



PROGRAMME OF WORK

Water Resources Department (WRD)

BUREAU OF INDIAN
STANDARDS

As on 01 April 2024

MANAK BHAWAN, 9 BAHADUR SHAH
ZAFAR MARG NEW DELHI- 110002

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WATER RESOURCES DIVISION COUNCIL

Scope : Standardization in the field of water resources development and management include activities covering utilization of water resources for all uses. In regard to drinking and industrial water supply, the work shall be confined to making the raw water available for treatment and distribution. However, special publication for water management shall include all facets of technology and engineering covering entire hydrologic cycle. In regard to water for hydroelectric uses, the work shall include planning and design of hydroelectric development and powerhouse structures but ay not include generation, transmission and distribution equipment.



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WRD

PROGRAMME OF WORK

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(WRD)



BUREAU OF INDIAN STANDARDS

MANAK BHAWAN, 9 BHADUR SHAH ZAFAR MARG

NEW DELHI- 110002

PREFACE

India accounts for 18% of the world population and about 4% of the world's water resources. With the growing population, the role to protect this resources becomes even more significant for socio economic growth of the country. Water Resources Division of BIS has been putting constant endeavor to bring standard practices in the field of water resources for the country to cover entire hydrologic cycle i.e. from the glaciers in Himalayan regions to the coastal region of the country.

A programme of work is prepared every year for each Division of the Bureau of Indian Standards, to indicate the latest position of published Indian Standards and draft standards at different stages of processing. This programme of work for Water Resources Division Council (WRDC) has been prepared Sectional Committee-wise, and arranged in sequential order of the Committees.

The scope of WRDC is as under:

'Standardization in the field of water resources development and management; to include activities covering utilization of water resources for all uses. In regard to drinking and industrial water supply, the work shall be confined to making the raw water available for treatment and distribution. However, special publication for water management shall include all facets of technology and engineering covering entire hydrologic cycle. In regard to water for hydroelectric uses, the work shall include planning and design of hydroelectric development and powerhouse structures but may not include generation, transmission and distribution equipment.'

It is hoped that this publication will provide the community of standard users a convenient tool for obtaining the latest information about new and upcoming standards in the field of Water Resources Development and Management. For further information, please write to us at:

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ASPECT WISE BREAKUP OF STANDARDS (As on 01 April 2024)

Committee No.	Product Specification	Code of practice	Method of Test	Dimensions	Terminology	Symbols	Others	Unclassified	Total
WRD 1	6	87	-	-	0	-	-	3	96
WRD 3	-	7	-	-	6	-	-	-	13
WRD 5	-	20	1	6	-	-	-	-	27
WRD 6	-	16	-	-	8	-	-	-	24
WRD 8	1	9	-	-	1	-	-	-	11
WRD 9	1	37	-	-	3	-	-	-	41
WRD 10	-	15	-	-	-	-	-	-	15
WRD 12	1	24	-	-	3	-	-	-	28
WRD 13	2	45	-	-	7	-	-	-	54
WRD 14	-	36	-	-	1	-	-	-	37
WRD 15	-	15	-	-	1	-	-	-	16
WRD 16	-	22	-	-	-	-	-	-	22
WRD 21	-	11	-	-	1	-	-	-	12
WRD 22	-	22	-	-	3	-	-	-	25
WRD 23	-	36	-	-	-	-	-	-	36
WRD 24	-	3	-	-	1	-	-	-	4
WRD 28	-	-	-	-	-	-	-	-	-
WRD 29	NEW COMMITTEE CONSTITUTED								
WRD 30	NEW COMMITTEE CONSTITUTED								
WRD 31	NEW COMMITTEE CONSTITUTED								
WRD 32	NEW COMMITTEE CONSTITUTED								
Total:	11	405	1	6	35	-	-	3	461

**The aspect wise breakup is based on the main contents of the standards and users may refer to the standards for details.*

HARMONIZATION POSITION

TYPE OF HARMONIZATION	NUMBER OF STANDARDS
INDIAN STANDARDS UNDER DUAL NUMBER (IDENTICAL WITH ISO OR IEC STANDARDS)	65
INDIAN STANDARDS TECHNICALLY EQUIVALENT/NOT EQUIVALENT WITH ISO STANDARDS	18
INDIAN STANDARDS HARMONIZED WITH EN STANDARDS/REGULATIONS/DIRECTIVES	NIL
INDIAN STANDARDS HARMONIZED WITH STANDARDS OF OTHER BODIES	NIL
TOTAL	83

Water Resources Department
COMMITTEE WISE POSITION OF WORK

SL NO.	COMMITTEE	TITLE
1	WRD 1	Hydrometry
2	WRD 3	Ground Water and Related Investigation
3	WRD 5	Geological Investigation and Subsurface Exploration
4	WRD 6	Water Resources Planning, Management and Evaluation
5	WRD 8	Foundation and Foundation Treatment
6	WRD 9	Dams and Spillways
7	WRD 10	Reservoirs and Lakes
8	WRD 12	Hydraulic Gates and Valves
9	WRD 13	Canals and Cross Drainage Works
10	WRD 14	Water Conductor Systems
11	WRD 15	Hydroelectric Power House Structures
12	WRD 16	Hydraulic Structure Instrumentation
13	WRD 21	Safety in Construction, Operation and Maintenance of RiverValley Projects
14	WRD 22	Flood Management, Erosion Management and DiversionWorks
15	WRD 23	Measurement and Cost Analysis of Works for river ValleyProjects
16	WRD 24	Environmental Assessment and Management of WaterResources Projects
17	WRD 28	Coastal Zone Water Management
18	WRD 29	Small Hydropower Plants Sectional Committee
19	WRD 30	Repair, Retrofitting and Rehabilitation of Dams Sectional Committee
20	WRD 31	Urban Flooding Sectional Committee
21	WRD 32	Glacial Lake Outburst Floods (GLOFs) and Landslide Lake Outburst Floods (LLOFs) Sectional Committee
22	Annex-I	List of Harmonized Standards
23	Annex-II	List of Indian Product Standards
20	Annex-III	List of Indian Standards Withdrawn/Superseded
21	Annex-IV	List of Other Identified New Subjects for Standardization

WRD 1: HYDROMETRY

SCOPE: *Standardization of methods, procedures, instruments and equipment relating to techniques for hydrometric determination of water level, velocity, discharge and sediment transport in open channels and fluid flow in closed conduits, hydrological and meteorological investigations.*

Liaison: **ISO TC- 113 (P): Hydrometry ISO TC- 113 SC- 1 (P): Velocity Area Method ISO TC- 113 SC-2 (P): Flow measurement structures ISO TC-113 SC- 5 (P): Instruments, equipment and data management ISO TC- 113 SC- 6 (P): Sediment Transport ISO TC- 113 SC- 8 (P): Ground Water ISO TC-30 (O) : Measurement of fluid flow in closed conduits - Observer (O) ISO/TC 30/SC 2 – Pressure differential devices - Observer (O) **ISO/TC 30/SC 5** - Velocity and mass methods - Observer (O) ISO/TC 30/SC 7 - Volume methods including water meters - Observer (O)**

STANDARDS PUBLISHED

Sl. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Degree of Equivalence
1.	IS 1191 : 2016	Hydrometry — Vocabulary and symbols (<i>Third Revision</i>)	Mar 2021	-	Not Equivalent
2.	IS 1192 : 2013 ISO 748 : 2007	Hydrometry — Measurement of liquidflow in open channels using Current-Meters or floats (<i>Second Revision</i>)	Jan-2023	-	IDTD
3.	IS 1194 : 1960	Forms for recording measurement of flow of water in open channels	Aug-2020	-	INDG
4.	IS 2912 : 2022 ISO 1070 : 2018	Liquid flow measurement in open channels — Slope-Area method (<i>First Revision</i>)	-	1	IDTD
5.	IS 2951 (Part 1) : 1965	Recommendation for estimation of flow of liquids in closed conduits (Part 1) Head loss in straight pipes due to frictional resistance	Sep-2022	-	INDG
6.	IS 2951 (Part 2) : 1965	Recommendation for estimation of flow of liquids in closed conduits : (Part 2) Head loss in valves and fittings	Sep-2022	1	INDG
7.	IS 3910 : 2013 ISO 2537 : 2007	Hydrometry — Rotating-element Current-Meters (<i>Second Revision</i>)	Jan-2023	-	IDTD
8.	IS 3911 : 1994	Surface floats — Functional requirements (<i>First Revision</i>)	Jan-2020	-	INDG
9.	IS 3912 : 2013 ISO 3454 : 2008	Hydrometry — Direct depth sounding and suspension equipment (<i>Second Revision</i>)	Jan-2023	-	IDTD

Sl. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Degree of Equivalence
10.	IS 3913 : 2014	Hydrometry — Functional requirements and characteristics of suspended Sediment samplers (<i>Second Revision</i>)	Mar-2020	-	Not Equivalent
11.	IS 3917 : 2003	Scoop type bed material samplers — Specification (<i>First Revision</i>)	Mar-2023	-	Not Equivalent
12.	IS 3918 : 1966	Code of practice for use of current meter (Cup Type) for water flow measurement	Aug-2020	1	INDG
13.	IS 4073 : 1967	Specification for Fish weights	Aug-2020	-	INDG
14.	IS 4080 : 1994	Vertical staff gauges — Functional requirements (<i>First Revision</i>)	Jan-2020	-	INDG
15.	IS 4477 (Part 2) : 1975	Method of measurement of fluid flow by means of venturi meters Part 2 Compressible fluids	Aug-2020	-	Not Equivalent
16.	IS 4858 : 1968	Specification for velocity rods	Aug-2020	-	INDG
17.	IS 4890 : 1968	Methods for measurement of suspended sediment in open channels	Aug-2020	-	INDG
18.	IS 4986 : 2002	Installation of rain gauge (Non-recording type) and measurement of rain — Code of Practice (<i>Second Revision</i>)	Sep-2022	-	INDG
19.	IS 4987 : 1994	Recommendations for establishing network of rain gauge stations (<i>First Revision</i>)	Jan-2020	-	INDG
20.	IS 5542 : 2003	Guide for storm analysis (<i>First Revision</i>)	Jan-2020	-	INDG
21.	IS 6062 : 1971	Method of measurement of flow of water in open channels using standingwave flume — Fall	Jan-2020	-	INDG
22.	IS 6063 : 1971	Method of measurement of flow of water in open channels using standingwave flume	Jan-2020	-	INDG
23.	IS 6064 : 1971	Specification for sounding and suspension equipment	Aug-2020	-	INDG

Sl. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Degree of Equivalence
24.	IS 6339 : 2013	Hydrometry — Sediment in streams and canals — Determination of concentration particle size distribution and relative density (<i>First Revision</i>)	Jan-2023	-	Not Equivalent
25.	IS 8389 : 2003	Installation and use of rain gauges recording — Code of Practice (<i>Second Revision</i>)	Mar-2023	-	INDG
26.	IS 9108 : 2020 ISO 1438 : 2017	Hydrometry open channel flow measurement using Thin-Plat weirs (<i>Second Revision</i>)	-	-	IDTD
27.	IS 9115 : 2002	Method for estimation of incompressible fluid flow in closed conduits by bend meters (<i>First Revision</i>)	Sep-2022	-	INDG
28.	IS 9116 : 2002	Water stage recorder (Float Type) — Specification (<i>First Revision</i>)	Sep-2022	-	Not Equivalent
29.	IS 9118 : 1979	Method for measurement of pressure by means of manometers	Aug-2020	1	INDG
30.	IS 9119 : 1979	Method of flow estimation by jet characteristics (<i>Approximate Method</i>)	Mar-2021	-	INDG
31.	IS 12752 : 2013 ISO 8368 : 2019	Hydrometric determinations — Flow measurements in open channels using structures — Guidelines for selection of structure (<i>First Revision</i>)	Jan-2023	-	IDTD
32.	IS 13083 : 2017	Hydrometric Determination — flow measurement in open channels using structures — Flat-V weirs	Apr-2022	-	Not Equivalent
33.	IS 13084 : 1991 ISO 4374 : 1990	Liquid flow measurement in open channels — Round-nose horizontal broad-crested weirs	Sep-2022	-	IDTD
34.	IS 13371 : 2014 ISO 3455:2007	Hydrometry — Calibration of current-Meters in straight open tanks (<i>First Revision</i>)	Dec-2023	-	IDTD
35.	IS 14359 : 2014 ISO 4366 : 2007	Hydrometry — Echo sounders for water depth measurements (<i>First Revision</i>)	Jan-2020	-	IDTD
36.	IS 14371 : 2016 ISO 9826 : 1992	Measurement of liquid flow in open channels — Parshall and saniiri flumes (<i>First Revision</i>)	Mar-2021	-	IDTD
37.	IS 14573 : 2014	Hydrometry — Velocity-Area methods	Jan-2020	-	IDTD

	ISO 1088 : 2007	using current-meters — Collection and processing of data for determination of uncertainties in flow measurement (<i>First Revision</i>)			
38.	IS 14615 (Part 1) : 2018 ISO 5167-1 : 2003	Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full (Part 1) : General principles and requirements (<i>First Revision</i>)	Mar 2023	-	IDTD
39.	IS 14615 (Part 2) : 2018 ISO 5167 (Part 2) : 2003	Measurement of fluid flow by means of pressure differential devices inserted in circular cross-sectional conduits running full (Part 2) Orifice plates	Mar 2023	-	IDTD
40.	IS 14615 (Part 3) : 2024 ISO 5167-3 : 2003	Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running Full (Part 3) nozzles and venturi nozzles	Mar 2023	-	IDTD
41.	IS 14615 (Part 4) : 2018 ISO 5167-(Part 4) : 2003	Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running Full (Part 4) venturi tubes	Mar 2023	-	IDTD
42.	IS 14615 (Part 5) : 2019 ISO 5167-5 : 2016	Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full Part 5 Cone meters	Mar 2024		IDTD
43.	IS 14673 : 2022 ISO 4360 : 2020	Hydrometry — Open channel flow measurement using triangular profileweirs (<i>First Revision</i>)	-	-	IDTD
44.	IS 14869 : 2016 ISO 4359 : 2013	Flow measurement structures — rectangular trapezoidal and U-Shaped flumes (<i>First Revision</i>)	Mar-2021	1	IDTD
45.	IS 14973 : 2019 ISO 3966 : 2008	Measurement of fluid flow in closed conduits — Velocity area method using Pitot static tube (<i>First Revision</i>)	June 2019	-	IDTD
46.	IS 14974 : 2018 ISO 3846 : 2008	Hydrometry — Open channel flow measurement using rectangular Broad crested weirs (<i>First Revision</i>)	Sep-2023	-	IDTD
47.	IS 14975 : 2001 ISO 9827 : 1994	Measurement of liquid flow in open channels — Streamlined triangular profile weirs	Mar 2022	-	IDTD

Sl. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Degree of Equivalence
48.	IS 15117 : 2018 ISO 4375 : 2014	Hydrometry — Cableway systems for stream gauging (<i>First Revision</i>)	Nov-2023	-	IDTD
49.	IS 15118 : 2014 ISO 4373 : 2008	Hydrometry — Water level measuring, devices (<i>First Revision</i>)	Jan-2020	-	IDTD
50.	IS 15119 (Part 2) : 2014 ISO 1100-2 : 2010	Hydrometry — Measurement of liquid flow in open channels Part 2 Determination of the stage-discharge relationship (<i>First Revision</i>)	Dec-2023	-	IDTD
51.	IS 15122 : 2014 ISO 2425 : 2010	Measurement of liquid flow in open channels under tidal conditions	Dec-2023	-	IDTD
52.	IS 15123 : 2002 ISO 4362 : 1999	Hydrometric determinations — Flow Measurement in open channels using Structures — Trapezoidal Broad-crested weirs	Sep-2022	-	IDTD
53.	IS 15124 : 2002 ISO 9195 : 1992	Liquid flow measurement in open channels — Sampling and analysis of Gravel-bed material	Sep-2022	-	IDTD
54.	IS 15352 : 2018 ISO 6420 : 2016	Hydrometry — Position fixing Equipment for Hydrometric boats (<i>First Revision</i>)	Sep-2023	-	IDTD
55.	IS 15353 : 2003 ISO 8333 : 1985	Liquid flow measurement in open channels by weirs and flumes — V-Shaped Broad-crested weirs	Mar-2023	-	IDTD
56.	IS 15358 : 2003 ISO 9196 : 1992	Liquid flow measurement in Open channels — Flow measurements under ice conditions	Mar-2023	-	IDTD
57.	IS 15359 : 2003 ISO 11329 : 2001	Hydrometric determinations — Measurement of Suspended Sediment Transport in Tidal channels	Mar-2023	-	IDTD
58.	IS 15360 : 2003	Measurement of liquid flow in open channels — Bed material sampling	Mar-2023	-	Not Equivalent
59.	IS 15362 : 2003 ISO 14139 : 2000	Hydrometric Determinations — Flow measurements in open channels using structures — Compound gauging structures	Mar-2023	-	IDTD
60.	IS 15454 : 2004	Liquid flow measurement in open channels — Velocity- Area method using a restricted number of verticals	Jan-2020	-	Not Equivalent
61.	IS 15527 : 2020	Hydrometry — Measurement in	Jan-2020	-	IDTD

