the Committee	No. of Meeting	Date	Time	Venue
Slaughter house and Meat Industry Sectional Committee, FAD 18	17 th	6 September 2023 (Friday)	10 00 h	Hybrid Mode ICAR- National Research Centre on Pig, Guwahati

CHAIRPERSON:

Dr. S B Barbuddhe
Director,
ICAR-National Meat Research Institute,
Hyderabad

MEMBER SECRETARY:

Debasish Mahalik
Scientist-B/ Assistant Director
Food & Agriculture Department,
Bureau of Indian Standards, New Delhi

ATTENDANCE SHEET – Please see Annex A (Page 17-18)

ITEM 0 GENERAL

0.1 Welcome

Shri Debasish Mahalik, Scientist-B/ Assistant Director, Food and Agriculture Department welcomed the Chairperson and members of FAD 18 to the 17th meeting of the committee. Shri Mahalik apprised the committee members regarding the various issues under consideration of the committee. Requesting for support from the committee, Shri Mahalik appreciated the work done by the various members and urged for fruitful and conclusive deliberation on the issues raised in the agenda.

0.2 Opening Remarks by the Chairman

Dr. S. B. Barbuddhe, Director, ICAR-National Meat Research Institute, Hyderabad and Chairperson, Slaughter house and Meat Industry Sectional Committee, FAD 18 in his opening remarks extended a warm welcome to the members of the Committee to its 17th meeting. He informed the members regarding recent developments and growth of meat sector and therefore this committee is going to play a crucial role in coming future. He highlighted on the use of standardization to solve the practical issues faces by not only large scale but also small-scale manufacturers in this industry. He further emphasized on research and innovation as a tool for quality National standards. Further elaborating in that, he requested all the organizations involved in research and innovation to collaborate with BIS secretariat to strengthen standardization. He then advised the committee members to actively participate in all the sectional committee meetings and panel meetings so that the pending work can be expedited.

0.3 Presentation on ‘Process Reforms in Standardization Activity of BIS and Future Roadmap’ by the Member Secretary

The committee deliberated upon the decisions along with the current status of the follow-up actions and the following decisions were taken :

<i>Sl No.</i>	<i>Decisions of the Committee</i>	<i>Status of the follow-up actions</i>	<i>Decision taken in 17th meeting</i>
a)	The process reforms by BIS were highly appreciated by the committee and it has been requested to identify potential collaboration for promotion of Indian Standards between the committee and BIS.	No inputs received from the committee members.	No further action is required.
b)	The proposed annual action plan for the year 2023-24 prepared by Member Secretary, FAD 18 has been approved by the committee. (also see 3)	The proposed annual action plan for the year 2023-24 has been approved by the committee in its 16 th meeting.	No further action is required.
c)	The annual meeting calendar proposed by Member Secretary, FAD 18 has been approved as follows: a) 3 rd week of May, 2023 (already completed) b) 3 rd week of August, 2023 (Venue - Guwahati, Assam) c) 3 rd week of November, 2023 d) 3 rd week of February, 2024	The committee may deliberate and decide regarding requirement for postponement of the scheduled meetings and venues.	After due deliberation the committee finalized the annual meeting calendar as follows: a) 3 rd week of May, 2023 (already completed) b) 6 th October, 2023 (Venue - ICAR-National Research Centre on Pig, Guwahati, Assam) c) 1 st week of December, 2023 (Venue ICAR-National Research Centre on Mithun, Dimapur) d) 3 rd week of February, 2024
d)	The committee decided to conduct a wider stakeholder consultation in collaboration with ICAR- National Meat Research Institute, Hyderabad for identification of the need/areas for research projects to be taken up for inclusion of empirical data and insights which can support the standardization activity under FAD 18. (also see 7.2)	The stakeholder consultation is yet to take place.	It was informed by Chairperson, Director ICAR-National Meat Research Institute, Hyderabad that in the month of January 2024 stakeholder consultation is being organized at Hyderabad. Further, Chairperson proposed that representation from BIS should also be there in the program in order to ensure desirable outcome.
e)	In order to carry out necessary activities pertaining to international participation, the committee decided to formulate a dedicated panel for the same. Further, the Chairperson, FAD 18	The SoPs has been circulated to the committee members via E-Mail dated.	No further action is required.

	requested the committee members to go through the SoPs pertaining to international participation in great details to avoid any confusion.		
f)	The committee requested all the members to provide suggestive list of national and international events to be participated within a period of 30 days, which further will be finalized by Chairperson, FAD 18 in consultation with BIS secretariat.	The inputs are awaited.	After due deliberation, the committee decided to extend the time for another 30 days for providing suggestive list of national and international events to be participated.
g)	The committee requested all the members to provide suggestive list of scientific journals and periodicals to be subscribed within a period of 30 days, which further will be finalized by Chairperson, FAD 18 in consultation with BIS secretariat.	The inputs are awaited.	After due deliberation, the committee decided to extend the time for another 30 days for providing suggestive list of scientific journals and periodicals to be subscribed.
h)	In order to create a pool of experts, the committee requested all members to provide an exhaustive list of expert organizations/ industry and individual experts within a period of 30 days to IMSA. And upon receipt of the details, IMSA to compile the list of experts and submit the final list to the committee within a period of 30 days.	The inputs are awaited.	After due deliberation, the committee decided to extend the time for another 30 days for providing an exhaustive list of expert organizations/ industry and individual experts to IMSA.

