Standard Operating Procedure (SOP) Manual

ICAR-CTRI

Central Tobacco Research Institute

(Indian Council of Agricultural Research)

Rajahmundy, Pin Code -533105

Andhra Pradesh, India

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Copy No.	
Issued To	

	ICAR-CTRI	STANDARD OPERATING PROCEDURE

AUTHORISATION

This document titled, Standard Operating Procedure (SOP) manual is the operative level manual for the ICAR-CTRI.

It describes the work flows of their respective processes and guidelines in the Institute and are aligned with the Quality Management System (QMS) of CTRI as per IS/ISO 9001:2008 international standard.

To ensure uniformity in work flow, the Institute have developed and documented standard operating procedures (SOP).

The SOPs in the manual are written in English language. All revisions and distributions of these documents are controlled by the Management Representative (MR).

For internal use, this manual is also available in soft form through CTRI intranet.

The contents of this manual are approved by the undersigned.

The Management Representative (MR) is responsible for issue and control of this manual.

Master copy of this manual is maintained by MR. Controlled copy of this manual are issued and distributed as per the distribution list maintained with MR. This Manual can also be issued to other officials with due approval of MR.

In case the holder of this manual ceases to exist, the controlled copy shall be returned to the MR/ AMR by the holder.

Record of distribution shall be maintained by MR.

Date 01/09/2018 Director

AMENDMENT HISTORY

Version 02; Effective Date 01/09/2018

Amendments to the current issue

Change Order	Section(s) affected	Pages affected	Brief reason for change	Version/ Issue	Effective Date
1	All	All	First issue as per ISO 9001:2008	01	04/09/2015
2	All	All	Revised in line with ISO 9001:2015	02	01/09/2018

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	CTRI	**STANDARD OPERATING PROCEDURE**

AUTHORISATION

Standard Operating Procedure for the ICAR-Central Tobacco Research Institute (CTRI) describes the activities necessary to complete tasks in accordance with industry regulations, provincial laws or alignment with the requirement of the Quality Management System (QMS) as per IS/ISO 9001:2015 international standard.

The SOP is written in English language. All revisions and amendments of this document are controlled by the Management Representative (MR).

The contents of this SOP are approved by the undersigned

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Master copy of this manual is maintained by MR.

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Date 01/09/2018

Director

Standard Operating Procedures (SOP)

1.0 PURPOSE

To establish, implement and maintain a documented procedure for control of quality management system (QMS) documents of the Institute and documents of external origins to ensure that

- The Latest issue of appropriate documents, duly approved, are available at the relevant locations and
- The invalid and obsolete documents are suitably identified and duly prevented from unintended use

2.0 SCOPE

Applicable to the following documents

- Quality manual & the Standard Operating Procedure (SOP)
- Documents of External Origins such as Standards, Regulations, Rules etc.

3.0 RESPONSIBILITY & AUTHORITY

Document	Review	Approval
Quality Manual	Management Representative	**Director**
SOP	Heads of Divisions/ Management Representative	**Director**
Documents of External origins	Director/PME/SAO/FACO/Librarian	**-**

4.0 PROCESS

4.1 CONTROL OF DOCUMENT OF EXTERNAL ORIGINS :

The Documents of External origins like text books, periodicals, journals are controlled by the Librarian though the process of Issue & Return

Circulars & Guidelines issued by ICAR are controlled by the office of the Director, who forwards the same from time to time to the respective Divisions/Departments/Sections from time to time

