



भारतीय मानक ब्यूरो

(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)

BUREAU OF INDIAN STANDARDS

(Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India)

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व्यापक परिचालन मसौदा

29 जुलाई 2024

हमारा संदर्भ : डब्ल्यूआरडी 06/ T-10

तकनीकी समिति : जल संसाधन योजना, प्रबंधन और मूल्यांकन अनुभागीय समिति, डब्ल्यूआरडी 06

प्राप्तकर्ता :

- जल संसाधन विभाग परिषद, डब्ल्यूआरडी के सभी सदस्य
- जल संसाधन योजना, प्रबंधन और मूल्यांकन अनुभागीय समिति, डब्ल्यूआरडी 06 के सभी सदस्य
- रुचि रखने वाले अन्य निकाय।

महोदय / महोदया,

निम्नलिखित मानक का मसौदा संलग्न है:

प्रालेख संख्या	शीर्षक
डब्ल्यूआरडी06(24196) WC	नदी घाटी परियोजनाओं के निर्माण के दौरान हुई प्रगति की रिपोर्ट देने के लिए प्रपत्र भाग 1 सिंचाई कार्य (13218 Part 1 का पहला पुनरीक्षण) - भारतीय मानक मसौदा (आई सी एस 93.160)

कृपया इस मसौदे का अवलोकन करें और अपनी सम्मतियाँ यह बताते हुए भेजे कि यह मसौदा प्रकाशित हो तो इन पर अमल करने में आपको व्यवसाय अथवा कारोबार में क्या कठिनाइयाँ आ सकती हैं।

सम्मतियाँ भेजने की अंतिम तिथि : 29 सितम्बर 2024

सम्मति यदि कोई हो तो कृपया अधोहस्ताक्षरी को ई-मेल द्वारा wrd@bis.gov.in पर या उपरलिखित पते पर, संलग्न फॉर्मेट में भेजें। सम्मतियाँ बीआईएस ईगवर्नेस पोर्टल-, www.manakonline.in के माध्यम से ऑनलाइन भी भेजी जा सकती हैं।

यदि कोई सम्मति प्राप्त नहीं होती है अथवा सम्मति में केवल भाषा संबंधी त्रुटि हुई तो उपरोक्त प्रालेख को यथावत अंतिम रूप दे दिया जाएगा। यदि सम्मति तकनीकी प्रकृति की हुई तो विषय समिति के अध्यक्ष के परामर्श से अथवा उनकी इच्छा पर आगे की कार्यवाही के लिए विषय समिति को भेजे जाने के बाद प्रालेख को अंतिम रूप दे दिया जाएगा।

यह प्रालेख भारतीय मानक ब्यूरो की वेबसाइट www.bis.gov.in पर भी उपलब्ध है।
धन्यवाद।

भवदीय

ह-/

श्री दुष्यन्त प्रजापति

वैज्ञानिक 'ई' (संयुक्त निदेशक) एवं प्रमुख

जल संसाधन विभाग

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संलग्न: उपरलिखित



भारतीय मानक ब्यूरो

(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)

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WIDE CIRCULATION DRAFT

::Our Reference WRD06 /T - 10

29 JULY 2024

:TECHNICAL COMMITTEE WATER RESOURCES PLANNING, MANAGEMENT AND EVALUATION SECTIONAL COMMITTEE, WRD 06**ADDRESSED TO:**

1. All Members of Water Resources Department Council, WRD
2. All Members of Water Resources Planning, Management and Evaluation Sectional Committee, WRD 06
3. All others interested.

Dear Sir/ Madam,

Please find enclosed the following draft:

Doc No.	Title
WRD 06 (24196)WC	<i>PROFORMA FOR REPORTING PROGRESS DURING CONSTRUCTION FOR RIVER VALLEY PROJECTS PART 1 IRRIGATION WORKS First Revision of IS 13218 Part 1- GUIDELINES (ICS: 93.160)</i>

Kindly examine the attached draft and forward your views stating any difficulties which you are likely to experience in your business or profession, if this is finally adopted as National Standard.

Last Date for Comments: 29 September 2024

Comments if any, may please be made in the enclosed format and emailed at wrd@bis.gov.in or sent at the above address. Additionally, comments may be sent online through the BIS e-governance portal, www.manakonline.in.