ITEM 2 SCOPE, ACTIVITIES & COMPOSITION OF THE SECTIONAL COMMITTEE

2.1 SCOPE & ACTIVITIES OF THE COMMITTEE

2.1.1 The committee noted the modified scope of FAD 18 approved by Food and Agriculture Division Council at its 27th meeting as follows:

- a) Equipment, materials used in slaughterhouse and slaughterhouse layouts, flow sheet categorization
- b) Meat, meat products, poultry, poultry products and other by-products from abattoir; codes for ante-mortem and post-mortem examination; meat stalls
- c) Physical, chemical and microbiological methods of test
- d) waste management of slaughter house and meat industry

2.1.2 The committee noted the approval of the transfer of IS 9800 : 1993 Meat and meat Products - Day - Old chicks Layers and Broilers basic requirements (first revision) to FAD 32 by Food and Agriculture Division Council at its 27th meeting.

2.1.3 The committee noted the Program of Work (POW) of Slaughter house and Meat Industry Sectional Committee, FAD 18 enclosed at Annex 1 of the agenda.

2.1.4 The committee noted the information regarding published Indian Standards under FAD 18 provided at 2.1.4 of the agenda and appreciated the timely action taken by member Secretary, FAD 18.

2.2 COMPOSITION OF THE COMMITTEE

2.2.1 The committee noted the information provided under 2.2.1 of the agenda. Accordingly, the committee welcomed Dr. V K Singh, Additional Director (VS)-I, Municipal Corporation of Delhi as a new member of FAD 18.

Further, the committee decided to send one last reminder to Greater Hyderabad Municipal Corporation, Hyderabad in order to seek fresh nomination. In case no response is received till next meeting of FAD 18, the nomination of the organization shall be withdrawn.

2.2.2 The committee noted the information provided under 2.2.2 of the agenda. Accordingly, after due deliberation the committee decided that in order to ensure harmonization and regulatory compliance, representation from FSSAI shall be there in FAD 18. Accordingly, the committee decided to write again to FSSAI for seeking fresh nominations for FAD 18 sectional committee and the different panels under the committee.

In order to facilitate the communication, the committee requested Dr. S B Barbuddhe, Chairperson, FAD 18 and Dr. A R Sen, ICAR-IVRI to take up the responsibility.

2.2.3 The committee noted the information regarding pending nominations provided under 2.2.3 of the agenda. The current status and the respective decision taken is mentioned as follows:

SI No.	Name of the Organization	Nomination status/ Decision taken
a)	Animal Welfare Board of India, Balabgarh	Member Secretary, FAD 18 apprised the committee regarding the absence of contribution from Animal welfare Board and Department of Animal Husbandry and Dairying, Govt. of India in FAD 18.
b)	Department of Animal Husbandry and Dairying, Govt. of India	Further, Dr. Kiran Ahuja, PETA-India apprised the committee regarding the importance of representation of animal welfare organization under FAD 18. Considering the both information, the committee decided to provide one month time period to the organization to submit the updated nomination and in case of failure to do the same, the

		nomination of the organization will be withdrawn. Also, the committee requested PETA-India to facilitate the communication with the organization.
c)	All India Meat and Livestock Exporters Association, Mumbai	The nomination of Dr. N Kondaiah has been received from All India Meat and Livestock Exporters Association, Mumbai.
d)	Export Inspection Council of India, New Delhi	The committee after due deliberation decided to withdraw the nomination of Export Inspection Council of India, New Delhi in the view of lack of contribution and lesser significance in committee as per the scope of FAD 18. Further, the committee decided to recommend the above to Food and Agriculture Division Council.
e)	Indian Poultry Science Association, Izatnagar, UP	The nomination of Dr. Jaydeep Rokde has been received from Indian Poultry Science Association, Izatnagar.