Sl. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Degree of Equivalence
	ISO/TR 9210 : 2017	meandering River and in streams with unstable boundaries (<i>First Revision</i>)			
62.	IS 15646 : 2017 ISO 9824 : 2007	Hydrometry — Measurement of free surface flow in closed conduits (<i>First Revision</i>)	Dec-2022	-	IDTD
63.	IS 15772 : 2014 ISO 9825 : 2005	Hydrometry — Field measurement of discharge in large rivers and rivers in flood (<i>First Revision</i>)	Dec-2023	-	IDTD
64.	IS 15822 : 2008	Measurement of liquid flow in open channels — Equipment for the measurement of discharge under Ice conditions	Sep-2022	-	Not Equivalent
65.	IS 15823 : 2009	Hydrometry — Computing stream flow using an unsteady flow model	Mar-2023	-	Not Equivalent
66.	IS 15847 : 2020 ISO 9123 : 2001	Hydrometry — Stage-fall-Discharge relationship (<i>First Revision</i>)	Dec-2020	-	IDTD
67.	IS 15873 : 2010	Hydrometric Determination — Unstable channels and ephemeral streams	Jan-2020	-	Not Equivalent
68.	IS 15898 (Part 1) : 2012 ISO 9555-1 : 1994	Measurement of liquid flow in open channels — Tracer dilution methods for the measurement of steady flow (Part 1) General	Mar-2022	1	IDTD
69.	IS 15898 (Part 3) : 2011 ISO 9555-3 : 1992	Measurement of liquid flow in open channels — Tracer dilution methods for the measurement of Steady Flow (Part 3) Chemical Tracers	Mar 2021	-	IDTD
70.	IS 15898 (Part 4) : 2012 ISO 9555-4 : 1992	Measurement of liquid flow in open channels — Tracer dilution methods for the measurement of steady flow (Part 4) fluorescent tracers	Mar- 2022	-	IDTD
71.	IS 16091 : 2013	Measurement of liquid flow in open channels — Method of specifying performance of hydrometric equipment	Dec-2023	-	Not Equivalent
72.	IS 16138 : 2013 ISO/TS 15768 : 2000	Measurement of liquid velocity in open channels — Design selection and use of electromagnetic current meters	Dec-2023	-	IDTD
73	IS 16222 : 2018 ISO 9212 : 2015	Hydrometry — Methods of measurement of bed load discharge (<i>First Revision</i>)	Jun-2023	-	IDTD

Sl. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Degree of Equivalence
74.	IS 16223 : 2014 ISO 15769 : 2010	Hydrometry — Guidelines for the application of acoustic velocity meters using the doppler and Echo correlation methods	Dec-2023	-	IDTD
75.	IS 16274 : 2018 ISO 24155 : 2016	Hydrometry — Hydrometric Data transmission systems-Specification of system requirements (<i>First Revision</i>)	Sep-2023	-	IDTD
76.	IS 16364 : 2017	Hydrometric uncertainty — Guidance HUG	Mar-2022	-	Not Equivalent
77.	IS 16571 : 2017 ISO 4369 : 1979	Measurement of liquid flow in open channels — Moving Boat method	Dec-2022	-	IDTD
78.	IS 16696 : 2018 ISO 11657 : 2014	Hydrometry — Suspended sediment in streams and canals — Determination of concentration by surrogate techniques	Jan-2023	-	IDTD
79.	IS 16697 : 2018 ISO 13550 : 2002	Hydrometric determinations — Flow measurements in open channels using structures — Use of vertical underflow gates	Mar 2023	-	IDTD
80.	IS 16698 : 2019 ISO 18365 : 2013	Hydrometry — Selection establishment and operation of a gauging station	Mar-2024	-	IDTD
81.	IS 16275 : 2014 ISO/TR 24578 : 2012	Hydrometry — Acoustic doppler profiler method and application for measurement of flow in open channels	Sept- 2019	-	IDTD
82.	IS 16804 : 2018 ISO 26906 : 2015	Hydrometry — Fish Passes at flow measurement structures	Nov- 2023	-	IDTD
83.	IS 16849 : 2018 ISO/TR 11651 : 2015	Estimation of sediment deposition in reservoir deposition using one dimensional simulation models	Nov- 2023	-	IDTD
84.	IS 17271 : 2020 ISO 6416 : 2017	Hydrometry measurement of discharge by ultrasonic transit time of flight method	Jan 2020	-	IDTD
85.	IS 17272 : 2021 ISO 19234 : 2016	Hydrometry — Low cost baffle solution to Aid Fish passage at triangular profile weirs that conform to ISO 4360	-	-	IDTD
86.	IS 17273 : 2021 ISO 4006 : 1991	Measurement of fluid flow in closed conduits — vocabulary and symbols	-	-	IDTD
87.	IS 17287 : 2021 ISO 4185 : 1980	Measurement of fluid flow in closed Conduits — Weighing method	-	-	IDTD

Sl. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Degree of Equivalence
88.	IS 17288 : 2021 ISO 5168 : 2005	Measurement of Fluid Flow — Procedures for evaluation of uncertainties	-	-	IDTD
89.	IS 17289 : 2021 ISO 8316 : 1987	Measurement of liquid flow in closed Conduits — Method by collection of the liquid in a volumetric tank	-	-	IDTD
90.	IS 17290 (Part 1) : 2021 ISO 9368 : 1990	Measurement of liquid flow in closed conduits by weighing Method — Procedures for checking installations Part 1 static weighing systems	-	-	IDTD
91.	IS 17484 : 2020 ISO 18481 : 2017	Hydrometry — Liquid flow measurement using end depth method in channels with a free overall	-	-	IDTD
92.	IS 17485 : 2020 ISO 2975-1 : 1974	Measurement of Water flow in closed Conduits — Tracer method (Part 1) General	-	-	IDTD
93.	IS 17485 (Part 2) : 2021 ISO 2975 Part 2 : 1975	Measurement of water flow in closed conduits — Tracer Method (Part 2) Constantrate injection method using Non-Radioactive tracers	-	-	IDTD
94.	IS 17485 (Part 3) : 2021 ISO 2975 -3 : 1976	Measurement of water flow in closed conduits — Tracer Method (Part 3) Constantrate injection method using Radioactive tracers	-	-	IDTD
95.	IS 17485 Part 6 : 2021 ISO 2975-6 : 1977	Measurement of water flow in closed conduits — Tracer Method (Part 6) Transit time method using non-radioactive tracers	-	-	IDTD
96.	IS 17485 Part 7 : 2021 ISO 2975-7 : 1977	Measurement of water flow in closed conduits — Tracer method (Part 7) Transit time method using Radioactive Tracers	-	-	IDTD

STANDARDS UNDER DEVELOPMENT

PROJECTS APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

SI. No.	Doc No	Title
1.	WRD 1 (20332)	Hydrometry — Calibration of Current - meters in straight open tanks
2.	WRD 1 (20347)	Measurement of fluid flow in closed conduits velocity area method using pitot static tube
3.	WRD 1 (20496)	Hydrometry vocabulary and symbols
4.	WRD 1 (20512)	Hydrometry functional requirements and characteristics of Suspended — Sediment Samplers
5.	WRD 1 (21458)	Hydrometric determinations flow measurements in open channels Using structures guidelines for selection of structure
6.	WRD 1 (22021)	Vertical Staff Gauges — Functional requirements
7.	WRD 1 (22063)	Measurement of fluid flow by means of pressure differential devices inserted in circular cross Section conduits running full (Part 1) General principles and requirements
8.	WRD 1 (22064)	Measurement of fluid flow by means of pressure differential devices inserted in circular cross Section conduits running full (Part 4) Venturi Tubes
9.	WRD 1 (22080)	Measurement of fluid flow by means of pressure differential devices inserted in circular cross - Section conduits running full (Part 2) orifice plates
10.	WRD 1 (23721)	Flow measurement structures rectangular trapezoidal and U - Shaped Flumes
11.	WRD 1 (23843)	Methods for measurement of suspended sediment in open channels
12.	WRD 1 (23881)	Hydrometry acoustic doppler profiler method and application For Measurement of flow in open channels

FINALIZED DRAFT INDIAN STANDARD

SI. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

Sl. No.	Doc No	Title
1.	WRD 1 (15738) Revision of: IS 2951:1965	Recommendation for estimation of flow of liquids in closed conduits (Part 1) Head loss in straight Pipes due to frictional resistance
2.	WRD 1 (15739) Revision of : IS 2951:1965	Recommendation for estimation of flow of liquids in closed conduits (Part 2) Head loss in valves and Fittings
3.	WRD 1 (19429)) Revision of : IS 9119:1979	Method of flow estimation by jet characteristics approximate Methods
4.	WRD 1 (20086) Revision of : IS 1192:2013	Hydrometry measurement of liquid flow in open channels using Current - meters or floats
5.	WRD 1 (20344)) Revision of : IS 14615:2018	Measurement of fluid flow by means of pressure differential devices inserted in circular cross-Section conduits running full (Part 3) Nozzles and Venturi nozzles

Total Published Standards: 96
Total Standards Under development: 17

WRD 3: GROUND WATER AND RELATED INVESTIGATIONS

SCOPE: *Standardization of all aspects of ground water resources, related investigations, water harvesting and recharge for ground water*

Liaison: *Co- ordination with work of ISO/TC 113 / SC 8 Ground water - P, ISO TC 319 - Karst - O*

STANDARDS PUBLISHED

Sl. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds.	Degree of Equivalence
1.	IS 4410 (Part 11/Sec 1) : 1972	Glossary of terms relating to river valley projects Part 11 Hydrology Sec 1 general terms	Oct-2020	-	INDG
2.	IS 4410 (Part 11/Sec 2) : 1972	Glossary of terms relating to river valley projects Part 11 Hydrology Sec 2 Precipitation and Run off	Oct-2020	-	INDG
3.	IS 4410 (Part 11/Sec 3) : 1973	Glossary of terms relating to river valley projects Part 11 Hydrology Sec 3 Infiltration and Water Losses	Oct-2020	-	INDG
4.	IS 4410 (Part 11/ Sec 4) : 1973	Glossary of terms relating to river valley projects Part 11 Hydrology Sec 4 Hydrographs	Oct-2020	-	INDG
5.	IS 4410 (Part 11/Sec 6) : 2018	Glossary of terms relating to river valley projects Part 11 Hydrology Sec 6 Ground Water (<i>Second Revision</i>)	Dec-2023	-	INDG
6.	IS 4410 (Part 11/Sec 7) : 1984	Glossary of terms relating to river valley projects Part 11 Hydrology Sec 7 Quality of Water	April-2021	-	INDG
7.	IS 14476 (Part 1 to 9) : 1998	Test pumping of water wells — Code of Practice	Jan-2023	-	INDG
8.	IS 15755 : 2007	Hydrometry — Geophysical logging of boreholes for Hydrogeological Purposes —Considerations and Guidelines for making measurements	Jun-2022	-	Not Equivalent
9.	IS 15792 : 2008	Artificial recharge to Ground Water Guidelines	Jan-2023	1	INDG

SI. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Degree of Equivalence
10.	IS 15797 : 2008	Roof Top rainwater harvesting — Guidelines	Jan-2023	-	INDG
11.	IS 15896 : 2011	Manual methods for measurement of Ground Water level in a well	Oct-2020	-	Not Equivalent
12.	IS 15897 : 2011	Surface Geophysical surveys for hydro geological studies	Oct-2020	-	INDG
13.	IS 16094 : 2018	Hydrometry - Measuring the water level in a well using automated pressure transducer methods — Guidelines	Dec-2023	-	Not Equivalent

STANDARDS UNDER DEVELOPMENT

Projects Approved

SI. No.	Doc No	TITLE

Preliminary Draft Standards

SI. No.	Doc No	TITLE

Drafts Standards in WC Stage

SI. No.	Doc No	TITLE

Draft Standards Completed WC Stage

SI. No.	Doc No	TITLE
1	WRD 3 (16229)	Unconventional measures for ground water harvesting
2	WRD 3 (17098)	Guidelines for aquifer mapping
3	WRD 3 (21909)	Hydrometry geophysical logging of boreholes for hydrogeological Purposes considerations and guidelines for making measurements

Finalized Draft Indian Standard

Sl. No.	Doc No	TITLE

Finalized Draft Indian Standards under Print

Sl. No.	Doc No	TITLE
1.	WRD 3 (16962) Revision of IS 14476 : 1998	Test Pumping of Water Wells - Code of Practice
2.	WRD 3 (21368) Revision of IS 4410 : 1972	Glossary of terms relating to river valley projects Part 11 Hydrology Sec 1 General terms

Total Published Standards: 13

Total Standards Under development: 5

WRD 5: GEOLOGICAL INVESTIGATION AND SUBSURFACE EXPLORATION

SCOPE: *Standardization of criteria for choice of methods, investigations and testing of subsurface strata and recommendations for collection and presentation of data.*

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds.	Degree of Equivalence
1.	IS 4078 : 1980	Code of Practice for Indexing and storage of drill cores (<i>First Revision</i>)	Feb- 2024	-	INDG
2.	IS 4410 (Part 7) : 1982	Glossary of terms relating to river valley projects Part 7 engineering geology (<i>First Revision</i>)	Feb- 2020	-	INDG
3.	IS 4453 : 2009	Subsurface exploration by pits trenches drifts and shafts — Code of Practice (<i>Second Revision</i>)	Feb- 2020	-	INDG
4.	IS 4464 : 2020	Code of Practice for presentation of drilling information and core description in geotechnical investigation (<i>Second Revision</i>)	-	-	INDG
5.	IS 5313 : 2020	Guide for core drilling observations (<i>Second Revision</i>)	-	-	INDG
6.	IS 5497 : 2008	Guide to topographical surveys for river valley projects (<i>Second Revision</i>)	Feb- 2024	-	INDG
7.	IS 5529 (Part 1) : 2013	In-Situ Permeability test Part 1 test in Overburden — Code of Practice (<i>Second Revision</i>)	Feb- 2024	-	INDG
8.	IS 5529 (Part 2) : 2006	In - Situ Permeability test Part 2 tests in bedrock (<i>Second Revision</i>)	Feb- 2020	1	INDG
9.	IS 6926 : 1996	Diamond core drilling — Site investigation for river valley projects — Code of Practice (<i>First Revision</i>)	Feb- 2020	-	INDG
10.	IS 6935 : 1973	Method for determination of water level in a bore hole	Feb- 2019	-	INDG
11.	IS 6955 : 2008	Subsurface exploration for earth and rockfill dams — Code of Practice (<i>First Revision</i>)	Feb- 2020	-	INDG
12.	IS 7422 (Part 1) : 1974	Symbols and abbreviations for use in Geological maps section and subsurface exploratory logs Part 1 Abbreviations	Feb- 2024	-	INDG
13.	IS 7422 (Part 2) : 1974	Symbols and abbreviations for use in geological maps section and subsurface exploratory logs Part 2 Igneous rocks	Feb- 2024	-	INDG