In case no comments are received or comments received are of editorial nature, kindly permit us to presume your approval for the above document as finalized. However, in case comments, technical in nature are received, then it may be finalized either in consultation with the Chairman, Sectional Committee or referred to the Sectional Committee for further necessary action if so desired by the Chairman, Sectional Committee.

The document is also hosted on BIS website www.bis.gov.in.

Thanking you,

Encl: As above

Yours faithfully,

Sd/-

(DUSHYANT PRAJAPATI)

Scientist 'E' & Head

(Water Resources Department)

Phone: +91-11 23231906

Email: wrd@bis.gov.in

BUREAU OF INDIAN STANDARD

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भारतीय मानक मसौदा

**नदी घाटी परियोजनाओं के निर्माण के दौरान हुई प्रगति की रिपोर्ट
देने के लिए प्रपत्र**

भाग 1 सिंचाई कार्य

(13218 Part 1 का पहला पुनरीक्षण)

Draft Indian Standard

**PROFORMA FOR REPORTING PROGRESS DURING CONSTRUCTION
FOR RIVER VALLEY PROJECTS**

PART 1 IRRIGATION WORKS

(First Revision of IS 13218 Part 1)

ICS 93.160

Water Resources Planning, Management, and
Evaluation Sectional Committee, WRD 06

Last date for Comments:
29/09/2024

FOREWORD

(Formal Clause of the foreword will be added later)

Proformae for reporting progress during construction for river valley projects are submitted to the concerned authorities in different patterns and formats. The necessity for some kind of uniformity in presentation has been felt for long. This standard has been prepared to serve as a guide to achieve this objective.

This standard (Part 1) was first published in 1992. This first revision has been brought out in view of the various technological changes that have taken place in this field since 1992 and to incorporate the latest practices. There is no ISO standard on the subject. This standard has been prepared based on indigenous data/practices that prevailed in the field in India. The major changes incorporated in this revision are:

- a) Proforma Q-1 clause 3.1.1 (b), 3.1.1 (c), 3.1.2, 3.1.4 have been modified in view of latest practices.
- b) Proforma Q-1 clause 3.1.6 has been added for reporting quarterly progress of medium projects.

- c) Col (5) of Proforma Q-2 has been modified.
- d) Proforma Q-4 has been modified and Col (8) & (9) have been added.
- e) Proforma A-1, A-2, A-3 (ii) & (iii) have been modified and Pipe Distribution Network (PDN) has been included.

This standard has been issued in three parts. This Part 1 gives proformas for reporting progress during construction related to irrigation works, such as dam portion, barrages, canals, and distribution system. Part 2 of the series gives guidance for the presentation of proformas for reporting progress during construction regarding hydel project works, and Part 3 gives proforma for reporting programme/progress of work related to flood control, and anti-erosion.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded-off value should be the same as that of the specified value in this standard.

Draft Indian Standard

**PROFORMA FOR REPORTING PROGRESS DURING CONSTRUCTION
FOR RIVER VALLEY PROJECTS**

PART 1 IRRIGATION WORKS

(First Revision of IS 13218 Part 1)

Water Resources Planning, Management, and
Evaluation Sectional Committee, WRD 06

Last date for Comments:
29/09/2024

1 SCOPE

This standard provides guidance regarding presentation of proforma for reporting progress during construction for river valley projects related to irrigation works.

2 TYPE OF PROFORMAE

Proformae are classified broadly in two types based on the interval of reporting, such as set of quarterly proformae and set of annual proformae. Set of proforma (Q1, Q2, Q3, and Q4) are suggested for collection of progress report of project quarterly. Set of proformae RR (A-1, A-2, A-3, A-4 and A-5) are suggested for the collection of progress report of the project annually.

3 PROFORMA

3.1 Proforma Q-1 is for reporting narrative of the progress, bottlenecks and corrective actions.

PROFORMA Q-1

(Quarterly Return)

Narrative of the Progress, Bottlenecks, etc, Project (State)

(Quarter Ending.....)

3.1.1 Narrative Progress

a) Dam Portion

1) Maximum. Minimum and average levels achieved:

i) Top of dam proposed

ii) Earth dam

iii) Concrete/Masonry-Overflow and non-overflow sections.