2.2.4 The committee noted the information regarding the tasks appearing on the dashboard of Hon'ble Minister, Ministry of Consumers Affairs, Food and Public Distribution, New Delhi, requiring action to be taken on part of BIS under 2.2.4 of the agenda. The decision taken by the committee with respect to each task is as follows :

Task	Decision taken in 17th meeting of FAD 18
Task 714	The committee deliberated on the analysis of composition enclosed at Annex 3 of the agenda and identified that, no such cases are available under FAD 18, which falls under the categories given under Task 714.
Task 715	The committee was apprised by the member secretary, FAD 18 regarding compliance of the activities given under FAD 18 as a routine activity of the committee. Considering the same, the committee decided to withdraw the nomination of Dr. V. K. Modi (in personal capacity).
Task 716	The committee deliberated on the analysis of composition enclosed at Annex 3 of the agenda and identified that, no such cases are available under FAD 18, which falls under the categories given under Task 716.

2.2.5 The committee after due deliberation on the composition of FAD 18 enclosed at Annex 3 of the agenda decided to co-opt the following organization in order to strengthen the industry representation in the committee:

- a) ICAR-National Research Centre on Mithun, Dimapur, Meghalaya
- b) West Bengal Livestock Development Corporation Limited, Kolkata, West Bengal (A Govt. of West Bengal Undertaking)
- c) Meat Products of India Ltd., Ernakulam, Kerala

2.2.6 The committee noted the composition of different panels under FAD 18 provided under 2.2.5 of the agenda.

2.2.7 The committee noted the information provided under 2.2.6 of the agenda regarding inclusion of waste management of slaughter house into the existing scope of FAD 18. Further, the committee

constituted the following panel in order to take the standardization activities related to waste management:

- a) Dr. Girish Patil, ICAR-National Research Centre on Mithun
- b) Dr. N Kondaiah, All India Meat & Livestock Exporters Association (AIMLEA), New Delhi
- c) Dr Yogesh Gadekar, ICAR- National Meat Research Institute, Hyderabad
- d) Dr. M. Kiran, KVAFSU, Karnataka
- e) Dr. Nadeem Fairoze, Professor (Retd.), Veterinary College, Bengaluru
- f) Dr. C. Ramakrishna, ICAR- NMRI, Hyderabad
- g) Dr. T S Uma, CSIR-Central Leather Research Institute, Chennai
- h) Representative from Environment Protection Training and Research Institute (EPTRI), Hyderabad

ITEM 3 ANNUAL ACTION PLAN FOR 2023-24

The committee noted the information provided under 3 of the agenda and deliberated upon the progress of the Annual Action Plan for the year 2023-24 (enclosed at Annex 4 of the agenda) of FAD 18. After due deliberation, the committee appreciated the work done by FAD 18/Panel I: Code of Practices related to Slaughter House and Meat Industry, FAD 18/Panel IV: Equipment related Slaughter House and Meat Industry and member Secretary, FAD 18.

ITEM 4 FINALISATION OF DRAFT INDIAN STANDARDS

4.1 Indian Standards on Code of practices related to Slaughter house and meat Industry

The committee noted the information provided under 4.1 of the agenda and deliberated on the comments received on the draft revisions (enclosed at Annex 10 of the agenda). After due deliberation the committee approved the comments provided and decided to incorporate the necessary changes in the respective draft revisions. Further, considering the above, the committee approved the draft revisions of following Indian Standards (enclosed at Annex 5 to Annex 9 of the agenda) for sending into publication (with comments incorporated).

<i>Sl. No.</i>	<i>IS</i>	<i>Title</i>
1.	IS 6558 : 1972	Code of practice for cold storage of shell eggs
2.	IS 6559 : 1972	Code of practice for ante-mortem and post-mortem inspection of poultry
3.	IS 7049 : 1973	Code for handling processing quality evaluation and storage of poultry
4.	IS 8182 : 1976	Code of hygienic conditions for processed meat products
5.	IS 7053:1996	Meat and meat products - Basic requirements for a stall for sale of meat of small and large animals (First Revision)

4.2 Indian Standards on Equipment related to Slaughter house and meat Industry

The committee noted the information provided under 4.2 of the agenda and considering absence of comments during wide circulation period, the committee approved the draft revisions of following Indian Standards (enclosed at Annex 11 to Annex 20 of the agenda) for sending into publication :

Sl. No.	IS	Title
1.	IS 6628 : 1972	Specification for slide rails for use in abattoirs
2.	IS 6782 : 1972	Specification for hog gambrels
3.	IS 6950 : 1973	Specification for pig hooks
4.	IS 7891 : 1975	Specification for inedible offals trolley
5.	IS 7909 : 1993	Slaughter house equipment - Electrical stunning tongs for pigs - Specification (<i>first revision</i>)
6.	IS 11533 : 1985	Specification for sheep dressing hooks
7.	IS 11631 : 1985	Specification for gambrels for sheep and goats
8.	IS 12189 : 1987	Specification for sheep spreaders
9.	IS 12486 : 1988	Specification for meat inspection table
10.	IS 12487 : 1988	Specification for offal handling table for small animals

4.3 Doc. No. FAD 18 (22984) Terminology of meat products and meat animals Part 1 poultry (First Revision of IS 8539: Part 1)

The committee noted the information provided under 4.3 of the agenda and considering absence of comments during wide circulation period, the committee approved the above draft standard (enclosed at Annex 21 of the agenda) for sending into publication.