14.	IS 7422 (Part 3) : 1974	Symbols and Abbreviations for use in geological maps Sections and subsurface exploratory logs Part 3 Sedimentary rocks	Feb- 2024	-	INDG
15.	IS 7422 (Part 4) : 1985	Symbols and abbreviations for use in geological maps, sections and subsurface exploratory logs Part 4 Metamorphic rocks	Feb- 2024	-	INDG
16.	IS 7422 (Part 5) : 1992	Symbols and abbreviations for use in geological maps, sections and sub — surface exploratory logs Part 5 Line symbols for formation contacts and structural features	Feb- 2020	-	INDG
17.	IS 10060 : 2013	Geotechnical investigation for power housesites — Code of Practice (<i>First Revision</i>)	Mar- 2024	-	INDG
18.	IS 10290 : 2013	Code of Practice for photo geological interpretation and mapping of river valleyproject sites	Mar- 2024	-	INDG
19.	IS 11385 : 2008	Subsurface exploration for canals and crossdrainage works — Code of Practice (<i>First Revision</i>)	Feb- 2020	-	INDG
20.	IS 13216 : 1991	Code of Practice for geological explorationfor reservoir sites	Mar- 2024	2	INDG
21.	IS 13578 : 2008	Subsurface exploration for barrages and weirs — Code of practice (<i>First Revision</i>)	Feb- 2020	-	INDG
22.	IS 14330 : 1996	Ground water investigation for hydraulic structures — Guidelines	Feb- 2020	-	INDG
23.	IS 15662 : 2006	Geological exploration for gravity dams andoverflow structures — Code of Practice	Feb- 2020	2	INDG
24.	IS 15681 : 2006	Geological exploration by geophysical method seismic Refraction — Code of Practice	Feb- 2020	-	INDG
25.	IS 15686 : 2006	Recommendations for preparation of geological and geotechnical maps for river valley projects	Feb- 2020	-	INDG
26.	IS 15736 : 2007	Geological exploration by geophysical method Electrical Resistivity — Code of Practice	Feb- 2024	1	INDG
27.	IS 17883 : 2022	Geological exploration for tunnels — Guidelines	Jul- 2022		INDG

STANDARDS UNDER DEVELOPMENT

Projects Approved

Sl. No.	Doc No	TITLE

Preliminary Draft Standards

Sl. No.	Doc No	TITLE
1.	WRD 5 (21415) Revision of IS 15681 : 2006	Geological exploration by geophysical method (Seismic Refraction) Code of Practice (<i>First Revision</i>)
2.	WRD 5 (21422) Revision of IS 15736 : 2007	Geological exploration by geophysical method electrical resistivity method Code of Practice (<i>First Revision</i>)

Drafts Standards in WC Stage

Sl. No.	Doc No	TITLE

Draft Standards Completed WC Stage

Sl. No.	Doc No	TITLE
1.	WRD 5 (19982) Revision of IS 13216 : 1991	Geological exploration for reservoir sites guidelines (<i>First Revision</i>)
2.	WRD 5 (21364) Revision of IS 7422 : 1974	Symbols and abbreviations for use in geological maps sections and subsurface exploratory logs (Part 1) abbreviations

Finalized Draft Indian Standards under Print

Sl. No.	Doc No	TITLE
1.	WRD 5 (19981) Revision of IS 4464 : 2020	Presentation of drilling information and core description in geotechnical investigation code of practice
2.	WRD 5 (21365) Revision of IS 7422 (Part 2) : 1974	Symbols and abbreviations for use in geological maps sections and subsurface exploratory logs Part 2 igneous rocks
3.	WRD 5 (21366) Revision of IS 7422 (Part 3) : 1974	Symbols and abbreviations for use in geological maps sections and subsurface exploratory logs Part 3 sedimentary rocks
4.	WRD 5 (21369) Revision of IS 7422 (Part 4) : 1985	Symbols and abbreviations for use in geological maps sections and subsurface exploratory logs Part 4 Metamorphic rocks
5.	WRD 5 (21370) Revision of IS 7422 (Part 5) : 1992	Symbols and abbreviations for use in geological maps sections and subsurface exploratory logs Part 5 line symbols for formation contacts and structural features

Total Published Standards: 27

Total Standards Under development: 09

WRD 6: WATER RESOURCES PLANNING, MANAGEMENT AND EVALUATION

SCOPE: *Standardization for water resources planning, development and management.*

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 4008 : 1985	Guide for presentation of project report for river valley projects (<i>First Revision</i>)	Feb- 2021	-	INDG
2.	IS 4186 : 2024	Guide for preparation of project report for river valley projects (<i>Second Revision</i>)	Feb- 2021	-	INDG
3.	IS 4410 (Part 1) : 1991	Glossary of terms relating to rivervalley projects Part 1 Irrigation Practice (<i>First Revision</i>)	Mar- 2024	-	INDG
4.	IS 4410 (Part 2) : 1967	Glossary of terms relating to river valley projects : Part 2 Project planning	Feb- 2021	-	INDG
5.	IS 4410 (Part 4) : 1982	Glossary of terms relating to river valley projects Part 4 Drawings (<i>First Revision</i>)	Feb- 2021	-	INDG
6.	IS 4410 (Part 11/Sec 5) : 1977	Glossary of terms relating to river valley projects Part 11 Hydrology Sec 5 Floods	Mar-2019	-	INDG
7.	IS 4410 (Part 14/Sec 1) : 1977	Glossary of terms relating to river valley projects: Part 14 Soil conservation and reclamation Sec 1 soil conservation	Mar- 2024	-	INDG
8.	IS 4410 (Part 14/Sec 2) : 1977	Glossary of terms relating to river valley Projects Part 14 Soil conservation and reclamation Sec 2 Reclamation	Mar-2024	-	INDG
9.	IS 4410 (Part 17) : 2024	Glossary of terms relating to rivervalley projects Part 17 Water requirements of crops	-	-	INDG
10.	IS 4410 (Part 21) : 1987	Glossary of terms relating to River valley projects Part 21 Flood control	Mar-2020	1	INDG

SI. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
11.	IS 5510 : 1969	Guide for Soil surveys for river valley projects	Feb- 2021	-	INDG
12.	IS 6748 (Part 1) : 1973	Recommendations for watershed management relating to soil conservation Part 1 Agronomic Aspects	Feb- 2021	-	INDG
13.	IS 7560 : 1974	Guidelines for allocation of cost among different purposes of rivervalley projects	Mar-2024	-	INDG
14.	IS 10336 : 1982	Guidelines for preparation of completion reports of multipurpose River Valley Projects	Feb- 2021	-	INDG
15.	IS 13028 (Part 1) : 2014	Guidelines for integrated planning development and management of river basins Part 1 Overall planning (<i>First Revision</i>)	Aug-2019	-	INDG
16.	IS 13142 : 1991	Proforma for reporting progress of benefits created by river valley projects	Mar-2019	2	INDG
17.	IS 13218 (Part 1) : 1992	Proforma for reporting progress during construction for river valley projects Part 1 Irrigation Works	Mar- 2024	-	INDG
18.	IS 13218 (Part 2) : 2024	Proforma for reporting progress during construction for river valley projects Part 2 Hydel Works	Mar-2019	-	INDG
19.	IS 13218 (Part 3) : 1992	Proforma for reporting progress during Construction for river valley projects Part 3 Flood Control	Mar-2019	-	INDG
20.	IS 13668 : 1993	Guidelines for fixing intensity of Irrigation	Mar-2024	-	INDG
21.	IS 13739 : 1993	Guidelines for estimation of flood damages	Mar-2024	-	INDG
22.	IS 14519 : 1998	Guidelines for fixing rates for Irrigation Water	Mar-2024	-	INDG
23.	IS 15087 : 2001	Planning and design of drainage in Irrigation projects — Guidelines	Mar- 2019	-	INDG
24.	IS 16115 : 2013	Evaluation of completed irrigation projects major and medium Guidelines	Mar-2024	-	INDG

**STANDARDS UNDER DEVELOPMENT
PROJECTS APPROVED**

SI. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE
1.	WRD 6 (22370) Revision of: IS 14519 : 1998	Fixing rates for Irrigation Water Guidelines
2.	WRD 6 (24196) Revision of IS 13218 : 1992	Proforma for reporting progress during construction for river valley projects Part 1 Irrigation Works (<i>First Revision</i>) of IS 13218 (Part 1)

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc No	TITLE
1	WRD 6 (22547) Revision of IS 13218 (Part 3) : 1992	Proforma for reporting progress during construction for river valley projects part 3 flood control (<i>First Revision</i>)
2	WRD 6 (22645) Revision of IS 6748 (Part 1) : 1973	Recommendations for watershed management relating to Soil conservation Part 1 Agronomic Aspects (<i>First Revision</i>)

FINALIZED DRAFT INDIAN STANDARD

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

Sl. No.	Doc No	TITLE
1.	WRD 6 (19372) Revision of IS 13218:1991	Proforma for reporting progress during construction for river valley projects Part 2 Hydel works <i>First Revision</i> of (IS 13218) Part 2
2.	WRD 6 (19440) Revision of: IS 4186:1985	Guide for preparation of Project report for river valley projects second revision of IS 4186
3.	WRD 6 (20273) Revision of: IS 4410:1977	Glossary of terms relating to river valley projects Part 17 Water Requirements of crops first revision

Total Published Standards: 24

Total Standards Under development: 7

WRD 8: FOUNDATION AND FOUNDATION TREATMENT

SCOPE: Standardization of criteria for design and construction of foundations on rocks, impermeable and permeable strata for water resource projects, including methods of foundation treatment.

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 4410 (Part 19) : 1996	Glossary of terms relating to river valley projects Part 19 grouting	Apr- 2021	-	INDG
2.	IS 4999 : 1991	Recommendations for grouting of pervious soils (<i>First Revision</i>)	Mar-2023	2	INDG
3.	IS 5050 : 1992	Code of Practice for design construction and maintenance of relief wells (<i>First Revision</i>)	Apr- 2021	1	INDG
4.	IS 6066 : 1994	Pressure grouting of rock foundations in river valley projects - recommendations (<i>Second Revision</i>)	Mar-2023	1	INDG
5.	IS 8414 : 2014	Guidelines for Design of under seepage control measures for earth and rockfill dams (<i>First Revision</i>)	Mar-2024	1	INDG
6.	IS 11293 : 2018	Guidelines for the design of grout curtains for earth and rock fill dams masonry dams and concrete gravity dams	Mar- 2024	-	INDG
7.	IS 11973 : 1986	Code of practice for treatment of rock foundations, core and abutment contacts with rock for embankment dams	Apr- 2021	1	INDG
8.	IS 12584 : 1989	Bentonite for grouting in civil engineering works — Specification	Mar-2023	1	INDG
9.	IS 14343 : 1996	Choice of grouting materials for alluvial Grouting — Guidelines	Apr- 2021	1	INDG
10.	IS 14344 : 2021	Design and construction of diaphragms for under seepage control Code of Practice (<i>First Revision</i>)	-	-	INDG
11.	IS 16547 : 2017	Investigations for foundation of existing earth and rock fill dams — Guidelines	Dec-2022	-	INDG

STANDARDS UNDER DEVELOPMENT

Projects Approved

Sl. No.	Doc No	TITLE
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Preliminary Draft Standards

SI. No.	Doc No	TITLE
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Drafts Standards in WC Stage

SI. No.	Doc No	TITLE
1.	WRD 8 (21401) Revision of IS 4410 : 1996	Glossary of terms relating to river valley projects part 19 grouting

Draft Standards Completed WC Stage

SI. No.	Doc No	TITLE
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Finalized Draft Indian Standard

SI. No.	Doc No	TITLE
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Finalized Draft Indian Standards under Print

SI. No.	Doc No	TITLE
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Total Published Standards: 11

Total Standards Under development: 1

WRD 9: DAMS AND SPILLWAYS

SCOPE: *Standardization of criteria for planning, design, construction, maintenance and related aspects of various types of dams and spillways.*

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	SP 55 : 1993	Design aid for anchorages for spillway piers training walls and divide walls	Mar-2020	-	INDG
2.	IS 4410 (Part 8) : 1992	Glossary of terms relating to river valley projects Part 8 dams and dam Section (<i>First Revision</i>)	Jan-2020	-	INDG
3.	IS 4410 (Part 9) : 1982	Glossary of terms relating to river valley projects Part 9 Spillways and Siphons (<i>First Revision</i>)	Mar-2021	-	INDG
4.	IS 4410 (Part 18) : 1983	Glossary of terms relating to river valley projects Part 18 energy dissipation devices stilling basins	Mar-2021	-	INDG
5.	IS 4997 : 1968	Criteria for design of hydraulic Jump type stilling basins with horizontal and sloping apron	Mar-2020	1	INDG
6.	IS 5186 : 1994	Design of chute and side channel spillways — Criteria (<i>First Revision</i>)	Feb-2020	1	INDG
7.	IS 6512 : 2019	Criteria for design of solid gravity dams (<i>Second Revision</i>)	Jan-2020	-	INDG
8.	IS 6934 : 2024	Hydraulic design of high ogee overflow and orifice spillways — Recommendations (<i>Second Revision</i>)	Jan-2020	-	INDG
9.	IS 7365 : 2010	Criteria for hydraulic design of bucket type energy dissipaters (<i>Second Revision</i>)	Feb-2020	-	INDG
10.	IS 7894 : 1975	Code of Practice for stability analysis of earth dams	Jan-2020	1	INDG
11.	IS 8605 : 1977	Code of Practice for construction of masonry in dams	Mar-2019	1	INDG
12.	IS 8826 : 1978	Guidelines for design of large earth and	Jan-2020	1	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
		rockfill dams			
13.	IS 9296 : 2001	Inspection and maintenance of dams and appurtenant Structures — Guidelines (<i>First Revision</i>)	Oct- 2023	-	INDG
14.	IS 9297 : 1979	Recommendations for lighting Ventilation and other facilities inside dams	Oct- 2023	2	INDG
15.	IS 9429 : 1999	Drainage system for earth and rockfill dams — Code of Practice (<i>First Revision</i>)	Jan- 2020	-	INDG
16.	IS 10135 : 1985	Code of Practice for drainage system for gravity dams their foundations and abutments (<i>First Revision</i>)	Mar-2020	-	INDG
17.	IS 10137 : 2015	Guidelines for selection of spillways and energy dissipators (<i>First Revision</i>)	Mar- 2020	-	INDG
18.	IS 10635 : 2014	Freeboard requirement in dams - Guidelines (<i>Second Revision</i>)	Feb-2020	-	INDG
19.	IS 11155 : 2019	Construction of spillways and similar overflow structures — Code of Practice (<i>Second Revision</i>)	-	-	INDG
20.	IS 11216 : 1985	Code of Practice for permeability test for masonry during and after Construction	Oct- 2023	-	INDG
21.	IS 11223 : 1985	Guidelines for fixing spillway capacity	Mar- 2020	2	INDG
22.	IS 11485 : 2014	Criteria for Design of sluices in concrete and masonry dams (<i>First Revision</i>)	Feb- 2020	-	INDG
23.	IS 11527 : 2013	Structural Design of energy dissipators for spillways — Criteria (<i>First Revision</i>)	Mar- 2020	-	INDG
24.	IS 11772 : 2009	Design of drainage arrangements of energy dissipators and training walls of spillways — Guidelines (<i>First Revision</i>)	Oct- 2023	-	INDG
25.	IS 12169 : 1987	Criteria for design of small embankment dams	Jan- 2020	1	INDG
26.	IS 12200 : 2001	Provision of water — Stops at transverse contraction joints in masonry and concrete dams — Code of Practice (<i>First Revision</i>)	Oct- 2023	-	INDG
27.	IS 12720 : 2004	Criteria for structural design of spillway training walls and divide walls (<i>Second Revision</i>)	Mar- 2020	-	INDG