2) No of Gates targeted, fabricated/erected.

3) Cofferdams (top levels, level achieved); and

4) No. of Diversion tunnels, Method of tunneling (Tunnel Boring Machine/Conventional Method), total length targeted, completed.

b) Barrages (Progress in Nos.)

1) Structure

i) Well foundation

ii) Piers

iii) Structures

2) Gates

3) River Training works: Length

4) Cofferdams (top levels, levels achieved)

5) Head Regulators (Nos.)

6) GD site (Type of site, type of observation, period of observations, etc.)

c) Canal and Distribution System

1) Main Canals and Branch Canals (separately for each) progress in kilometers

i) Type of Canal lined/un-lined in progress/completed

ii) PDN (Progress in km/ and in %)

iii) Numbers of Cross Drainage Works (CDW) Progress/completed

iv) No of Railway crossing Progress/completed

v) No. of National Highways crossing/No of Road Crossing/ progress/completed.

vi) Forest Area in ha

2) Distribution system progress in kilometers

i) Type of Canal lined/un-lined in progress/completed

ii) PDN (Progress in km/ and in percent)

iii) Numbers of Cross Drainage Works (CDW) Progress/completed

iv) No of railway crossing Progress/completed

v) No. of National Highways crossing/No of Road Crossing/ progress/completed.

- vi) Forest Area in ha.
- 3) Head Regulators (Nos.)
- 4) Command Area Development and Water Management (CAD&WM)
 - i) Area Proposed/Completed
 - ii) Irrigation potential utilized progress/completed

3.1.2 Bottlenecks

- a) Utility crossing (i.e Interstate level/Intrastate level) progress/completed;
- b) Land Acquisition progress/completed;
- c) Farmer's consultation;
- d) Flow of Fund;
- e) Inter departmental issues; and
- f) Litigation, court cases etc.

3.1.3 Corrective Actions Taken/proposed

- a) At project level;
- b) At State Government Level;
- c) At Central Government level; and
- d) Please state whether the progress during the quarter is commensurate with the target for the year ending.....and if not, the reasons for the same and remedial action proposed.

3.1.4 Major Projects (Project-wise)

- a) Total estimated cost of the project in hand in the base year in Rs.....
- b) Total estimated cost of components covered under central assistance/ any other external (national/international) financial institutions in Rs.....
- c) Total expenditure of the project up to the previous year as a whole in Rs.....
- d) Total expenditure of the project up to the previous financial year incurred under central assistance (CA)/Any other external (national/international) financial Institutions in Rs.....
- e) Irrigation potential created of the project up to the previous year as a whole in ha.....
- f) Irrigation potential of the project Created under Central Assistance/ any other external (National/Inter-National) financial institutions up to the previous year in ha.... ..
- g) Approved outlay during the current year....
- h) Expenditure during the year up to last quarter....
- j) Expenditure during the quarter reported upon ...
- k) State whether the expenditure is commensurate with the physical progress.

3.1.5 Medium Projects (Quarterly Return) — State

- a) The number of medium irrigation projects under execution during the year;

- b) Total project potential of medium irrigation projects in the state;
- c) The potential created up to the end of the previous quarter (Annual, for quarter ending);
- d) Potential created during the quarter (Annual, for quarter ending) and;
- e) Remark indicating whether the progress is satisfactory so as to achieve the target.

3.1.6 Medium Projects (Quarterly Progress) Project wise

- a) Total estimated cost of the project in hand in the base year in Rs.....
- b) Total estimated cost of components covered under central assistance/ any other external (national/international) financial institutions in Rs.....
- c) Total expenditure of the project up to the previous year as a whole in Rs.....
- d) Total expenditure of the project up to the previous Financial year incurred under central assistance (CA)/Any other external (national/international) financial Institutions in Rs.....
- e) Irrigation potential created by the project up to the previous year as a whole in ha.....
- f) Irrigation potential of the project Created under Central Assistance/ any other external (National/Inter-National) financial institutions up to the previous year in ha.... ..
- g) Approved outlay during the current year....
- h) Expenditure during the year up to last quarter....
- j) Expenditure during the quarter reported upon ...
- k) State whether the expenditure is commensurate with the physical progress.