4.4 Doc. No. FAD 18 (23182) Meat and Meat products - Methods of Test (Part 1) - Determination of Nitrogen content [second revision of IS 5960 (Part 1)]

The committee noted the information provided under 4.4 of the agenda and considering absence of comments during wide circulation period, the committee approved the above draft standard (enclosed at Annex 22 of the agenda) for sending into publication.

ITEM 5 NEW STANDARDS FOR STANDARDISATION

5.1 Draft specification for Slaughter Box

The committee noted the information provided under 5.1 of the agenda and deliberated upon the content of the Draft Indian Standard Rotary Animal Restrainer – Specification (enclosed at Annex 23 of the agenda). Upon deliberation, the committee decided to circulate the draft standard as a preliminary draft (P-Draft) among committee members of FAD 18 for a period of 21 days for comments. In case, no comments received during the period of circulation, the draft will be sent for wide circulation upon due approval of the Chairperson, FAD 18 for a period of 60 days.

5.2 Draft Terminology for meat and meat products

The committee noted the information provided under 5.2 of the agenda and requested the panel to submit the draft standard before 31st October 2023, which upon receipt will be circulated among the committee members as Preliminary draft for a period of 21 days for commenting. In case, no comments received during the period of circulation, the draft will be sent for wide circulation upon due approval of the Chairperson, FAD 18.

Further, the committee requested Dr. R Thomas, ICAR-NRC on Pig, Guwahati to provide his expert inputs on the draft. Also, the committee requested Dr. R. Narendra Babu to conduct the meeting of the panel as soon as possible in order to complete the preparation of working draft on the subject.

5.3 Code of practice for Transportation of Animal carcasses from Abattoirs to Distribution Centers

The committee noted the information provided under 5.3 of the agenda and requested the panel to submit the draft standard before 31st October 2023, which upon receipt will be circulated among the committee members as Preliminary draft for a period of 21 days for commenting. In case, no comments received during the period of circulation, the draft will be sent for wide circulation upon due approval of the Chairperson, FAD 18.

ITEM 6 REVIEW OF INDIAN STANDARDS

6.1 The committee noted the information provided at 6.1 of the agenda and took the following decision on review of the standard as given below:

Sl No.	IS No. and Title	Decision taken	Allocated to
1	IS 1981 : 2018 Animal casings - grades and specification (<i>second revision</i>) Due for review - December, 2023	The Standard to be reaffirmed while simultaneously taken up for revision. The draft revision upon receipt will be circulated as wide circulation draft upon necessary approval of Chairperson, FAD 18.	a) Dr. R. Thomas, ICAR- NRC on Pig- Guwahati b) Dr. Tanaji Kudre, CFTRI, Mysore

6.2 Research projects to be taken up for inclusion of empirical data and insights

6.2.1 The committee after due deliberation identified the research project needed for standardization of small-scale slaughterhouse (micro slaughterhouse). It was apprised by National Meat Research Institute, Hyderabad that there is requirement for validation study regarding efficiency and effectiveness of the slaughterhouse for country wide adoption. Further, considering the above the committee approved the proposal to be considered and constituted the following panel and allocated the respective tasks to be carried out:

Panel on Small Scale Slaughterhouse	Tasks Allocated
a) Dr. R. Narendra Babu, TNVASU, Chennai b) Dr. R. Thomas, ICAR- NRC on Pig, Guwahati c) Dr. M. Muthukumar, ICAR- NMRI, Hyderabad d) Dr. C. Ramakrishna, ICAR- NMRI, Hyderabad e) Dr V. V. Kulkarni, Former Director, ICAR- NRC on Meat, Hyderabad	a) Development of draft standard on small scale slaughterhouse – specification b) Preparation of ToR for R&D project on validation of small-scale slaughterhouse c) Preparation of proposal regarding new work item on small scale slaughterhouse at ISO/TC 34/SC 6

6.2.2 The committee noted the information provided under 6.2.2 of the agenda and requested member secretary, FAD 18 to circulate the revised ‘Guidelines for Research & Development Projects for Formulation and Review of Standards’ issued by Bureau of Indian Standards (enclosed at Annex 24 of the agenda) among committee members for reference.