28.	IS 12731 : 1989	Hydraulic design of impact type energy dissipators — Recommendations	Mar- 2020	-	INDG
29.	IS 12804 : 1989	Criteria for estimation of aeration demand for spillway and outlet structures	Mar- 2020	-	INDG
30.	IS 12966 (Part 1) : 1992	Code of Practice for galleries and other openings in dams Part 1 General Requirements	Jan- 2020	-	INDG
31.	IS 12966 (Part 2) : 1990	Code of Practice for galleries and other openings in dams Part 2 Structural Design	Oct- 2023	-	INDG
32.	IS 13048 : 1991	Recommendations for hydraulic design of duck bill spillways	Mar- 2020	-	INDG
33.	IS 13144 : 1991	Recommendations for provision of facilities outside the dams	Oct- 2023	-	INDG
34.	IS 13195 : 1991	Preliminary design operation and maintenance of protection works downstream of spillways — Guidelines	Mar- 2020	-	INDG
35.	IS 13551 : 1992	Structural design of spillway pier and crest — Criteria	Oct- 2023	-	INDG
36.	IS 13645 : 1993	Guniting the upstream face of masonry dams — Guidelines	Oct- 2023	1	INDG
37.	IS 14591 : 1999	Temperature control of mass concrete for dams — Guidelines	Mar- 2020	-	INDG
38.	IS 14690 : 1999	Quality control during construction of earth and rockfill dams — Recommendations	Mar- 2020	-	INDG
39.	IS 14954 : 2001	Distress and remedial measures in earth and rockfill dams — Guidelines	Mar-2021	-	INDG
40.	IS 15058 : 2002	PVC water - Stops at transverse contraction joints for use in masonry and concrete dams — Specification	Oct- 2023	1	INDG
41.	IS 17837 : 2022	Junction of Earth/ Earth Core Rockfill Dam with Spillways, Non-Overflow (NOF) Dams Foundations and Outlets Guidelines	-	-	INDG

STANDARDS UNDER DEVELOPMENT

PROJECTS APPROVED

SI. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

SI. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

SI. No.	Doc No	TITLE
1	WRD 9 (24572) Revision of IS 9297 : 1979	Recommendations for lighting ventilation and other facilities inside dams

DRAFT STANDARDS COMPLETED WC STAGE

SI. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARD

SI. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

SI. No.	Doc No	TITLE
1	WRD 9 (15646) Revision of IS 4997 : 1968	Criteria for design of hydraulic jump type stilling basins with horizontal and sloping apron (<i>First Revision</i>)
2.	WRD 9 (15557) Revision of IS 12804 : 1989	Hydraulic design of spillway aerators — Guidelines
3.	WRD 9 (15743)	Planning and structural design of concrete face rockfill dam — Guidelines
4.	WRD 9 (17616) Revision of IS 6934 : 2014	Hydraulic design of ogee overflow and orifice spillways — Recommendations (<i>Third Revision</i>)
5.	WRD 9 (19599) Revision of IS 12966 : 1990	Galleries and other openings in dams — Code of practice Part 2 Structural design

Total Published Standards: 41

Total Standards Under development: 6

WRD 10: RESERVOIRS AND LAKES

SCOPE: *Standardization of criteria for planning, design, operation, maintenance and other related aspects of reservoirs/lakes.*

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 4410 (Part 6) : 2022	Glossary of terms relating to river valley projects Part 6 Reservoirs (<i>First Revision</i>)	-	-	INDG
2.	IS 5477 (Part 1) : 1999	Fixing the capacities of reservoirs methods Part 1 general requirements (<i>First Revision</i>)	Oct-2019	-	INDG
3.	IS 5477 (Part 2) : 2020	Methods for fixing the capacities of reservoirs Part 2 dead storage (<i>Second Revision</i>)	-	-	INDG
4.	IS 5477 (Part 3) : 2002	Fixing the capacities of reservoirs — methods Part 3 live storage (<i>First Revision</i>)	Apr- 2022	-	INDG
5.	IS 5477 (Part 4) : 2019	Methods for fixing the capacities of reservoirs Part 4 surcharge storage (<i>First Revision</i>)	Mar- 2024	-	INDG
6.	IS 6518 : 2017	Guidelines for control of sediment in reservoirs (<i>Second Revision</i>)	Apr- 2022	-	INDG
7.	IS 6939 : 1992	Methods for determination of evaporation from reservoirs (<i>First Revision</i>)	Feb- 2022	-	INDG
8.	IS 7323 : 1994	Operation of reservoirs — Guidelines (<i>First Revision</i>)	Jan- 2023	1	INDG
9.	IS 8237 : 1985	Code of Practice for protection of slope for reservoir embankment (<i>First Revision</i>)	Apr- 2022	-	INDG
10.	IS 12182 : 1987	Guidelines for determination of effects of sedimentation in planning and performance of reservoirs	April- 2022	-	INDG
11.	IS 13665 : 2017 ISO 6421 : 2012	Hydrometry — Methods for assessment of reservoir sedimentation (<i>First Revision</i>)	Aug- 2022	-	IDTD
12.	IS 14654 : 1999	Minimizing evaporation losses from reservoirs — Guidelines	Oct- 2019	-	INDG

Sl. No	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
13.	IS 15472 : 2004	Guidelines for planning and design of low level outlets for evacuating storage reservoirs	Oct- 2019	-	INDG
14.	IS 15840 : 2009	Determination of volume of water and water level in lakes and reservoirs	Jan- 2023	-	Not Equivalent
15.	IS 19027 : 2023	Measurement and control of Sediments in Natural Lakes — Guidelines	-		INDG

STANDARDS UNDER DEVELOPMENT

PROJECTS APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc No	TITLE
1	WRD 10 (21163) Revision of IS 7323 : 1994	Operation of reservoirs - Guidelines
2	WRD 10(23313) Revision of IS 8237 : 1985	Protection of slope for reservoir embankment code of practice (<i>Second Revision</i>)

FINALIZED DRAFT INDIAN STANDARD

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

Sl. No.	Doc No	TITLE
1.	WRD 10 (18947) Revision of IS 14654 : 1999	Minimizing evaporation losses from reservoirs — Guidelines

Total Published Standards: 15
Total Standards Under development: 3

WRD 12: HYDRAULIC GATES AND VALVES

SCOPE: Standardization of criteria for selection, design, construction, maintenance, operation and testing of gates and valves.

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 4410 (Part 16/Sec 1) : 1999	Glossary of terms relating to river valley projects (Part 16) gates and valves Section 1 Gates and terms related with gates (<i>First Revision</i>)	Mar- 2023	-	INDG
2.	IS 4410 (Part 16/Sec 2) : 1981	Glossary of terms relating to river valley projects (Part 16) Gates and valves Section 2 Valves	Feb- 2020	-	INDG
3.	IS 4410 (Part 23) : 1999	Glossary of terms relating to river valley projects (Part 23) hoists, cranes and other related terms	Mar- 2023	-	INDG
4.	IS 4622 : 2020	Recommendations for structural design of Fixed-Wheel Gates (<i>Fourth Revision</i>)	Dec- 2020	-	INDG
5.	IS 4623 : 2000	Recommendations for structural design of radial gates (<i>Third Revision</i>)	Mar- 2024	-	INDG
6.	IS 5620 : 2020	Recommendations for structural design criteria for low head slide gates (<i>Third Revision</i>)	Feb- 2020	-	INDG
7.	IS 6938 : 2005	Design of rope drum and chain hoists for hydraulic gates — Code of Practice (<i>Second Revision</i>)	Feb- 2020	2	INDG
8.	IS 7326 (Part 1) : 1992	Penstock and turbine inlet butterfly valves for hydropower stations and systems (Part 1) criteria for structural and hydraulic design (<i>First Revision</i>)	Mar 2023	-	INDG
9.	IS 7326 (Part 2) : 1992	Penstock and turbine inlet butterfly valves for hydro — Power Stations and systems (Part 2) Guidelines for design and selection of control equipment (<i>First Revision</i>)	Mar- 2023	-	INDG
10.	IS 7326 (Part 3) : 1976	Penstock and turbine inlet butterfly	Mar- 2023	-	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
		valves for hydropower Stations and systems Part 3 Recommendations for operations and maintenance			
11.	IS 7332 (Part 1) : 1991	Spherical valves for hydropower Stations and systems Part 1 Criteria for structural and hydraulic design (<i>First Revision</i>)	Mar- 2023	1	INDG
12.	IS 7332 (Part 2) : 1993	Spherical valves for hydropower Stations and systems Part 2 Selection of control equipment (<i>First Revision</i>)	Mar- 2023	-	INDG
13.	IS 7332 (Part 3) : 1994	Spherical valves for hydropower Stations and systems Part 3 Recommendations for operation and maintenance of spherical valves (<i>First Revision</i>)	Mar- 2023	-	INDG
14.	IS 7718 : 2018	Recommendations for inspection testing and maintenance of fixed wheel and slide gate (<i>Second Revision</i>)	Jan-2023	-	INDG
15.	IS 9349 : 2006	Recommendations for structural design of medium and high head slide gates (<i>Second Revision</i>)	Mar 2020	-	INDG
16.	IS 10021 : 2000	Guidelines for de - Icing system for hydraulic installations (<i>First Revision</i>)	Mar- 2023	-	INDG
17.	IS 10096 (Part 1/Sec 1) : 1983	Recommendations for inspection testing and maintenance of radial gates and their hoists (Part 1) Inspection testing and assembly at the manufacturing stage Section 1 Gates	Feb-2020	-	INDG
18.	IS 10096 (Part 1/Sec 2) : 2014	Recommendations for inspection testing and maintenance of radial gates and rope drum hoists (Part 1) inspection testing and assembly at the manufacturing stage Section 2 rope drum hoists (<i>First Revision</i>)	June- 2019	-	INDG
19.	IS 10096 (Part 2) : 1983	Recommendations for inspection testing and maintenance of radial gates and their hoists (Part 2) inspection testing and assembly at the time of Erection	Feb-2020	2	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
20.	IS 10096 (Part 3) : 2002	Recommendations for inspection testing and maintenance of radial gates and rope drum hoists Part 3 after erection (<i>Second Revision</i>)	Mar- 2023	1	INDG
21.	IS 10210 : 1993	Criteria for design of hydraulic hoistsfor gates (<i>First Revision</i>)	Mar- 2023	1	INDG
22.	IS 11228 : 2023	Recommendations for design of screw hoists for hydraulic gates	-	-	INDG
23.	IS 11793 : 1986	Guidelines for design of float driven hoisting mechanism for automatic gated control	Mar- 2020	-	INDG
24.	IS 11855 : 2017	Design and use of rubber seals for hydraulic gates — Recommendations (<i>Second Revision</i>)	July- 2022	-	INDG
25.	IS 13041 : 2013	Recommendations for inspection testing and maintenance of hydraulic hoist After Erection (<i>First Revision</i>)	Mar- 2023	-	INDG
26.	IS 13591 : 2019	Criteria for design of lifting beams (<i>First Revision</i>)	-	-	INDG
27.	IS 13623 : 1993	Criteria for choice of Gates and hoists	Mar- 2023	1	INDG
28.	IS 14177 : 2023	Guidelines for Painting system for hydraulic gates and hoists	-	-	INDG

STANDARDS UNDER DEVELOPMENT

PROJECTS APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

SI. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

SI. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARD

SI. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

SI. No.	Doc No	TITLE
1.	WRD 12 (18770) Revision of: IS 9349:2006	Recommendations for structural design of medium and high head slide gates (<i>Third Revision</i>)
2.	RD 12 (18778) Revision of: IS 4623:2000	Recommendations for structural design of radial gates (<i>Fourth Revision</i>)

Total Published Standards:28

Total Standards Under development: 2

WRD 13: CANALS AND CROSS DRAINAGE WORKS

SCOPE: *Standardization of criteria for planning, location, design, construction, inspection, maintenance and other related aspects for canals and cross drainage works.*

Liaison:

STANDARDS PUBLISHED

Sl. No	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 3872 : 2002	Lining of canals with burnt clay tiles — Code of Practice (<i>First Revision</i>)	Aug-2022	1	INDG
2.	IS 3873 : 1993	Laying cement concrete stone slab lining on canals — Code of Practice (<i>Second Revision</i>)	Sep-2019	1	INDG
3.	IS 4410 (Part 5) : 2023	Glossary of terms relating to river valley projects Part 5 Canals (<i>First Revision</i>)	-	-	INDG
4.	IS 4410 (Part 15/Sec 1) : 2023	Glossary of terms relating to river valley projects Part 15 Canal structures Section 1 General Terms	-	-	INDG
5.	IS 4410 (Part 15/Sec 2) : 2023	Glossary of terms relating to river valley projects Part 15 Canal Structures Section 2 Transitions	-	-	INDG
6.	IS 4410 (Part 15/Sec 3) : 1977	Glossary of terms relating to river valley projects Part 15 Canal Structures: Section 3 flume	Mar- 2020	-	INDG
7.	IS 4410 (Part 15/Sec 4) : 1977	Glossary of terms relating to river valley projects Part 15 Canal structures Section 4 Regulating works	Mar- 2020	-	INDG
8.	IS 4410 (Part 15/Sec 5) : 2023	Glossary of terms relating to river valley projects Part 15 Canal structures Section 5 Cross - Drainage works (<i>First Revision</i>)	-	-	INDG
9.	IS 4515 : 2002	Stone pitched lining for canals — Code of Practice (<i>Second Revision</i>)	Aug- 2022	-	INDG
10.	IS 4558 : 1995	Under — Drainage of lined canals — Code of Practice (<i>Second Revision</i>)	Feb- 2021	1	INDG
11.	IS 4701 : 1982	Code of practice for earthwork on canals (<i>First Revision</i>)	Sep- 2019	-	INDG

Sl. No	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
12.	IS 4839 (Part 1) : 1992	Maintenance of canals code of practice Part 1 unlined canals (<i>Second Revision</i>)	Aug- 2022	1	INDG
13.	IS 4839 (Part 2) : 1992	Maintenance of canals — Code of Practice Part 2 Lined canals (<i>Second Revision</i>)	Feb- 2021	1	INDG
14.	IS 4839 (Part 3) : 1992	Code of practice for maintenance of canals Part 3 Canal structures drains outlets jungle clearance, plantation and regulation (<i>Second Revision</i>)	Aug- 2022	1	INDG
15.	IS 5256 : 1992	Sealing expansion joints in concrete lining of canals — Code of Practice (<i>First Revision</i>)	Aug- 2022	-	INDG
16.	IS 5690 : 1982	Guide for laying combination lining for existing unlined canals (<i>First Revision</i>)	Sep- 2019	1	INDG
17.	IS 5968 : 1987	Guide for planning and layout of canal system for Irrigation (<i>First Revision</i>)	Aug-2022	-	INDG
18.	IS 6004 : 1980	Criteria for hydraulic design of sediment ejector for irrigation and power channels (<i>First Revision</i>)	Sep- 2019	-	INDG
19.	IS 6522 : 1972	Criteria for design of silt vanes for sediment control in off taking canals	Sep- 2019	-	INDG
20.	IS 6531 : 2021	Canal head regulators criteria for design (<i>Second Revision</i>)	-	-	INDG
21.	IS 6936 : 1992	Guide for location selection and hydraulic design of canal escapes (<i>First Revision</i>)	Aug- 2022	-	INDG
22.	IS 7112 : 2002	Criteria for design of cross-section for unlined canals in alluvial soil (<i>First Revision</i>)	Aug- 2022	-	INDG
23.	IS 7113 : 2003	Soil Cement lining for canals — Code of practice (<i>First Revision</i>)	Aug- 2022	1	INDG
24.	IS 7114 : 1973	Criteria for hydraulic design of cross regulators for canals	Sep- 2019	-	INDG