3.2 Proforma Q-2 is for reporting the progress of work done in the previous three months.

3.3 Proforma Q-3 is for reporting expenditure during the progress of work done in the previous three months.

3.4 Proforma Q-4 is for reporting potential and utilization.

3.5 Proforma A-1 is for reporting the progress of construction in terms of completed annually.

3.6 Proforma A-2 is for reporting the progress of construction in terms of physical quantities of work done in a year.

3.7 Proforma A-3 is for reporting progress for preconstruction activities.

3.8 Proforma A-4 is for the irrigation potential crop-wise area.

3.9 Proforma A-5 is for the utilization of water and revenue receipts.

3.10 The above proformae should be accompanied by bar charts.

PROFORMA Q-2
(Quarterly Return)

(Clause 3.2)

.....Project (.....State)

PROGRESS REPORT FOR THE QUARTER ENDING (YEAR)
(PHYSICAL PROGRESS IN QUANTITIES)

Sl. No.	Main Items of Works	Latest Estimated Quantity	Unit	Date of Commencement of main Component	Cumulative Work Done Up to Previous Quarter	Work Done During Current Quarter		Cumulative Work Done Up to Current Quarter		Shortfall Up to End of Current Quarter (9)-(10)	Date of Completion of Main items of works		Bottlenecks: Reasons for Shortfall, if any, and Proposed Corrective Action
						Scheduled	Actual	Scheduled	Actual		Scheduled	Expected	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

III. Distribution System (System wise)

LEFT

A. Earthen

i) Name, length in kms

ii) PDN (Type, Length in Km)

RIGHT

i) Name, length in kms

ii) PDN (Type, Length in Km)

IV. Other works

NOTES

1. Proforma 1 (A) to be accompanied by:
 - a) Index plan of the project and preferably PERT chart for the dam and headworks.
 - b) Longitudinal Section of the Dam/Head works showing the construction programme annually as indicated in Proforma A-1 in different colors.
 - c) Longitudinal Section and plan of the Canal System showing the main canal, Branches, Distributaries, the off-take points and the ayacut under sample schematic diagram enclosed in different colors (for different years).
 2. The proforma is generally to be used for all projects. In some projects, it may not be possible to furnish information in this format and in such modified suitably by project authorities.
-

Right bank canal	kms
PDN (Type, Length in km)	
CD on Left Bank Canal	Nos
Railway Crossing/National Highway on LBC	Nos
Director canal for reservoir	Kms
Miners (with names, if any)	Kms
PDN (Type, Length in Km)	
Earthwork	m ³
Reservoir cutting	m ³
Lining	m ³
Masonry/Concrete Structures	
Fans	Nos,
Regulators	Nos,
C Works	Nos,
Miners and Water Courses	
Field channels to be constructed at the cost of irrigation project, if any	Kms
PDN to be constructed at the cost of irrigation project, if any	Kms
Saving in Land Acquisition	Ha

NOTES

1. The items listed are only indicative and they may be suitably modified according to the convenience by project authorities.
 2. The break-up of the quantities be shown separately for executed works by departmental and contractual agencies.
-

PROFORMA A-3 (i)

Annual Year

(Clause 3.7)

.....**Project****State**

PRE-CONSTRUCTION ACTIVITIES — PRE-INVESTIGATIONS, INFRASTRUCTURES, CONSTRUCTION PLANNING AND ANY OTHER MATTER

NOTE — The report may be in narrative form and the points mentioned below may generally be covered.

1. Hydrological Studies for Headworks — Dam/Barrage
2. Geological and Foundation Investigations:
 - a) Dam and reservoirs;
 - b) Barrage/weir; and
 - c) Big canal structures.
3. Organisation (for Survey and Investigations, Designs, Execution, Quality Control, Monitoring, etc)
 - a) Creation of new posts; and
 - b) Deployment of personnel.
4. Communications
 - a) Roads, railways, etc; and
 - b) Postal facilities, telegraph, telephones.
5. Colony: Residential and Non-residential buildings and other facilities (Including Land Acquisition)
6. Plant and Equipment, and Vehicles
 - a) Construction — planning;
 - b) Procurement of construction equipment and spare parts;