6.3 Review of Pre- 2000 Indian Standards

The committee noted the following status of review of pre-2000 Indian Standards under FAD 18 and following decisions are taken :

(a) Product Specification (Food products)			
Sl. No.	IS	Title	Current Status
1.	IS 1743 : 1973	Specification for mutton and goat meat canned in brine (<i>first revision</i>)	Considering the GoM decision the committee decided to archive all the Indian Standards except IS 5558 : 1970 and asked the panels to not to carry out review of these Indian Standards till any further information from BIS secretariat.
2.	IS 2475 : 1979	Specification for smoked bacon (<i>first revision</i>)	
3.	IS 2476 : 1963	Specification for ham	
4.	IS 2536 : 1995	Meat and meat products - Mutton and goat meat Chevon - Fresh chilled and frozen technical requirements (<i>first revision</i>)	
5.	IS 2537 : 1995	Meat and meat products - Beef and buffalo meat - Fresh chilled and frozen - Technical requirements (<i>first revision</i>)	
6.	IS 3044 : 1973	Specification for mutton and goat meat curried and canned (<i>first revision</i>)	
7.	IS 4352 : 1967	Specification for pork luncheon meat canned	
8.	IS 4674 : 1975	Specification for dressed chicken (<i>first revision</i>)	
9.	IS 4723 : 1978	Specification for egg powder (<i>first revision</i>)	
10.	IS 4950 : 1968	Specification for bacon rashers canned	
11.	IS 5558 : 1970	Specification for chicken essence	
12.	IS 10382 : 1982	Specification for edible egg albumen powder	
13.	IS 10697 : 1983	Specification for chicken canned in brine	

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| 14. | IS 11746 : 1986 | Specification for luncheon beet
canned |
| 15. | IS 11747 : 1986 | Specification for corned beef
canned |
| 16. | IS 11748 : 1986 | Specification for meat extract
Beef food grade |
| 17. | IS 11771 : 1986 | Specification for soup stock
medium Beef |
| 18. | IS 12541 : 1988 | Meat and meat Products -
Poultry - Chicken curry canned
- Specification |
| 19. | IS 12542 : 1988 | Meat and meat Products -
Canned ham minced -
Specification |
| 20. | IS 12543 : 1988 | Meat and meat Products -
Poultry products - Canned egg
curry - Specification |
| 21. | IS 12561 : 1988 | Poultry products - Pickled quail
eggs - Specification |
| 22. | IS 13165 : 1991 | Meat and meat Products -
Mutton biryani Canned -
Specification |
| 23. | IS 13400 : 1992 | Meat and meat Products -
Chicken sausages -
Specification |

(b) Product Specification (Non-food products)

<i>Sl. No.</i>	<i>IS</i>	<i>Title</i>	
1.	IS 6557 : 1972	Specification for albumen flakes non - Edible quality	The committee was apprised regarding the 1 st meeting of FAD 18/Panel-III to review the Indian standard. Further, the committee requested the panel to submit the draft within a period of 30 days. The draft upon receipt will be sent for wide circulation upon necessary approval from Chairperson, FAD 18.

(c) Food Equipment Specifications

<i>Sl. No.</i>	<i>IS</i>	<i>Title</i>	
11.	IS 6628 : 1972	Specification for slide rails for use in abattoirs	See Item 4.2.
12.	IS 6782 : 1972	Specification for hog gambrels	See Item 4.2.
13.	IS 6950 : 1973	Specification for pig hooks	See Item 4.2.
14.	IS 7891 : 1975	Specification for inedible offals trolley	See Item 4.2.

15.	IS 7909 : 1993	Slaughter house equipment - Electrical stunning tongs for pigs - Specification (<i>first revision</i>)	See Item 4.2.
16.	IS 11533 : 1985	Specification for sheep dressing hooks	See Item 4.2.
17.	IS 11631 : 1985	Specification for gambrels for sheep and goats	See Item 4.2.
18.	IS 12189 : 1987	Specification for sheep spreaders	See Item 4.2.
19.	IS 12486 : 1988	Specification for meat inspection table	See Item 4.2.
20.	IS 12487 : 1988	Specification for offal handling table for small animals	See Item 4.2.
21.	IS 12190 : 1987	Specification for sheep bleeding shackles	The panel apprised the committee that additional time is required in order to incorporate changes in the draft. Also, the title of the standard will be replaced by 'Specification for Sheep Bleeding rails with Shackles'. The committee noted the same and requested the panel for submission of draft revision by 31 st October 2023.