Sl. No	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
25.	IS 7331 : 1981	Code of practice for inspection and maintenance of cross drainage works (<i>First Revision</i>)	Aug- 2022	-	INDG
26.	IS 7495 : 1974	Criteria for hydraulic design of silt selective head regulator for sediment control in off taking canals	Aug- 2019	-	INDG
27.	IS 7784 (Part 1) : 2013	Design of cross drainage works — Code of Practice Part 1 general features (<i>Second Revision</i>)	Sep- 2019	-	INDG
28.	IS 7784 (Part 2 Sec 1) : 1995	Design of cross drainage works codeof practice Part 2 Specific requirements Sec 1 Aqueducts (<i>First Revision</i>)	Feb- 2020	-	INDG
29.	IS 7784 (Part 2 Sec 2) : 2000	Code of practice for design of cross drainage works Part 2 specific requirements Section 2 Super passages (<i>First Revision</i>)	Sep- 2019	1	INDG
30.	IS 7784 (Part 2 Sec 3) : 1996	Code of practice for design of cross drainage works Part 2 specific requirements Section 3 Canal syphons (<i>First Revision</i>)	Feb- 2021	-	INDG
31.	IS 7784 (Part 2 Sec 4) : 1999	Design of cross drainage works — Code of practice Part 2 specific requirements Section 4 Level crossings (<i>First Revision</i>)	Aug- 2019	-	INDG
32.	IS 7784 (Part 2 Sec 5) : 2000	Code of practice for design of cross drainage works part 2 Specific requirements Section 5 Syphon aqueducts (<i>First Revision</i>)	Sep- 2019	1	INDG
33.	IS 7871 : 1975	Criteria for hydraulic design of groyne walls Curved Wing for sediment distribution at offtakepoints in a canal	Mar- 2019	-	INDG
34.	IS 7873 : 1975	Code of practice for lime concrete lining for canals	Mar- 2019	1	INDG
35.	IS 7880 : 1975	Criteria for hydraulic design of skimming platform for sediment control in offtaking canal	Sep- 2019	-	INDG

Sl. No	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
36.	IS 7986 : 1976	Code of Practice for canal outlets	Sep- 2019	1	INDG
37.	IS 8835 : 1978	Guidelines for planning and design of surface drains	Sep- 2019	-	INDG
38.	IS 9097 : 1979	Guide for laying lining of canals with hot bitumen or bituminous felts	Mar- 2019	-	INDG
39.	IS 9447 : 2023	Guidelines for assessment of seepage losses from canals by analytical method	-	-	INDG
40.	IS 9451 : 2022	Guidelines for lining of canals in expansive soils (<i>Second Revision</i>)	April- 2022	3	INDG
41.	IS 9452 (Part 1) : 1993	Measurement of seepage losses from canals — Code of Practice Part 1 Ponding method (<i>First Revision</i>)	Mar- 2019	-	INDG
42.	IS 9452 (Part 2) : 1980	Code of Practice for measurement of seepage losses from canals Part 2 Inflow - Outflow method	Mar- 2019	-	INDG
43.	IS 9452 (Part 3) : 1988	Code of Practice for measurement of seepage losses from canals Part 3 seepage meter method	Mar- 2019	-	INDG
44.	IS 9698 : 1995	Lining of canals with polyethylene film — Code of Practice (<i>First Revision</i>)	Feb- 2020	1	INDG
45.	IS 9913 : 2000	Code of Practice for construction of cross drainage works (<i>First Revision</i>)	Sep- 2019	1	INDG
46.	IS 10430 : 2000	Criteria for design of lined canals and guidance for selection of type of lining (<i>First Revision</i>)	Sep- 2019	1	INDG
47.	IS 10646 : 1991	Canal linings – Cement concrete tiles — Specification (<i>First Revision</i>)	Sep- 2019	3	INDG
48.	IS 11570 : 1985	Criteria for hydraulic design of irrigation intake structures	Mar- 2019	1	INDG
49.	IS 11809 : 1994	Lining for canals by stone masonry — Code of Practice (<i>First Revision</i>)	Sep- 2019	2	INDG
50.	IS 12331 : 1988	General requirements for canal outlets	Aug- 2022	1	INDG
51.	IS 12379 : 1988	Code of Practice for lining of water —	Aug- 2022	2	INDG

Sl. No	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
		Courses and field channels			
52.	IS 13143 : 1991	Joints in concrete lining of canals Sealing compound — Specification	Mar- 2019	-	INDG
53.	IS 16238 : 2017	Planning of parallel canals — Guidelines	Apr- 2022	-	INDG
54.	IS 16472 : 2016	Design and construction of water courses — Guidelines	Feb- 2021	-	INDG

STANDARDS UNDER DEVELOPMENT

PROJECTS APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE
1.	WRD 13 (24522) Revision of IS 3873 : 1993	Laying Cement Concrete Stone slab lining on Canals-Code of Practice
2.	WRD 13 (24526) Revision of IS 4558 : 1995	Under Drainage of Lined Canals — Code of Practice
3.	WRD 13 (24576) Revision of IS 4701 1982	Code of practice for earthwork on canals

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc No	TITLE

Finalized Draft Indian Standard

Sl. No.	Doc No	TITLE

Finalized Draft Indian Standards under Print

Sl. No.	Doc No	TITLE

List of Indian Standards Withdrawn/Superseded

Sl. No.	IS No.	Title
1.	IS 3860 : 1966	Precast cement concrete slabs for canal lining
2.	IS 4745 : 1968	Code of Practice for design of Cross-section of lined canals
3.	IS 4969 : 1968	Method of test for determining flexural strength of precast Cement concrete slabs for canal lining
4.	IS 5331 : 1969	Guide for selection of type of lining for canals

Indian Product Standards

Sl. No.	IS No. & Year	Title
1.	IS 10646 : 1991	Canal linings — Cement concrete tiles — Specification (First Revision)
2.	IS 13143 : 1991	Joints in concrete lining of canals sealing compound — Specification

Total Published Standards:54

Total Standards Under development: 9

WRD 14 : WATER CONDUCTOR SYSTEMS

SCOPE: Standardization of criteria for planning, design, construction, maintenance and related aspects of all components of water conductor systems.

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 4410 (Part 20) : 1983	Glossary of terms relating to river valley projects Part 20 Tunnels	Mar- 2020	-	INDG
2.	IS 4880 (Part 1) : 1987	Code of Practice for design of tunnels conveying water Part 1 General design (<i>First Revision</i>)	Mar- 2023	1	INDG
3.	IS 4880 (Part 2) : 1976	Code of Practice for design of tunnels conveying water Part 2 Geometric Design (<i>First revision</i>)	Mar- 2020	-	INDG
4.	IS 4880 (Part 3) : 1976	Code of Practice for design of tunnels conveying water Part 3 Hydraulic design (<i>First Revision</i>)	Mar- 2020	-	INDG
5.	IS 4880 (Part 4) : 1971	Code of Practice for design in tunnels conveying water Part 4 Structural design of concrete lining in rock	Mar- 2020	2	INDG
6.	IS 4880 (Part 5) : 1972	Code of Practice for design of tunnels conveying water Part 5 Structural design of concrete lining in soft strata and soils	Feb- 2020	2	INDG
7.	IS 4880 (Part 6) : 1971	Code of Practice for design of tunnels conveying water Part 6 Tunnel supports	Feb- 2020	-	INDG
8.	IS 4880 (Part 7): 2014	Code of Practice for design of tunnels conveying water Part 7 Structural design of steel lining (<i>First Revision</i>)	Feb- 2020	-	INDG
9.	IS 5330 : 1984	Criteria for design of anchor blocks for penstocks with expansion joints (<i>First Revision</i>)	Feb- 2020	-	INDG
10.	IS 5878 (Part 1) : 1971	Code of Practice for construction of tunnels conveying water Part 1 Precision survey and setting out	Mar- 2023	2	INDG
11.	IS 5878 (Part 2/Sec 1) : 1970	Code of Practice for construction of tunnels Part 2 Underground excavation in	Feb- 2020	1	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
		rock Sec 1 Drilling and blasting			
12.	IS 5878 (Part 2/Sec 2) : 1971	Code of Practice for construction of tunnels Part 2 Underground excavation in rock Sec 2 Ventilation, lighting, mucking and dewatering	Feb- 2020	1	INDG
13.	IS 5878 (Part 2/Sec 3) : 1971	Code of Practice for construction of tunnels conveying water Part 2 Underground excavation in rock section 3 Tunnelling method for steeply inclined tunnels shafts and underground power houses	Mar- 2020	2	INDG
14.	IS 5878 (Part 3) : 1972	Code of Practice for construction of tunnels Part 3 Underground excavation in soft strata	Mar- 2020	1	INDG
15.	IS 5878 (Part 4) : 1971	Code of Practice for construction of tunnels conveying water Part 4 Tunnel supports	Mar- 2020	2	INDG
16.	IS 5878 (Part 5) : 1976	Code of Practice for construction of tunnels conveying water Part 5 Concrete lining (<i>First Revision</i>)	Feb- 2020	1	INDG
17.	IS 5878 (Part 6) : 1975	Code of Practice for construction of tunnels Part 6 Steel lining	Feb- 2020	1	INDG
18.	IS 5878 (Part 7) : 1972	Code of Practice for construction of tunnels conveying water Part 7 Grouting	Feb- 2020	2	INDG
19.	IS 7357 : 1974	Code of Practice for structural design of surge tanks	Feb- 2020	-	INDG
20.	IS 7396 (Part 1) : 1985	Criteria for hydraulic design of surge tanks Part 1 Simple restricted orifice and differential surge tanks (<i>First Revision</i>)	Feb- 2020	-	INDG
21.	IS 7396 (Part 2) : 1985	Criteria for hydraulic design of surge tanks Part 2 Tail race surge tanks First Revision	Feb- 2020	-	INDG
22.	IS 7396 (Part 3) : 1990	Criteria for hydraulic design of surge tanks Part 3 Special surge tanks	Feb- 2020	-	INDG
23.	IS 7396 (Part 4) : 1983	Criteria for hydraulic design of surge tanks Part 4 multiple surge tanks	Feb- 2020	-	INDG
24.	IS 7563 : 1986	Code of Practice for structural design of cut and cover concrete conduits (<i>First Revision</i>)	Feb-2020	1	INDG
25.	IS 7916 : 1992	Open power channels — Code of Practice (<i>First Revision</i>)	Mar- 2023	-	INDG
26.	IS 9761 : 1995	Hydropower intakes — Criteria for hydraulic design (<i>First Revision</i>)	Mar- 2020	-	INDG
27.	IS 11105 : 2004	Design and Construction of Tunnel Plugs — Code of Practice	Mar- 2020	-	INDG

28.	IS 11388 : 2012	Recommendations for design of trash racks for intakes (<i>Second Revision</i>)	Sep- 2022	-	INDG
29.	IS 11625 : 1986	Criteria for hydraulic design of penstocks	Mar- 2020	-	INDG
30.	IS 11639 (Part 1) : 1986	Criteria for structure design of penstocks Part 1 Surface Penstocks	Mar- 2020	1	INDG
31.	IS 11639 (Part 2) : 1995	Structural design of penstocks — Criteria Part 2 buried/embedded penstocks in rock	Feb- 2020	-	INDG
32.	IS 11639 (Part 3) : 1996	Structural design of penstock — Criteria Part3 Specials for penstocks	Mar- 2023	4	INDG
33.	IS 12633 : 1989	First filling and emptying of pressure tunnels — Guidelines	Mar- 2023	2	INDG
34.	IS 12967 (Part 1) : 1990	Analysis of hydraulic transients in hydro — Electric and pumping plants — Code of Practice Part 1 Criteria for analysis	Mar- 2020	-	INDG
35.	IS 13495 : 1992	Design of sediment excluders — Guidelines	Mar- 2023	-	INDG
36.	IS 15310 : 2003	Hydraulic design of pump sumps and intakes — Guidelines	Mar- 2023	-	INDG
37.	IS 16173 : 2014	Criteria for hydraulic design of sediment removal devices for hydro power projects (<i>First Revision</i>)	Feb- 2020	-	INDG

STANDARDS UNDER DEVELOPMENT

PROJECTS APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE
1	WRD 14 (19357)	Hydropower intakes criteria for hydraulic design (<i>Second Revision of IS 9761</i>)

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc No	TITLE
1.	WRD 14 (18185) Revision of IS 4880 : 1971	Code of Practice for design of tunnels conveying water part 4 structural design of concrete lining in rock

FINALIZED DRAFT INDIAN STANDARD

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

Sl. No.	Doc No	TITLE

Total Published Standards:37

Total Standards Under development: 2

WRD 15: HYDROELECTRIC POWER HOUSE STRUCTURES

SCOPE: *Standardization of criteria for location, design, construction and maintenance of powerhouse structures, including pumped storage.*

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 4247 (Part 1) : 1993	Structural design of surface hydroelectric Power Stations Part 1 Data for design — Code of practice (<i>Third Revision</i>)	Jan- 2023	1	INDG
2.	IS 4247 (Part 2) : 1992	Code of practice for structural design of surface Hydroelectric Power Station Part 2 Superstructure (<i>Second Revision</i>)	Jan- 2023	1	INDG
3.	IS 4247 (Part 3) : 1998	Code of practice for structural design of surface hydel Power Stations Part 3 Sub -Structure (<i>Second Revision</i>)	Jan- 2023	-	INDG
4.	IS 4410 (Part 10) : 1988	Glossary of terms relating to river valley projects Part 10 Hydroelectric Power Station including water conductor system (<i>First Revision</i>)	Jan- 2023	-	INDG
5.	IS 4461 : 1998	Code of practice for joints in surface Hydroelectric Power Stations (<i>Second Revision</i>)	Jan- 2023	-	INDG
6.	IS 4720 : 2020	Ventilation of Surface Hydel Power Stations — Code of Practice (<i>Second Revision</i>)	-	-	INDG
7.	IS 4721 : 2014	Code of Practice for drainage and dewatering of surface underground Hydroelectric Power Stations (<i>Second Revision</i>)	Aug- 2019	-	INDG
8.	IS 5496 : 1993	Guide for preliminary dimensioning and layout of elbow type draft tubes for surface Hydroelectric Power Stations (<i>First Revision</i>)	Feb- 2019	1	INDG
9.	IS 7207 : 1992	Criteria for design of generator foundation for Hydroelectric Power Stations (<i>First Revision</i>)	Mar- 2023	-	INDG
10.	IS 7418 : 1991	Criteria for design of spiral casing Concrete and Steel (<i>First Revision</i>)	Mar- 2023	-	INDG
11.	IS 9120 : 1979	Guidelines for planning layout and design of cavities in underground Hydroelectric Power Stations	Mar- 2023	-	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
12.	IS 10824 : 1984	Code of practice for amenities in hydroelectric power houses	Oct- 2021	-	INDG
13.	IS 12800 (Part 1) : 1993	Guidelines for selection of turbines preliminary dimensioning and layout of surface hydroelectric powerhouses Part 1 Medium and large power houses	Jan- 2023	-	INDG
14.	IS 12800 (Part 2) : 1989	Guidelines for Selection of Turbines, preliminary dimensioning and layout of surface hydroelectric power house Part 2 Pumped storage power houses	Oct- 2021	2	INDG
15.	IS 12800 (Part 3) : 1991	Guidelines for selection of hydraulic turbine preliminary dimensioning and layout of surfaceHydroelectric power houses Part 3 small, mini and micro hydroelectric power houses	Jan- 2023	-	INDG
16.	IS 12837 : 1989	Hydraulic turbines for medium and large power houses — Guidelines for selection	Jan-2023	-	INDG

STANDARDS UNDER DEVELOPMENT

PROJECTS APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc No	TITLE
1.	WRD 15 (21609) Revision of IS 9120 : 1979	Guidelines for planning layout and design of cavities in underground hydroelectric power stations

FINALIZED DRAFT INDIAN STANDARD

SI. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

SI. No.	Doc No	TITLE

Total Published Standards: 16

Total Standards Under development : 1

WRD 16: HYDRAULIC STRUCTURES INSTRUMENTATION

SCOPE: Standardization of criteria for selection, installation, usage and maintenance of instruments used for the measurement of displacement, strain, stress, temperature etc. in hydraulic structures.