- c) Import of equipment and spare parts — schedule of delivery, bottlenecks, etc; and
- d) Inspection and transport vehicles.
- 7. Administrative and technical sanctions of project estimates
- 8. Inter-State/International Matte

-
- h)Others
2. Rehabilitation of Oustees
- a) Families (SC/ST) Nos
 - b) Villages (SC/ST) Nos
3. Topographical Surveys
- a) Dam and reservoir hectare
 - b) Barrage/weirs and river training works hectare
 - c) Main canals and branches kilometres
 - d) Distributaries of miners
 - e) PDN hectare
 - f) Others
4. Surveys for quarries and borrow areas (in terms of quantities required for construction)
- a) Dam
 - i) Masonry/Concrete m³
 - ii) Earth/Rockfill m³
 - b) Barrage/weirs
 - i) River Training Works m³
 - c) Main canal and branches m³
5. Pre-irrigation soil surveys and drainage in command hectare
6. Distance of quarries/borrow area from Dam/ batching plant Kms
-

NOTES

1. The items listed above are indicative and they may be suitably modified according to the convenience by project authorities.
 2. In case of acquisition of land, the land to be acquired from public (cultivated and uncultivated) and Government departments (like Forest, etc) be indicated separately.
-

PROFORMA A-3 (iii)
 (Clause 3.7)
 Due on 31st August

.....Project (.....State)

PRE-CONSTRUCTION ACTIVITIES - DESIGN, TENDERS AND AWARD OF WORK

(All the dates shall be ACTUAL if the activity is complete on the date of reports of ANTICIPATED if the activity is to start or is in progress)

Sl. No.	Item of Work	Design and Drawing				Tenders and Award Contracts					Award Date	Date of Start	Date of Completion	Reasons for Slippage If Any in an Activity and Corrective Action Proposed
		Preliminary Drawing for Tender Purposes		Final Drawing for construction Purposes		Preparation of documents	Date of issue	Date of Invitation of Tenders						
(1)	(2)	Date of start	Date of finish	Date of start	Date of finish			(7)	(8)	Date of opening of tender notice	Original	Extended or re-tender	(12)	(13)

1. Dam
- a) Cofferdam
 - b) Earth/Rockfill
 - c) Right bank Left bank
 - d) Concrete/Masonry
 - e) Non-overflow
 - f) Spillway

2. Tunnels

- a) Diversion
- b) Irrigation or power
- c) Barrage/weir
- d) Main structure
- e) Head regulators

Main Canals and Branches (separately for each Canal)

- a) Reach-wise
- b) Tunnels
- c) Big structures (Falls, Regulators, Cross Drainage Works, Bridges, Railway Crossing, etc)
- d) PDN

3.

NOTES

1 The items listed above are only indicative and they may be suitably modified and new items added wherever necessary.

2 For departmental construction only the schedule date of start and completion of the work may be mentioned.

3 The report for a particular year should include all works under construction and those proposed for construction during the current and succeeding year.

PROFORMA A-4

(Clause 3.8)

THE IRRIGATION POTENTIAL CROP-WISE AREA
Year of Report

Name of the state:

Name of the district:

Name of Project Major/Medium	Perennial	Two Seasonal	Kharif	Rabi	Hot Weather	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. i)						
ii)						
iii)						
2. i)						
ii)						
iii)						
i. On full development (only when project under construction).						
ii. Created by..... month andyear (this row may be filled with area figures of the project for the year of report).						
iii. Likely additional creation during the subsequent year.						

PROFORMA A-5
(Clause 3.9)

UTILIZATION OF WATER AND REVENUE RECEIPTS
Year of Report

Name of the state:
Name of the district:

Name of Project (As in Proforma A) (Major/Medium)	Name of Crops	Crop Areas in Thousand ha and Water Utilisation in Th.ha.m					Total Area		Total Water Utilisation	Revenue Receipts (Rs in Lakhs)		Total Revenue in Lakhs
		Perennial	Two Seasonal	Kharif	Rabi	H.W.	A	U		Current	Arrears	
		A U	A U	A U	A U	A U						

Total of district.....

A = Area of crop in thousand hectares.

U = Water utilized (if crop-wise utilization is not available, season-wise water utilization total in th.ha.m to be given).