(d) Method of Test

Sl. No.	IS	Title	
1.	IS 5960 (Part 1) : 1996 ISO 937	Meat and meat products - Methods of test Part 1 Determination of nitrogen content (<i>first revision</i>)	See Item 4.4.
2.	IS 5960 (Part 2) : 2000 ISO 936	Meat and meat products - Methods of test Part 2 Determination of total ash (<i>first revision</i>)	The latest version of ISO standard has been adopted. Therefore, currently no action required.
3.	IS 5960 (Part 4) : 1997 ISO 1444	Meat and meat products - Methods of test Part 4 Determination of - Free fat content (<i>first revision</i>)	The latest version of ISO standard has been adopted. Therefore, currently no action required.
4.	IS 5960 (Part 6/Sec 1) : 1997 ISO 1841-1	Meat and meat products - Methods of test Part 6 Determination of chloride content Sec 1 volhard method (<i>first revision</i>)	The latest version of ISO standard has been adopted. Therefore, currently no action required.
5.	IS 5960 (Part 6/Sec 2) : 1997 ISO 1841-2	Meat and meat products - Methods of test Part 6 Determination of chloride	The latest version of ISO standard has been adopted. Therefore, currently no action required.

		content Sec 2 potentiometric method (<i>first revision</i>)	
6.	IS 5960 (Part 7) : 1996 ISO 2918	Meat and meat products - Methods of test Part 7 Determination of nitrite content (<i>first revision</i>)	The latest version of ISO standard has been adopted. Therefore, currently no action required.
7.	IS 5960 (Part 8) : 1996 ISO 3091	Meat and meat products - Methods of test Part 8 Determination of nitrate content (<i>first revision</i>)	The latest version of ISO standard has been adopted. Therefore, currently no action required.
8.	IS 5960 (Part 9) : 1988 ISO 2294	Meat and meat products - Methods of test Part 9 Determination of total phosphorus content	IS 18371 : 2023/ ISO 23776 : 2021 Meat and Meat Products — Determination of Total Phosphorus Content is published. Therefore, IS 5960 (Part 9) : 1988 ISO 2294 will be withdrawn.
9.	IS 5960 (Part 13) : 1988 ISO 5553	Meat and meat products - Methods of test Part 13 detection of polyphosphates	ISO 5553 is currently under revision as ISO/ CD 5553. After publication of the same the committee may adopt the same.
10.	IS 5960 (Part 14) : 1988 ISO 5554	Methods of test for meat and meat products Part 14 determination of starch content	The latest version of ISO standard has been adopted. Therefore, currently no action required.
11.	IS 5960 (Part 15) : 2000 ISO 3496	Meat and meat products - Methods of test Part 15 Determination of l - hydroxyproline content (<i>first revision</i>)	The latest version of ISO standard has been adopted. Therefore, currently no action required.
12.	IS 9810 : 1981	Methods for evaluation of quality of chicken eggs	The committee was apprised regarding the 1st meeting of FAD 18/Panel-III to review the Indian standard. Further, the committee requested the panel to submit the draft within a period of 30 days. The draft upon receipt will be sent for wide circulation upon necessary approval from Chairperson, FAD 18.
13.	IS 13401 : 1992	Meat and meat products Determination of thiobarbituric acid value in meat - Test method	The committee allocated the standard to Dr. R Thomas and Dr. Gadekar from ICAR-NRCP, Guwahati to review the Indian standard and submit the revised draft within a period of 30 days. The draft upon receipt will be sent for wide circulation upon

necessary approval from Chairperson, FAD 18.

(e) Code of Practice

Sl. No.	IS	Title	
6.	IS 6558 : 1972	Code of practice for cold storage of shell eggs	See Item 4.1.
7.	IS 6559 : 1972	Code of practice for ante-mortem and post-mortem inspection of poultry	See Item 4.1.
8.	IS 7049 : 1973	Code for handling processing quality evaluation and storage of poultry	See Item 4.1.
9.	IS 8182 : 1976	Code of hygienic conditions for processed meat products	See Item 4.1.
10.	IS 7053:1996	Meat and meat products - Basic requirements for a stall for sale of meat of small and large animals (First Revision)	See Item 4.1.
11.	IS 9800 : 1993	Meat and meat Products - Day - Old chicks Layers and Broilers basic requirements (<i>first revision</i>)	See Item 2.1.2.

(f) Terminology

Sl. No.	IS	Title	
1.	IS 8539 (Part 1) : 1977	Terminology of meat products and meat animals Part 1 poultry	The committee noted the information provided under Item 4.3.

ITEM 7 INTERNATIONAL ACTIVITIES

7.1 Nomination of experts for different Working groups under ISO/TC 34/SC 6

The committee noted the information provided under 7.1 of the agenda regarding the expert nominated for different Working groups under ISO/TC 34/SC 6. Further, the committee approved the nominated experts.