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 6524 : 1972	Code of Practice for installation and observation of instruments for temperature measurements inside dams: Resistance type thermometers	Mar- 2023	1	INDG
2.	IS 6532 : 1972	Code of Practice for design, installation, observation and maintenance of uplift pressure pipes for hydraulic structures on permeable foundations	Mar- 2020	-	INDG
3.	IS 7356 (Part 1) : 2002	Code of Practice for installation, maintenance and observation of instruments for pore pressure measurements in earth dams and rockfill dams - Part 1 porous tube piezometers	April- 2021	1	INDG
4.	IS 7356 (Part 2) : 2003	Installation observation and maintenance of instruments for pore pressure measurements in earth and rockfill dams - Code of Practice Part 2 twin tube hydraulic piezometers (<i>Second Revision</i>)	Mar- 2023	-	INDG
5.	IS 7436 (Part 1) : 1993	Guide for types of measurements for structures in river valley projects and criteria for choice and location of measuring instruments Part 1 for earth and rockfill dams (<i>First Revision</i>)	Mar- 2023	-	INDG
6.	IS 7436 (Part 2) : 2019	Guide for types of measurements for structures in river valley projects and criteria for choice and location of measuring instrument Part 2 concrete and masonry dams (<i>Second Revision</i>)	-	1	INDG
7.	IS 7500 : 2000	Code of Practice for installation and observation of cross arms for measurement of internal vertical movement in earth dams (<i>First Revision</i>)	Mar- 2020	-	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
8.	IS 8226 : 2017	Installation and observation of base plate apparatus for measurement of foundation settlement in embankments — Code of practice (<i>First Revision</i>)	Dec- 2022	-	INDG
9.	IS 8282 (Part 1) : 1976	Code of Practice for installation maintenance and observations of pore pressure measuring devices in concrete and masonry dams Part 1 electrical resistance type cell	Mar- 2023	-	INDG
10.	IS 8282 (Part 2) : 1996	Installation maintenance and observations of pore pressure measuring devices in concrete and masonry dams — Code of Practice Part 2 vibrating wire type cell	Mar- 2020	-	INDG
11.	IS 10334 : 1982	Code of Practice for selection splicing installation and providing protection to the open ends of cables used for connecting resistance type measuring devices in concrete and masonry dams	Mar- 2020	-	INDG
12.	IS 10434 (Part 1) : 2003	Installation maintenance and observation of deformation measuring devices in concrete and masonry dams - Guidelines Part 1 Resistance type joint meters (<i>First Revision</i>)	Mar- 2023	-	INDG
13.	IS 10434 Part 2 : 1996	Guidelines for installation maintenance and observation of preformation measuring devices in concrete and masonry dams Part 2 vibrating wire type joint meter	Mar- 2020	1	INDG
14.	IS 12949 : 2013	Installation maintenance and observation of instruments for pore pressure measurements in earth and rockfill dams - Vibrating wire type electrical pore pressure cell - Code of practice (<i>First Revision</i>)	Mar- 2023	-	INDG
15.	IS 13073 (Part 1) : 2002	Installation maintenance and observation of displacement measuring devices in concrete and masonry dams - Code of practice Part 1 deflection measurement using plumb lines (<i>First Revision</i>)	Mar- 2023	-	INDG
16.	IS 13073 (Part 2) : 2000	Code of Practice for installation maintenance and observation of displacement measuring devices for concrete and masonry dams Part 2 Geodetic observation - Crest collimation	Mar- 2020	-	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
17.	IS 13232 : 1992	Installation maintenance and observations of electrical strain measuring devices in concrete dams — Code of Practice	Mar- 2023	-	INDG
18.	IS 14248 : 1995	Guidelines for instrumentation of barrages and weirs	Mar- 2020	-	INDG
19.	IS 14278 : 1995	Stress measuring devices in concrete and masonry dams — Installation commissioning and observations - Code of Practice	Mar- 2020	1	INDG
20.	IS 14750 : 2014	Code of Practice for installation maintenance and observation of seepage measuring devices for concrete/masonry and earth/rockfill dams (<i>First Revision</i>)	Mar- 2020	-	INDG
21.	IS 14793 : 2013	Installation maintenance and observation of the instruments for vibration studies other than earthquakes on hydraulic structures and machines — Code of practice (<i>First Revision</i>)	Mar- 2023	-	INDG
22.	IS 17158 : 2019	Guide for type of measurement choice of location and type of instruments for underground power house	-	-	INDG

STANDARDS UNDER DEVELOPMENT

PROJECTS APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS

Sl. No.	Doc No	TITLE

Total Published Standards:22

Total Standards Under development: 0

WRD 21: SAFETY IN CONSTRUCTION, OPERATION AND MAINTENANCE OF RIVER VALLEY PROJECTS

SCOPE: Standardization of safety aspects during various stages of construction, operation and maintenance of components and appurtenances of water resource projects.

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 4410 (Part 13) : 1985	Glossary of terms relating to river valley projects Part 13 Operation Maintenance and Repair of River Valley Projects	Feb- 2020	-	INDG
2.	IS 10386 (Part 1) : 2013	Safety code for construction operation and maintenance of river valley projects Part 1 General aspects (<i>First Revision</i>)	Jan-2023	-	INDG
3.	IS 10386 (Part 2) : 2013	Safety code for construction operation and maintenance of river valley projects Part 2 Amenities protective clothing and equipment (<i>First Revision</i>)	Jan-2023	-	INDG
4.	IS 10386 (Part 3) : 2014	Safety code for construction operation and maintenance of river valley projects Part 3 Plant and machinery (<i>First Revision</i>)	Apr- 2023	-	INDG
5.	IS 10386 (Part 4) : 2013	Safety code for construction operation and maintenance of river valley projects Part 4 Handling transportation and storage of explosives (<i>First Revision</i>)	Jan-2023	-	INDG
6.	IS 10386 (Part 5) : 2014	Safety code for construction operation and maintenance of river valley projects Part 5 Electrical aspects (<i>First Revision</i>)	Apr- 2023	-	INDG
7.	IS 10386 (Part 6) : 2024	Safety code for construction operation and maintenance of river valley projects Part 6 Construction	Feb- 2020	1	INDG
8.	IS 10386 (Part 7) : 2020	Construction Operation and Maintenance of River Valley Projects Safety Code Part 7 Fire Safety Aspects (<i>First Revision</i>)	-	-	INDG
9.	IS 10386 (Part 8) : 2024	Safety code for construction operation and maintenance of river valley projects Part 8 Open excavation	Feb- 2020	1	INDG
10.	IS 10386 (Part 9) : 1998	Safety code of operation and maintenance of river valley projects Part 9 Canals and cross	Jan-2023	1	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
		drainage works			
11.	IS 10386 (Part 10) : 1983	Safety code for construction operation and maintenance of river valley projects Part 10 Storage handling detection and safety measures for gases chemicals and flammableliquids	Feb- 2020	-	INDG
12.	IS 10386 (Part 11) : 2012	Safety Code for Construction Operation and Maintenance of River Valley Projects Part 11 Underground Excavation	Jul-2022	-	INDG

STANDARDS UNDER DEVELOPMENT

PROJECTS APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARD

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

Sl. No.	Doc No	TITLE
1	WRD 21 (12904) Revision of IS 10386 : 2012	Safety code for construction operation and maintenance of river valley projects Part 11 Underground excavation
2	WRD 21 (15620) Revision of IS 10386 : 1983	Safety code for construction operation and maintenance of river valley projects Part 6 construction
3	WRD 21 (16993) Revision of IS 10386 : 1995	Safety code for construction operation and maintenance of river valley projects Part 8 open excavation

INDIAN STANDARDS

Sl. No.	IS No.	TITLE

Total Published Standards:12

Total Standards Under development: 3

WRD 22: FLOOD MANAGEMENT, EROSION MANAGEMENT AND DIVERSION WORKS

SCOPE: *Standardization of criteria for planning, design, construction, operation, maintenance and other related aspects of river training works, barrages, weirs and diversion works.*

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 4410 (Part 3) : 1988	Glossary of terms relating to river valley projects Part 3 River and river training (<i>First Revision</i>)	Mar-2021	-	INDG
2.	IS 4410 (Part 12) : 1993	Glossary of terms relating to river valley projects Part 12 Diversion works (<i>First Revision</i>)	Mar-2021	-	INDG
3.	IS 4410 (Part 22) : 1994	Glossary of terms relating to river valley projects Part 22 Barrages and Weirs	Mar-2021	-	INDG
4.	IS 6966 (Part 1) : 1989	Hydraulic design of barrages and weirs — Guidelines Part 1 Alluvial reaches (<i>First Revision</i>)	Mar-2021	1	INDG
5.	IS 7349 : 2012	Barrages and weirs - Operation and maintenance — Guidelines (<i>Second Revision</i>)	Mar-2021	-	INDG
6.	IS 7720 : 1991	Criteria for investigation planning and layout for barrages and weirs (<i>First Revision</i>)	Mar-2021	-	INDG
7.	IS 8408 : 1994	Planning and design of groynes in alluvial river — Guidelines (<i>First Revision</i>)	Mar-2021	-	INDG
8.	IS 9461 : 1980	Guidelines for data required for design of temporary river diversion works	Mar-2021	1	INDG
9.	IS 9795 (Part 1) : 1981	Guidelines for the choice of the type of diversion works Part 1 Cofferdams	Mar-2021	1	INDG
10.	IS 10084 (Part 1) : 1982	Criteria for design of diversion works Part 1 Cofferdams	Mar-2021	-	INDG
11.	IS 10084 (Part 2) : 2014	Design of diversion works — Criteria Part 2 Diversion channel and open cut or Conduit in the body of dam (<i>First Revision</i>)	Dec-2023	-	INDG
12.	IS 10751 : 2022	Planning and design of guide banks for alluvial rivers — Guidelines (<i>First Revision</i>)	-	-	INDG
13.	IS 10788 (Part 1) : 1984	Code of practice for construction of	Mar-2021	-	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
		diversion works Part 1 Cellular coffer dams			
14.	IS 11130: 1984	Criteria for structural design of barrages and weirs	Mar-2021	1	INDG
15.	IS 11150 : 1993	Construction of concrete barrages — Code of practice (<i>First Revision</i>)	Mar-2021	1	INDG
16.	IS 11532 : 1995	Construction and maintenance of river embankments levees — Guidelines (<i>First Revision</i>)	Mar-2021	1	INDG
17.	IS 12094 : 2018	Planning and design of river embankments levees — Guidelines (<i>Second Revision</i>)	Mar-2023	-	INDG
18.	IS 12892 : 1989	Safety of barrage and weir structures — Guidelines	Mar-2021	1	INDG
19.	IS 12926 : 1995	Construction and maintenance of guide banks in alluvial rivers — Guidelines (<i>First Revision</i>)	Mar-2021	-	INDG
20.	IS 13877 : 1993	Planning and design of fish pass — Guidelines	Mar-2021	-	INDG
21.	IS 13912 : 1993	Closure of diversion channel and open cutor conduit in the body of the dam — Code of practice	Dec-2023	1	INDG
22.	IS 14262 : 1995	Planning and design of revetment — Guidelines	Mar-2021	-	INDG
23.	IS 14592 (Part 1) : 1998	Planning and design of barrage power houses — Guidelines Part 1 Investigation planning and layout	Dec-2023	-	INDG
24.	IS 14815 : 2000	Design flood for river diversion works — Guidelines	Mar - 2021	-	INDG
25.	IS 14955 : 2001	Guidelines for hydraulic model studies of barrages and weirs	Mar-2021	-	INDG

STANDARDS UNDER DEVELOPMENT

PROJECT APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc No	TITLE
1.	WRD 22 (22122) Revision of IS 14262 : 1995	Planning and design of revetment guidelines (First Revision)
2.	WRD 22 (22124) Revision of IS 12892 : 1989	Safety of barrage and weir structures guidelines (First Revision)
3.	WRD 22 (22125) Revision of IS 11532 : 1995	Construction and maintenance of river embankments levees guidelines (Second Revision)

FINALIZED DRAFT INDIAN STANDARDS

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

Sl. No.	Doc No	TITLE

Total Published Standards
Total Standards Under development: 3

WRD 23: MEASUREMENT AND COST ANALYSIS OF WORKS FOR RIVER VALLEYPROJECTS

SCOPE: *Standardization in the field of measurement and cost analysis of civil engineering works for water resource projects.*

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 4851 : 2024	Proforma for estimating unit rate of concrete used in mechanized construction of river valley projects (<i>Second Revision</i>)	-	-	INDG
2.	IS 4852 : 2024	Proforma for estimating unit rate of random rubble masonry used in construction of river valley projects (<i>Second Revision</i>)	-	-	INDG
3.	IS 4877 : 1968	Guide for preparation of estimate for river valley projects	Mar-2021	-	INDG
4.	IS 9401 (Part 1) : 1999	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 1 Excavation for foundation (<i>First Revision</i>)	Mar-2021	-	INDG
5.	IS 9401 (Part 2) : 2003	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 2 Dewatering (<i>First Revision</i>)	Dec-2022	-	INDG
6.	IS 9401 (Part 3) : 2003	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 3 Grouting (<i>Second Revision</i>)	Dec-2022	-	INDG
7.	IS 9401 (Part 4) : 2018	Method of measurement of works in river valley projects dams and appurtenant structures Part 4 Concrete work	Sep-2023	-	INDG
8.	IS 9401 (Part 5) : 2014	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 5 Masonry (<i>First Revision</i>)	May-2019	-	INDG
9.	IS 9401 (Part 6) : 2013	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 6 Ventilation pipes and	Dec-2022	-	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
		other embedded materials (<i>First Revision</i>)			
10.	IS 9401 (Part 7) : 2013	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 7 Joints (<i>First Revision</i>)	Dec-2022	-	INDG
11.	IS 9401 (Part 8) : 1985	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 8 Instrumentation	Feb-2020	1	INDG
12.	IS 9401 (Part 9) : 1987	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 9 Lining	Jul-2022	-	INDG
13.	IS 9401 (Part 10): 1990	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 10 Formwork	Jul-2022	-	INDG
14.	IS 9401 (Part 11) : 1998	Methods of measurement of work in river valley projects Dams and Appurtenant structures Part 11 Diaphragm walls (<i>First Revision</i>)	Jul-2022	-	INDG
15.	IS 9401 (Part 12) : 1992	Method of measurement of works in river valley projects Dams and Appurtenant Structures	Jul-2022	1	INDG
16.	IS 9401 (Part 13) : 1992	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 13 Earth and fill dams	Jul-2022	-	INDG
17.	IS 9401 (Part 14) : 1992	Method of measurement of works in river valley projects Dams and Appurtenant structures Part 14 Canal works	Jul-2022	-	INDG
18.	IS 9401 (Part 15) : 2010	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 15 Investigation works - Drilling of bore holes and exploratory drifting and logging	Feb-2020	-	INDG
19.	IS 9401 (Part 16) : 1999	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 16 Tunneling	Mar-2021	-	INDG
20.	IS 9401 (Part 17) : 1999	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 17 Hydro mechanical and related metal works	Mar-2021	-	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
21.	IS 9401 (Part 18) : 2000	Method of measurement of work in river valley projects Dams and Appurtenant Structures Part 18 sheet piling	Mar-2021	-	INDG
22.	IS 9401 (Part 19) : 2022	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 19 electro — Mechanical works (<i>First Revision</i>)	-	-	INDG
23.	IS 9401 (Part 20) : 2013	Method of measurement of works in river valley projects Dams and Appurtenant Structures Part 20 Protection works	Dec-2022	-	INDG
24.	IS 10061 : 2024	Proforma for analysis of unit rate of excavation of tunnels by cyclic drilling and blasting (<i>First Revision</i>)	-	-	INDG
25.	IS 10062 : 2024	Proforma for analysis of unit rate of quarrying rock by mechanical means (<i>First Revision</i>)	-	-	INDG
26.	IS 10160 : 2024	Proforma for analysis of unit rate of earthwork used in construction of river valley projects	-	-	INDG
27.	IS 10421 : 1983	Proforma for analysis of unit rate of shuttering formwork for concrete items	Mar-2021	-	INDG
28.	IS 10777 : 1994	Proforma for analysis of unit rate of rock excavation by mechanical means including blasting for open excavation (<i>First Revision</i>)	Mar-2021	-	INDG
29.	IS 11399 (Part 1) : 1985	Guidelines for estimating output norms of items of work in construction of river valley projects Part 1 Earthwork excavation	Mar-2021	2	INDG
30.	IS 11590 : 1995	Guidelines for working out unit rate cost of the construction equipment used for river valley projects (<i>First Revision</i>)	Mar-2021	-	INDG
31.	IS 11638 : 2000	Proforma for estimation of unit rate of construction of embankment by mechanical means (<i>First Revision</i>)	Mar-2021	-	INDG
32.	IS 13418 : 1992	Proforma for analysis of unit rate of grouting used in river valley projects	Jan-2023	-	INDG
33.	IS 13419 : 1992	Proforma for analysis of unit rate of	Jan-2023	-	INDG