Chairperson, FAD 18 requested all the following nominated experts to submit a report on progress of respective working groups before the 18th meeting of FAD 18, which will be further deliberated in the meeting for taking further action :

Sl No.	Details of Expert	Working Group
a)	Dr. PK Mandal, Professor & Head, Dept. of Livestock Products Technology Rajiv Gandhi Institute of veterinary Education and Research, Pondicherry	WG 19: Nomenclature and vocabulary
b)	Dr.M.Muthukumar Principal Scientist & PI- Agri-Business	WG 20: Operating procedures of slaughtering

	Incubator, ICAR - National Meat Research Institute, Hyderabad	
c)	Dr. Naveena B. Maheswarappa, ICAR- National Fellow & Principal Scientist, ICAR - National Meat Research Institute, Hyderabad	WG 20: Operating procedures of slaughtering
d)	Dr.Narendra Babu.R. Professor, Department of Livestock Products Technology (Meat Science), Madras Veterinary College, Chennai	WG 26: Determination of essential composition and quality factors
e)	Dr.Kandeeban Gurunathan Senior Scientist, ICAR-National Meat Research Institute, Hyderabad	WG 20: Operating procedures of slaughtering WG 26: Determination of essential composition and quality factors
f)	Dr. Rajiv Ranjan Kumar Principal Scientist, Central Institute for Research on Cattle (ICAR-CIRC)	WG 26: Determination of essential composition and quality factors

7.2 New Proposal for Standardization at ISO under ISO/TC 34/SC 6

The committee noted the information provided under 7.2 of the agenda. Further, upon due deliberation the committee requested all the committee members to provide new subjects or existing Indian standards to be proposed at ISO/TC 34/SC 6 as a new subject for standardization. Further, in order to facilitate the required analysis and research work, the committee decided to provide a time period of 45 days for providing the above-mentioned inputs.

ITEM 8 MAPPING OF EQUIPMENT WITH INDIAN STANDARDS

The committee noted and deliberated upon the research carried out by Mr. Harsh Kumar (Intern under Member Secretary, FAD 18) on Pre-standardization Report on Mapping of equipment with Indian Standards (enclosed at Annex 25 of agenda). Further, the committee decided to send the report to FAD 18/Panel IV: Panel on Equipment related Slaughter House and Meat Industry and asked the panel to analyze the report in order to recommend the subjects to be taken up as new subjects for standardization within a period of 30 days. The subjects recommended will be further deliberated by the committee in its upcoming meeting for further action.

ITEM 9 GAP ANALYSIS OF MEAT INDUSTRY SUPPLY CHAIN TO IDENTIFY THE GAP AREAS FOR STANDARDIZATION

The committee noted the information provided under 9 of the agenda and asked the 'FAD 18/Panel 1: Code of Practices related to Slaughter House and Meat Industry' to carry out the required analysis and identify the gap areas within a period of 30 days. The committee further requested the panel to submit the analysis, which upon receipt will be circulated to respective panel for standardization after necessary approval from Chairperson, FAD 18.

ITEM 10 ANY OTHER BUSINESS

The member Secretary, FAD 18 and Dr. R Thomas, ICAR-NRC on Pig, Guwahati apprised the committee members regarding the seminar held on **Relevance of standards, need for their harmonization and new avenues to be explored in livestock as well as meat sector (with special reference to pig and pork sector)** at ICAR-National Research Centre on Pig, Guwahati on 5 October 2023. The seminar was attended by Dr. S. B. Barbuddhe, Director, ICAR-National Meat Research Institute, Hyderabad, Dr. Girish Patil, S., Director, ICAR-NRC on Mithun, Dr. V.K. Gupta, Director, ICAR-NRCP, Guwahati, Dr. Jesto George, Deputy Director, FSSAI, Smt. Sunita Rai, Deputy General Manager, APEDA, scientists from ICAR-NRCP, Guwahati, Entrepreneurs from Khaisua foods Pvt Ltd., Sayuri farms produce Pvt. Ltd., Arohan foods Pvt. Ltd. and research students from universities. More than 50 participants attended the seminar. Many new subjects for standardization in the meat sector along with the potential research collaboration have been identified and deliberated upon.

Further, the committee deliberated upon the following new subject recommendations from the seminar by stakeholders and took the following decisions for further action:

Sl. No.	Subjects recommended in the seminar	Decision of the committee under 18 th meeting
a)	Specification for Stunning Box for Pigs	<p>After due deliberation the committee decided that only if any specifications other than the specifications mentioned in the draft enclosed Annex 23 of the agenda is required for stunning box for pigs, then the subject should be taken up for standardization.</p> <p>Considering the above, the committee requested Dr. R Thomas, ICAR-NRC on Pig to analyze the draft enclosed at Annex 23 of the agenda and provide the information regarding additional requirements, if any. In case, no additional requirements are needed to be incorporated, the draft may be modified in order to cover pig in its cope.</p>
b)	Guidelines for identification of traditional meat products	The committee deliberated on the subject and rejected the proposal considering the requirements of such guidelines to be developed.
c)	Slaughterhouse Management System	<p>The committee was apprised by the Member Secretary, FAD 18 regarding the direction of DG, BIS in order to develop a National Standard on Slaughterhouse Management System. After due deliberation, the committee decided that a management system on slaughterhouse is much needed considering the current adverse scenario of slaughterhouses in India. Therefore, for taking up this task as a priority, the committee constituted the following dedicated panel for developing the draft on the above subject :</p> <ol style="list-style-type: none"> Dr. G Srinivasan, MoFPI, New Delhi Representative from Management Systems Department, BIS Representative from PETA, India Representative from ICAR-National Meat Research Institute, Hyderabad