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
		shotcreting guniting used in river valley projects			
34.	IS 14590 : 1998	Proforma for analysis of unit rate of dewatering	Jan-2023	-	INDG
35.	IS 14749 : 2000	Proforma for analysis of unit rate of underground excavation by cyclic drilling and blasting	Apr-2021	-	INDG
36.	IS 14835 : 2000	Guidelines for estimating unit rate of items of works in construction of rubble masonry for river valley projects	Apr-2021	-	INDG

STANDARDS UNDER DEVELOPMENT

PROJECTS APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE
1	WRD 23 (16770) Revision of IS 10777 : 1994	Proforma for analysis of unit rate of rock excavation by mechanical means including blasting for open excavation (Second Revision)
2	WRD 23 (16771) Revision of IS 11638 : 2000	Proforma for analysis of unit rate of construction of embankment by mechanical means (Second Revision)
3	WRD 23 (16772) Revision of: IS 13418:1992	Proforma for analysis of unit rate of grouting (First Revision)
4	WRD 23 (16773) Revision of IS 13419 : 1992	Proforma for analysis of unit rate of shotcreting guniting used in river valley projects (First Revision)
5	WRD 23 (16774) Revision of IS 14590 : 1998	Proforma for analysis of unit rate of dewatering (First Revision)
6	WRD 23 (16776) Revision of IS 14835 : 2000	Guidelines for estimating unit rate of items of works in construction of rubble masonry for river valley projects (First Revision)
7	WRD 23 (16777) Revision of IS 10421 : 1983	Proforma for analysis of unit rate of shuttering formwork for concrete items (First Revision)

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE
1	WRD 23 (16776) Revision of IS 14835 : 2000	Guidelines for estimating unit rate of items of works in construction of rubble masonry for river valley projects (First Revision)

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc No	TITLE
1	WRD 23 (16770) Revision of IS 10777 : 1994	Proforma for analysis of unit rate of rock excavation by mechanical means including blasting for open excavation (Second Revision)
2	WRD 23 (16771) Revision of IS 11638 : 2000	Proforma for analysis of unit rate of construction of embankment by mechanical means (Second revision)
3	WRD 23 (16772) Revision of IS 13418 : 1992	Proforma for analysis of unit rate of grouting (First Revision)
4	WRD 23 (16773) Revision of IS 13419 : 1992	Proforma for analysis of unit rate of shotcreting guniting used in river valley projects (First Revision)
5	WRD 23 (16774) Revision of IS 14590 : 1998	Proforma for analysis of unit rate of dewatering (First Revision)
6	WRD 23 (16777) Revision of IS 10421 : 1983	Proforma for analysis of unit rate of shuttering formwork for concrete items (First Revision)

FINALIZED DRAFT INDIAN STANDARD

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

Sl. No.	Doc No	TITLE
1	WRD 23 (16704)	Proforma for analysis of unit rate of excavation of tunnels by cyclic drilling and blasting (Second Revision of IS 10061)
2	WRD 23 (16705)	Proforma for analysis of unit rate of earthwork used in construction of river valley projects (First Revision of IS 10160)
3	WRD 23 (16708) Revision of: IS 10062:1991	Proforma for analysis of unit rate of quarrying rock by mechanical means (Second Revision)

Total Published Standards: 36
Total Standards Under development: 17

WRD 24: ENVIRONMENTAL ASSESSMENT AND MANAGEMENT OF WATER RESOURCES PROJECTS

SCOPE: *Standardization in the field of environmental assessment, evaluation and management relevant to water resources projects.*

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence
1.	IS 15442 : 2004	Parameters for environmental impact assessment of water resources projects	Feb-2020	1	INDG
2.	IS 15832 : 2022	Glossary of technical terms related to environmental impact	-	-	INDG
3.	IS 15845 : 2009	Environment management plan for hydropower/ irrigation /flood control/ multipurpose river valley projects	Apr-2019	-	INDG
4.	IS 17422 : 2021	Guidelines for assessment of the environmental health impacts of river valley projects	-	-	INDG

STANDARDS UNDER DEVELOPMENT

PROJECTS APPROVED

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc no	TITLE
1.	WRD 24 (23492)	Guidelines for Parameters and Assessment criteria for downstream flow to maintain Ecological Balance
2.	WRD 24 (23493)	Recommendations for remote sensing and geographical information system as relevant to environmental impact Assessment and environment management plan

DRAFTS STANDARDS IN WC STAGE

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc no	TITLE
1.	WRD 24 (10945)	Guidelines for the preparation of catchment area treatment plan
2.	WRD 24 (23488)	Guidelines for environmental impact assessment and environmental management plan EIA /EMP for river valley and hydro-electric projects

FINALIZED DRAFT INDIAN STANDARD

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

Sl. No.	Doc No	TITLE
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Total Published Standards:4
Total Standards Under development: 4

WRD 28 : COASTAL ZONE WATER MANAGEMENT

SCOPE: *Standards on planning, design, construction and management of coastal zone water resources. The scope covers the standardization on coastal pollution, coastal erosion, desalination, intake and outfalls, salt water intrusions, remote sensing, estuary hydraulics, back water, islands, coastal hazards, coastal structures and coastal aquifers.*

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence

STANDARDS UNDER DEVELOPMENT PROJECTS APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE
1.	WRD 28 (24783)	Glossary of terms related to coastal engineering

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARD

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

Sl. No.	Doc No	TITLE

Total Published Standards: 0

Total Standards Under development: 1

WRD 29 Small Hydropower Plants Sectional Committee

SCOPE: *Standardization in the field of site selection planning, design, construction and management for Small Hydropower plants.*

Liaison: ISO TC 339 - Small hydropower plants (SHP plants) – (P)

STANDARDS PUBLISHED

SI. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence

STANDARDS UNDER DEVELOPMENT PROJECTS APPROVED

SI. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

SI. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

SI. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

SI. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARD

SI. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARDS UNDER PRINT

SI. No.	Doc No	TITLE

WRD 30 Repair, Retrofitting and Rehabilitation of Dams Sectional Committee

SCOPE: *Standardization related to repair, retrofitting and rehabilitation of dams.*

Liaison:

STANDARDS PUBLISHED

Sl. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence

STANDARDS UNDER DEVELOPMENT PROJECTS APPROVED

Sl. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

Sl. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

Sl. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

Sl. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARD

Sl. No.	Doc No	TITLE

WRD 31 Urban Flooding Sectional Committee

SCOPE: *'Standardization related to mitigation and management of urban floods'*

Liaison:

STANDARDS PUBLISHED

SI. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence

STANDARDS UNDER DEVELOPMENT PROJECTS APPROVED

SI. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

SI. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

SI. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

SI. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARD

SI. No.	Doc No	TITLE

WRD 32 Glacial Lake Outburst Floods (GLOFs) and Landslide Lake Outburst Floods (LLOFs) Sectional Committee

SCOPE: *‘Standardization related to practices for glacier and landslide lake flood management, including nomenclature, mapping, volume estimation, hydrodynamic modeling, vulnerability assessment, early warning systems, and planning for flood mitigation.’*

Liaison:

STANDARDS PUBLISHED

SI. No.	IS No.	Title	Reaffirm	No. of Amds.	Degree of Equivalence

STANDARDS UNDER DEVELOPMENT PROJECTS APPROVED

SI. No.	Doc No	TITLE

PRELIMINARY DRAFT STANDARDS

SI. No.	Doc No	TITLE

DRAFTS STANDARDS IN WC STAGE

SI. No.	Doc No	TITLE

DRAFT STANDARDS COMPLETED WC STAGE

SI. No.	Doc No	TITLE

FINALIZED DRAFT INDIAN STANDARD

SI. No.	Doc No	TITLE

ANNEX-I

HARMONIZED STANDARDS

Sl. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Degree of Equivalence
1.	IS 1191 : 2016	Hydrometry — Vocabulary and symbols Third Revision	Mar- 2021	-	Not Equivalent
2.	IS 1192 : 2013 ISO 748 : 2007	Hydrometry Measurement of liquid flow in open channels using current — Meters or floats (<i>Second Revision</i>)	Jan-2018	-	IDTD
3.	IS 2912 : 1999 ISO 1070 : 2018	Liquid flow measurement in open channels — Slope — Area method (<i>First Revision</i>)	Jan - 2020	1	IDTD
4.	IS 3910 : 2013 ISO 2537 : 2007	Hydrometry Rotating - Element current — Meters (<i>Second Revision</i>)	Jan-2018	-	IDTD
5.	IS 3912 : 2013 ISO 3454 : 2008	Hydrometry - Direct depth sounding and suspension equipment (<i>Second Revision</i>)	Jan-2018	-	IDTD
6.	IS 3913 : 2014	Hydrometry — Functional requirements and characteristics of suspended — Sediment samplers (<i>Second Revision</i>)	Dec- 2018	-	Not Equivalent
7.	IS 3917 : 2003	Scoop type bed material samplers — Specification (<i>First Revision</i>)	Dec- 2018	-	Not Equivalent
8.	IS 4477 (Part 2) : 1975	Method of measurement of fluid flow by means of venturi meters Part 2 compressible fluids	Aug- 2020	-	Not Equivalent
9.	IS 6339 : 2013	Hydrometry — Sediment in streams and canals — Determination of concentration particle size distribution and relative density (<i>First Revision</i>)	Jan-2018	-	Not Equivalent
10.	IS 9108 : 2020 ISO 1438 : 2017	Hydrometry Open Channel Flow Measurement Using Thin—Plate Weirs (<i>Second Revision</i>)	Feb- 2022	-	IDTD
11.	IS 9116 : 2002	Water stage recorder Float Type — Specification (<i>First Revision</i>)	Sep- 2017	-	Not Equivalent
12.	IS 12752 : 2013 ISO 8368 : 2019	Hydrometric determinations - Flow measurements in open channels using structures — Guidelines for selection of structure (<i>First Revision</i>)	Jan-2018	-	IDTD
13.	IS 13083 : 2017	Hydrometric Determination - flow measurement in open channels using structures — flat—V weirs	April- 2017	-	Not Equivalent
14.	IS 13084 : 1991 ISO 4374 : 1990	Liquid flow measurement in open channels — Round — Nose horizontal broad — Crested weirs	Sep- 2017	-	IDTD
15.	IS 13371 : 2014 ISO 3455:2007	Hydrometry — Calibration of current — Meters in straight open tanks (<i>First Revision</i>)	Dec- 2018	-	IDTD
16.	IS 14359 : 2014 ISO 4366 : 2007	Hydrometry - Echo sounders for water depth measurements (<i>First Revision</i>)	Jan-2020	-	IDTD
17.	IS 14371 : 2016 ISO 9826 : 1992	Measurement of liquid flow in open channels — Parshall and Saniiiri flumes (<i>First Revision</i>)	Mar- 2021	-	IDTD

18.	IS 14573 : 2014 ISO 1088 : 2007	Hydrometry — Velocity — Area methods using current — Meters — Collection and processing of data for determination of uncertainties in flow measurement (First Revision)	Jan-2020	-	IDTD
19.	IS 14615 : Part 1 : 2018 ISO 5167-1 : 2003	Measurement of fluid flow by means of pressure differential devices inserted in circular cross — Section conduits running full Part 1 general principles and requirements First Revision	Mar 18	-	IDTD
20.	IS 14615 : Part 2 : 2018 ISO 5167 Part 2 : 2003	Measurement of fluid flow by means of pressure differential devices inserted in circular cross — Sectional conduits running full Part 2 orifice plates	Mar 18	-	IDTD
21.	IS 14615 Part 3 : 2018 ISO 5167-3 : 2003	Measurement of fluid flow by means of pressure differential devices inserted in circular cross Section conduits running full Part 3 nozzles and venturi nozzles	Mar 18	-	IDTD
22.	IS 14615 Part 4 : 2018 ISO 5167-Part 4 : 2003	Measurement of fluid flow by means of pressure differential devices inserted in circular cross Section conduits running full Part 4 venturi tubes	Mar 18	-	IDTD
23.	IS 14615 : Part 5 : 2019 ISO 5167-5 : 2016	Measurement of Fluid Flow by Means of Pressure Differential Devices Inserted in Circular Cross-Section Conduits Running Full Part 5 Cone Meters	June 2019		IDTD
24.	IS 14673 : 2014 ISO 4360 : 2020	Hydrometry — Open channel flow measurement using triangular profile weirs (<i>First Revision</i>)	Dec- 2020	-	IDTD
25.	IS 14869 : 2016 ISO 4359 : 2013	Flow measurement structures - Rectangular trapezoidal and u - Shaped flumes (<i>First Revision</i>)	Mar- 2021	1	IDTD
26.	IS 14973 : 2019 ISO 3966 : 2008	Measurement of fluid flow in closed conduits — Velocity area method using pitot static tube (<i>First Revision</i>)	Jun-2019	-	IDTD
27.	IS 14974 : 2018 ISO 3846 : 2008	Hydrometry — Open channel flow measurement using rectangular broad crested weirs (<i>First Revision</i>)	Sep- 2018	-	IDTD
28.	IS 14975 : 2001 ISO 9827 : 1994	Measurement of liquid flow in open channels — Streamlined triangular profile weirs	Mar- 2022	-	IDTD
29.	IS 15117 : 2018 ISO 4375 : 2014	Hydrometry — Cableway systems for stream gauging (<i>First Revision</i>)	Sep-2017	-	IDTD
30.	IS 15118 : 2014 ISO 4373 : 2008	Hydrometry — Water level measuring devices (<i>First Revision</i>)	Jan-2020	-	IDTD
31.	IS 15119 (Part 2) : 2014 ISO 1100-2 : 2010	Hydrometry — Measurement of liquid flow in open channels Part 2 determination of the stage — Discharge relationship (<i>First Revision</i>)	Dec- 2018	-	IDTD
32.	IS 15122 : 2014 ISO 2425 : 2010	Measurement of liquid flow in open channels under tidal conditions	Dec- 2018	-	IDTD
33.	IS 15123 : 2002 ISO 4362 : 1999	Hydrometric determinations - Flow measurement in open channels using structures — Trapezoidal broad — Crested weirs	Sep- 2017	-	IDTD