		<p>e) Dr. N Kondaiah, All India Meat & Livestock Exporters Association (AIMLEA), New Delhi</p> <p>f) Dr. Jyoti, ICAR-National Research Centre on Mithun, Dimapur</p> <p>Further, Chairperson, FAD 18 informed the committee that, in consultation with other experts he will provide the list of other experts to be included in the panel and also will decide upon the convenor of the panel.</p>
d)	Small or Micro Slaughterhouses specifications	After due deliberation, the committee decided to take up the subject as a new subject for standardization on priority. Also see 6.2.1.
e)	Traceability of meat products	<p>After due deliberation, the committee decided to approve the subject as a new subject for development of National Standard. However, in order to explore the possibility of adoption of ISO standards on traceability and to avoid the duplication of existing Indian standards on traceability, the committee requested Dr. Girish Patil, ICAR-National Research Centre on Mithun to analyze the above.</p> <p>In case, no such cases for adoption or duplication are found, the committee requested Dr. Patil to submit the working draft on the above subject, which upon receipt will be circulated as a preliminary draft for a period of 21 days for comments upon necessary approval from Chairperson, FAD 18.</p>
f)	Guidelines for waste management of slaughterhouses	See 2.2.7

ITEM 11 TIME AND PLACE FOR THE NEXT MEETING

As per the approved meeting calendar of the Committee, it was decided to hold its 18th meeting of FAD 18 in the 1st week of December 2023. Dr. Girish Patil, ICAR-National Research Centre on Mithun, Dimapur (Representing Indian Meat Science Association in FAD 18) proposed to host the 18th meeting of FAD 18 at Dimapur, Nagaland. Considering the same, the committee approved the time and place for the meeting.

ANNEX A
ATTENDANCE
SLAUGHTER HOUSE AND MEAT INDUSTRY SECTIONAL
COMMITTEE, FAD 18

Date: 06 October 2023

Venue: National Research Centre for Pig, Guwahati

Physical Attendees		
Sl. No.	Organization Represented	Member Represented
1.	ICAR- National Meat Research Institute, Hyderabad	Dr. S. B. Barbuddhe <i>(Chairperson)</i>
2.	National Research Centre for Pig, Guwahati	Dr. R. Thomas
3.	Ministry of Food Processing Industries, Delhi	Dr. G. Srinivasan
4.	Indian Meat Science Association, Hyderabad	Dr. Girish Patil S.
5.	Municipal Corporation of Delhi, New Delhi	Dr. V. K. Singh
6.	Rajiv Gandhi Institute of Veterinary Education and Research (RIVER), Pondicherry	Dr. Prabhat K. Mandal
7.	Bureau of Indian Standards, New Delhi	Shri Debasish Mahalik, Sc. B <i>(Member secretary)</i>
Virtual Attendees		
Sl. No.	Organization Represented	Member Represented
1.	CSIR- Central Food Technological Research Institute, Mysore	Dr. Tanaji Kudre
2.	CSIR- Central Leather Research Institute, Chennai	Dr. T. S. Uma
3.	Deonar Slaughterhouse, Mumbai	Dr. Kalimpasha Ahmedkhan Pathan
4.	Indian Veterinary Research Institute, Izatnagar	Dr. A. R. Sen
5.	ISSDA, Gurgaon	Shri Rohit Kumar
6.	National Research Center on Meat, Hyderabad	Dr. M. Muthukumar
7.	People for Ethical Treatment of Animals, Mumbai	Dr. Kiran Ahuja
8.	Tamil Nadu Vet & Animal Sciences University, Chennai	Dr. R. Narendra Babu Dr. S Ezhivelan
9.	Voluntary Organization in Interest of Consumer Education (VOICE), New Delhi	Shri M. A. U. Khan
10.	Confederation of Indian Food & Trade Industry & Industry, New Delhi	Shri Kannan B. Ms. Varsha Yadav

11.	Indian Poultry Science Association, Izatnagar	Dr. Jaydeep Rokade
12.	Rajiv Gandhi Institute of Veterinary Education and Research (RIVER), Pondicherry	Dr. V. J. Ajay Kumar