34.	IS 15124 : 2002 ISO 9195 : 1992	Liquid flow measurement in open channels — Sampling and analysis of gravel — Bed material	Sep- 2017	-	IDTD
35.	IS 15352 : 2018 ISO 6420 : 2016	Hydrometry — Position fixing equipment for hydrometric boats (<i>First Revision</i>)	Dec- 2018	-	IDTD
36.	IS 15353 : 2003 ISO 8333 : 1985	Liquid flow measurement in open channels byweirs and flumes — V — Shaped broad — Crestedweirs	Dec- 2018	-	IDTD
37.	IS 15358 : 2003 ISO 9196 : 1992	Liquid flow measurement in open channels — Flow measurements under ice conditions	Dec- 2018	-	IDTD
38.	IS 15359 : 2003 ISO 11329 : 2001	Hydrometric determinations — Measurement of suspended sediment transport in tidal channels	Dec- 2018	-	IDTD
39.	IS 15360 : 2003	Measurement of liquid flow in open channels — Bed material sampling	Dec- 2018	-	Not Equivalent
40.	IS 15362 : 2003 ISO 14139 : 2000	Hydrometric determinations — Flow measurements in open channels using structures — Compound gauging structures	Dec- 2018	-	IDTD
41.	IS 15454 : 2004	Liquid flow measurement in open channels — Velocity — Area method using a restricted number of verticals	Jan-2020	-	Not Equivalent
42.	IS 15527 : 2020 ISO/TR 9210 : 2017	Hydrometry — Measurement in Meandering River and in Streams with Unstable Boundaries (<i>First Revision</i>)	Jan-2020	-	IDTD
43.	IS 15646 : 2017 ISO 9824 : 2007	Hydrometry — Measurement of free surface flow in closed conduits (<i>First Revision</i>)	Dec- 2017	-	IDTD
44.	IS 15772 : 2014 ISO 9825 : 2005	Hydrometry — Field measurement of discharge in large rivers and rivers in flood (<i>First Revision</i>)	Dec- 2018	-	IDTD
45.	IS 15822 : 2008	Measurement of liquid flow in open channels — Equipment for the measurement of discharge under ice conditions	Sep- 2017	-	Not Equivalent
46.	IS 15823 : 2009	Hydrometry — Computing stream flow using an unsteady flow model	Dec- 2018	-	Not Equivalent
47.	IS 15847 : 2020 ISO 9123 : 2001	Hydrometry — Stage-fall-discharge Relationship (<i>First Revision</i>)	Dec-2020	-	IDTD
48.	IS 15873 : 2010	Hydrometric determination — Unstable channels and ephemeral streams	Jan-2020	-	Not Equivalent
49.	IS 15898 (Part 1) : 2012 ISO 9555-1 : 1994	Measurement of liquid flow in open channels — Tracer dilution methods for the measurement of steady flow Part 1 general	Mar- 2022	1	IDTD
50.	IS 15898 Part 3 : 2011 ISO 9555-3 : 1992	Measurement of liquid flow in open channels — Tracer dilution methods for the measurement of steady flow Part 3 chemical tracers	Mar- 2021	-	IDTD
51.	IS 15898 Part 4 : 2012 ISO 9555-4:1992	Measurement of liquid flow in open channels — Tracer dilution methods for the measurement of steady flow Part 4 fluorescent tracers	Mar- 2022	-	IDTD

52.	IS 16091 : 2013	Measurement of liquid flow in open channels — Method of specifying performance of hydrometric equipment	Dec- 2018	-	Not Equivalent
53.	IS 16138 : 2013 ISO/TS 15768 : 2000	Measurement of liquid velocity in open channels — Design selection and use of electromagnetic current meters	Dec- 2018	-	IDTD
54.	IS 16222 : 2018 ISO 9212 : 2015	Hydrometry — Methods of measurement of bedload discharge (<i>First Revision</i>)	Jun-2018	-	IDTD
55.	IS 16223 : 2014 ISO 15769 : 2010	Hydrometry — Guidelines for the application of acoustic velocity meters using the doppler and echo correlation methods	Dec-2018	-	IDTD
56.	IS 16274 : 2018 ISO 24155 : 2016	Hydrometry — Hydrometric data transmission systems — Specification of system requirements (<i>First Revision</i>)	Sep-2018	-	IDTD
57.	IS 16364 : 2017	Hydrometric uncertainty — Guidance HUG	Mar-2022	-	Not Equivalent
58.	IS 16571 : 2017 ISO 4369 : 1979	Measurement of liquid flow in open channels — Moving — Boat method	Dec-2017	-	IDTD
59.	IS 16696 : 2018 ISO 11657 : 2014	Hydrometry — Suspended sediment in streams and canals — Determination of concentration by surrogate techniques	Jan-2018	-	IDTD
60.	IS 16697 : 2018 ISO 13550 : 2002	Hydrometric determinations — Flow measurements in open channels using structures — Use of vertical underflow gates	Mar-2018	-	IDTD
61.	IS 16698 : 2019 ISO 18365 : 2013	Hydrometry — Selection, establishment and operation of a gauging station	Jan-2019	-	IDTD
62.	IS 16275 : 2014 ISO/TR 24578 : 2012	Hydrometry Acoustic Doppler Profiler Method and Application for Measurement of Flow in Open Channels	Sept-2019	-	IDTD
63.	IS 16804 : 2018 ISO 26906 : 2015	Hydrometry — Fish passes at flow measurement structures	Nov-2018	-	IDTD
64.	IS 16849 : 2018 ISO/TR 11651 : 2015	Estimation of sediment deposition in reservoir deposition using one dimensional simulation models	Nov-2018	-	IDTD
65.	IS 17271 : 2020 ISO 6416 : 2017	Hydrometry Measurement of Discharge by Ultrasonic Transit Time of Flight Method	Jan-2020	-	IDTD
66.	IS 17272 : 2021 ISO 19234 : 2016	Hydrometry — Low Cost Baffle Solution to Aid Fish Passage at Triangular Profile Weirs that Conform to ISO 4360	Jan-2021	-	IDTD
67.	IS 17273 : 2021 ISO 4006 : 1991	Measurement of Fluid Flow in Closed Conduits — Vocabulary and Symbols	Jan-2021	-	IDTD
68.	IS 17287 : 2021 ISO 4185 : 1980	Measurement of Fluid Flow in Closed Conduits — Weighing Method	Jan-2021	-	IDTD
69.	IS 17288 : 2021 ISO 5168 : 2005	Measurement of Fluid Flow — Procedures for Evaluation of Uncertainties	Jan-2021	-	IDTD

70.	IS 17289 : 2021 ISO 8316 : 1987	Measurement of Liquid Flow in Closed Conduits — Method by Collection of the Liquid in a Volumetric Tank	Jan-2021	-	IDTD
71.	IS 17290 Part 1 : 2021 ISO 9368 : 1990	Measurement of Liquid Flow in Closed Conduits by Weighing Method — Procedures for Checking Installations Part 1 Static Weighing Systems	Jan-2021	-	IDTD
72.	IS 17484 : 2020 ISO 18481 : 2017	Hydrometry — Liquid Flow Measurement Using End Depth Method in Channels with a Free Overall	Dec- 2020	-	IDTD
73.	IS 17485 : 2020 ISO 2975-1: 1974	Measurement of Water Flow in Closed Conduits — Tracer Method Part 1 General	Dec- 2020	-	IDTD
74.	IS 17485 Part 2 : 2021 ISO 2975 Part 2: 1975	Measurement of water flow in closed conduits — Tracer Method Part 2 Constant rate injection method using non-radioactive tracers	Mar- 2021	-	IDTD
75.	IS 17485 Part 3 : 2021 ISO 2975 -3 :1976	Measurement of water flow in closed conduits — Tracer Method Part 3 Constant rate injection method using radioactive tracers	Mar- 2021	-	IDTD
76.	IS 17485 Part 6 : 2021 ISO 2975-6: 1977	Measurement of water flow in closed conduits — Tracer Method Part 6 Transit time method using non-radioactive tracers	Mar- 2021	-	IDTD
77.	IS 17485 Part 7 : 2021 ISO 2975-7: 1977	Measurement of water flow in closed conduits — Tracer Method Part 7 Transit time method using radioactive tracers	Mar- 2021	-	IDTD
78.	IS 13969 (Part 11) : 2018 ISO 5667-11 : 2009	Water quality — Sampling Part 11 guidance on sampling of groundwaters (<i>First Revision</i>)	Sept- 2018	-	IDTD
79.	IS 15755 : 2007	Hydrometry — Geophysical logging of boreholes for hydrogeological purposes — Considerations and guidelines for making measurements	Jun-2017	-	Not Equivalent
80.	IS 15896 : 2011	Manual methods for measurement of ground water level in a well	Aug- 2020	-	Not Equivalent
81.	IS 16094 : 2018	Hydrometry — Measuring the water level in a well using automated pressure transducer methods — Guidelines	Dec- 2018	-	Not Equivalent
82.	IS 13665 : 2017 ISO 6421 : 2012	Hydrometry Equivalent Methods for assessment of reservoir sedimentation (<i>First Revision</i>)	Aug- 2017	-	IDTD
83.	IS 15840 : 2009	Determination of volume of water and water level in lakes and reservoirs	Jan-2018	-	Not Equivalent

ANNEX-II

LIST OF PRODUCTS SPECIFICATIONS

Sl. No.	IS No. & Year	TITLE
1.	IS 3917 : 2003 ISO 4364	Scoop type bed material samplers — Specification (<i>First Revision</i>)
2.	IS 4073 : 1967	Specification for fish weights
3.	IS 4477 (Part 2) : 1975	Method of measurement of fluid flow by means of venturi meters: Part ii compressible fluids
4.	IS 4858 : 1968	Specification for velocity rods
5.	IS 6064 : 1971	Specification for sounding and suspension equipment
6.	IS 9116 : 2002	Water stage recorder (Float Type) — Specification (<i>First Revision</i>)
7.	IS 10646 : 1991	Canal linings — Cement concrete tiles — Specification (<i>First Revision</i>)
8.	IS 11855 : 2017	Design and use of rubber seals for hydraulic gates — Recommendations (<i>Second Revision</i>)
9.	IS 12584 : 1989	Bentonite for grouting in civil engineering works — Specification
10.	IS 13143 : 1991	Joints in concrete lining of canals — Sealing compound - Specification
11.	IS 15058 : 2002	PVC water — Stops at transverse contraction joints for use in masonry and concrete dams — Specification

Total Product Standards = 11

ANNEX-III

LIST OF INDIAN STANDARDS WITHDRAWN/SUPERSEDED

Sl. No.	IS No.	Title
1.	IS 1193 : 1959	Methods for Measurements of Flow of Water in Open Channels Using Notches Weirs and Flumes
2.	IS 2913 : 1964	Recommendation for determination of flow in tidal channels
3.	IS 2914 : 1964	Recommendations for Estimation of Discharges by Establishing Stage-discharge Relation in Open Channels
4.	IS 2915 : 1965	Instructions for Collection of Data for the Determination of Error in Measurement of Flow by Velocity Area Methods
5.	IS 2952 (Part 1) : 1964	Recommendation for Methods of Measurement of Fluid Flow by Means of Orifice Plates and Nozzles - Part I Incompressible Fluids
6.	IS 2952 (Part 2) : 1975	Recommendations for methods of measurement of liquid flow by means of orifice plates and nozzles Part 2 Compressible fluids
7.	IS 3860 : 1966	Precast Cement Concrete Slabs for Canal Lining
8.	IS/ISO 4362 : 1992	Measurement of Liquid flow in Open Channels - Trapezoidal Profile Weirs
9.	IS 4477 (Part 1) : 1967	Method of Measurement of Fluid Flow by Means of Venturi Meters - Part I Liquids
10.	IS 4745 : 1968	Code of Practice for Design of Cross-section of Lined Canals
11.	IS 4969 : 1968	Method of Test for Determining Flexural Strength of Precast Cement Concrete Slabs for Canal Lining
12.	IS 5331 : 1969	Guide for Selection of Type of Lining for Canals
13.	IS 6059 : 1971	Recommendations for liquid flow measurement in open channels by weirs and flumes - weirs of finite crest width for free discharge
14.	IS 6065 (Part 1) : 2001	Recommendations for the preparation of geological and geotechnical maps for river valley project Part 1 Scales
15.	IS 9117 : 1979	Recommendation for Liquid Flow Measurement in Open Channels by Weirs and Flumes - End Depth Method for Estimation of Flow in non Rectangular Channels with a Free Overall Approximate Method
16.	IS 9163 (Part 1) : 1979	Dilution Methods for Measurement of Steady Flow - Part I Constant Rate Injection Method
17.	IS 9401 (Part 15/Sec 1) : 1993	Method of measurement of works in river valley projects Dams and appurtenant structures Part 15 Investigation works

		Section 1 Drilling of bore holes
18.	IS 9401 (Part 15/Sec 2) : 1992	Method of Measurement of Works in River Valley Projects dams and appurtenant structures - Part 15 Investigation Works - Section 2 Exploratory Drifting
19.	IS 9922 : 2010	Measurement of Liquid Flow in Open Channels - General Guidelines for Selection of Method
20.	IS 11293 (Part 1) : 1985	Guidelines for the design of grout curtains Part 1 earth and rockfill dams
21.	IS 11293 (Part 2) : 1993	Guidelines for the design of grout curtains Part 2 masonry and concrete gravity dams
22.	IS 12028 : 1987	Guidelines for Maintenance of River Embankments Levees
23.	IS 14574 : 1998 ISO 4371:1984	Measurement of liquid flow in open channels by weirs and flumes - End depth method for Estimation of flow in non - Rectangular channels with a free overfall Approximate Method
24.	IS 15119 (Part 1) : 2002	Measurement of Liquid Flow in Open Channels - Part 1 Establishment and Operation of a Gauging Station
25.	IS 15646 (Part 1) : 2006	Measurements of free surface flow in closed conduits Part 1 Methods
26.	IS 15646 (Part 2) : 2006	Measurements of free surface flow in closed conduits Part 2 Equipment
27.	IS 13969 : 1994 IS 5667 : 2009	Sampling of Ground water - Guidelines
28.	IS 15466 : 2004	Rubber seals for h Hydraulic gates – Specification
29.	IS 6330:2012/ISO 3847:1977	Liquid flow measurement in open channels by weirs and flumes - End - Depth method for estimation of flow in rectangular channels with a free overfall First Revision

ANNEX-IV

List of Other Identified New Subjects for Standardization

S. No.	Committee No.	New Subjects
1.	WRD 03	Aquifer Storage and Recovery Techniques
2.	WRD 03	Impact assessment techniques for artificial recharge structures
3.	WRD 03	Ground Water Harvesting Using Unconventional Measures
4.	WRD 03	Sustainable management of groundwater resources
5.	WRD 03	Guidelines for Aquifer mapping
6.	WRD 03	Guidelines for surface runoff harvesting using Small Structures
7.	WRD 28	Control of Salt Water Intrusion
8.	WRD 28	Preventions of Coastal Hazards
9.	WRD 28	Coastal Erosion Protection including anti-erosion works
10.	WRD 32	Glacial Lakes Outburst Floods
11.	WRD 22	Anti – Erosion Works on River Course
12.	WRD 15	Design and Construction of Fuse Plug to Facilitate Breaching
13.	WRD 22	Flood Forecasting Using Real Time Reservoir Inflow
14.	WRD22	Flood Map of India
15.	WRD 22	River Morphology and Flood Plain Study
16.	WRD 22	Standardization on Dams Safety Management, Planning and Retrofitting
17.	WRD 09	Dam Safety Protocol and Retrofitting
18.	WRD 10	Sediment Management and disposal
19.	WRD 10	Optimization and Simulation of Reservoir Operation
20.	WRD 09/ WRD 30	Guidelines on performance of old or existing hydraulic structures
21.	WRD 08	Guidelines on Treatment of Defects in the Foundation of Masonry and Concrete Dam
22.	WRD 09	Dam Break Analysis
23.	WRD 09	Roller Compacted Dams (Material, Testing and roller compaction methodology)
24.	WRD 09	Rubber Dams
25.	WRD 12	Adit Gates Design
26.	WRD 15	Ventilation of Underground Power Houses
27.	WRD 16	Performance Monitoring of Hydraulic Structures
28.	WRD 09	Life Cycle Assessment of dams
29.	WRD 09	Piano key Weirs
30.	WRD 16	Installation, Maintenance and Operation of Instruments in Tunnels
31.	WRD 05	Standards on Geological investigations in Himalayan Region
32.	WRD 22	Interlinking of Rivers
33.	WRD 10	Standards on Artificial Ponds/ Lakes
34.	WRD 06/ WRD 13	Canal Automation
35.	WRD 10	Water Use Efficiency
36.	WRD 13	Inland Water Transportation Design
37.	WRD 06	Efficient use of Water Resources
38.	WRD 10	Rejuvenation of Traditional Water Resources (modified as 'Performance Evaluation of Rejuvenation/Conservation of Traditional Water Bodies')
39.	WRD 06	Water Audit
40.	WRD 06	Piped Irrigation Network
41.	WRD 10	Seepage Losses in Reservoirs
42.	WRD 13	Evaporation Control in Canals

43.	WRD 06	Integrated watershed management
44.	WRD 24	Environment and Social Impact on River Training Works
45.	WRD06/ WRD 24	Climate Resilient Water Security
46.	WRD 24	Assessment of Environmental Flow
47.	WRD 10	Conservation of aquatic ecosystems in reservoirs and lakes