4.2 CONTROL OF QMS DOCUMENTs

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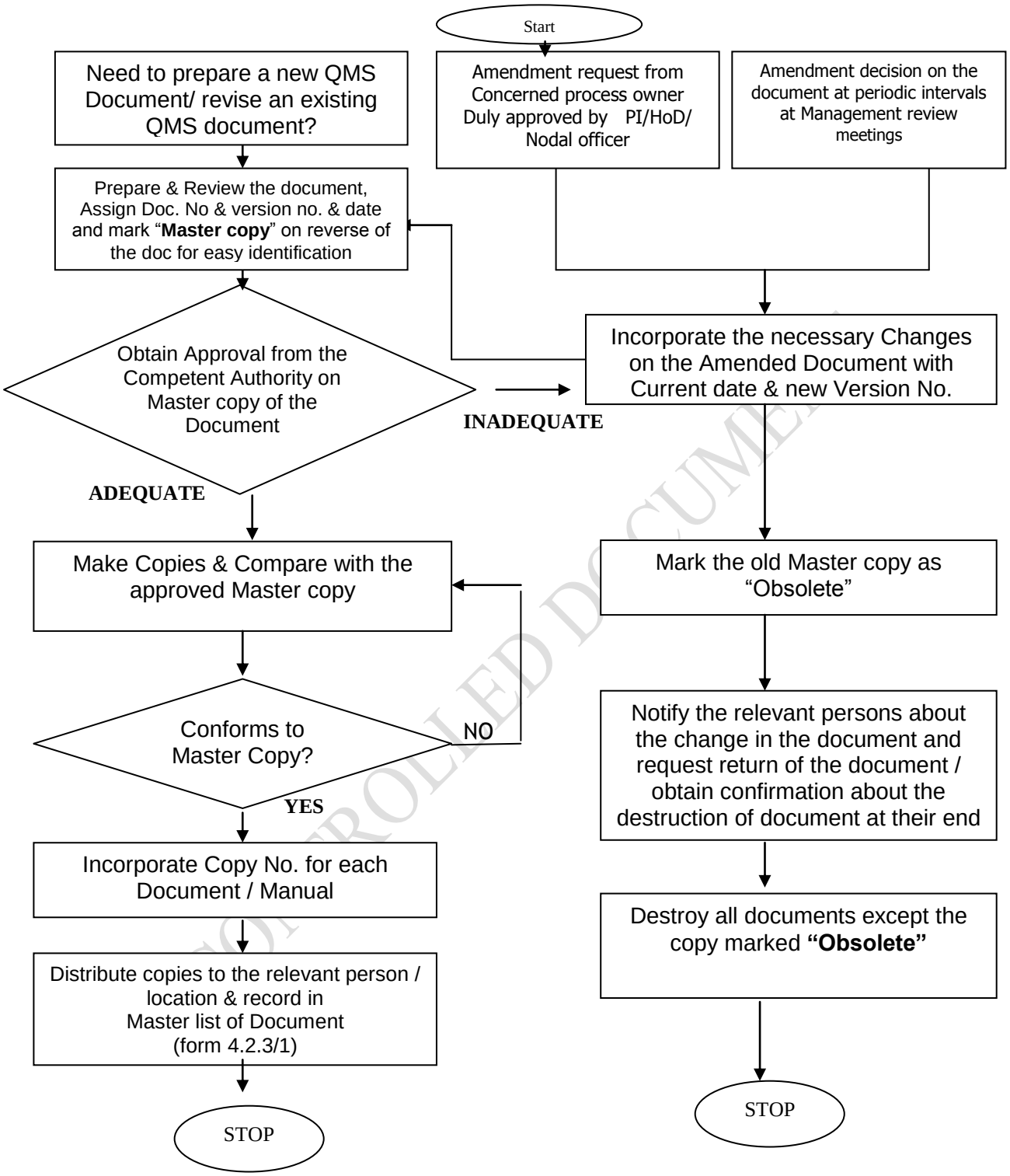

1.0 PURPOSE

To establish, implement and maintain a documented procedures for control of Quality management system (QMS) records of the Institute to ensure that duly approved formats are available at the relevant locations & used to record the evidences of fulfilling the requirements and the Records are disposed off at the end of their retention period as per ICAR Record Retention schedule, 1989

2.0 SCOPE

- All QMS related records (Hard copy + Electronic) as mentioned in the relevant documents

3.0 RESPONSIBILITY & AUTHORITY

Record	Review	Approval
Formats of QMS records	Management Representative	Director
Formats of ICAR prescribed records	ICAR	ICAR

4.0 PROCESS

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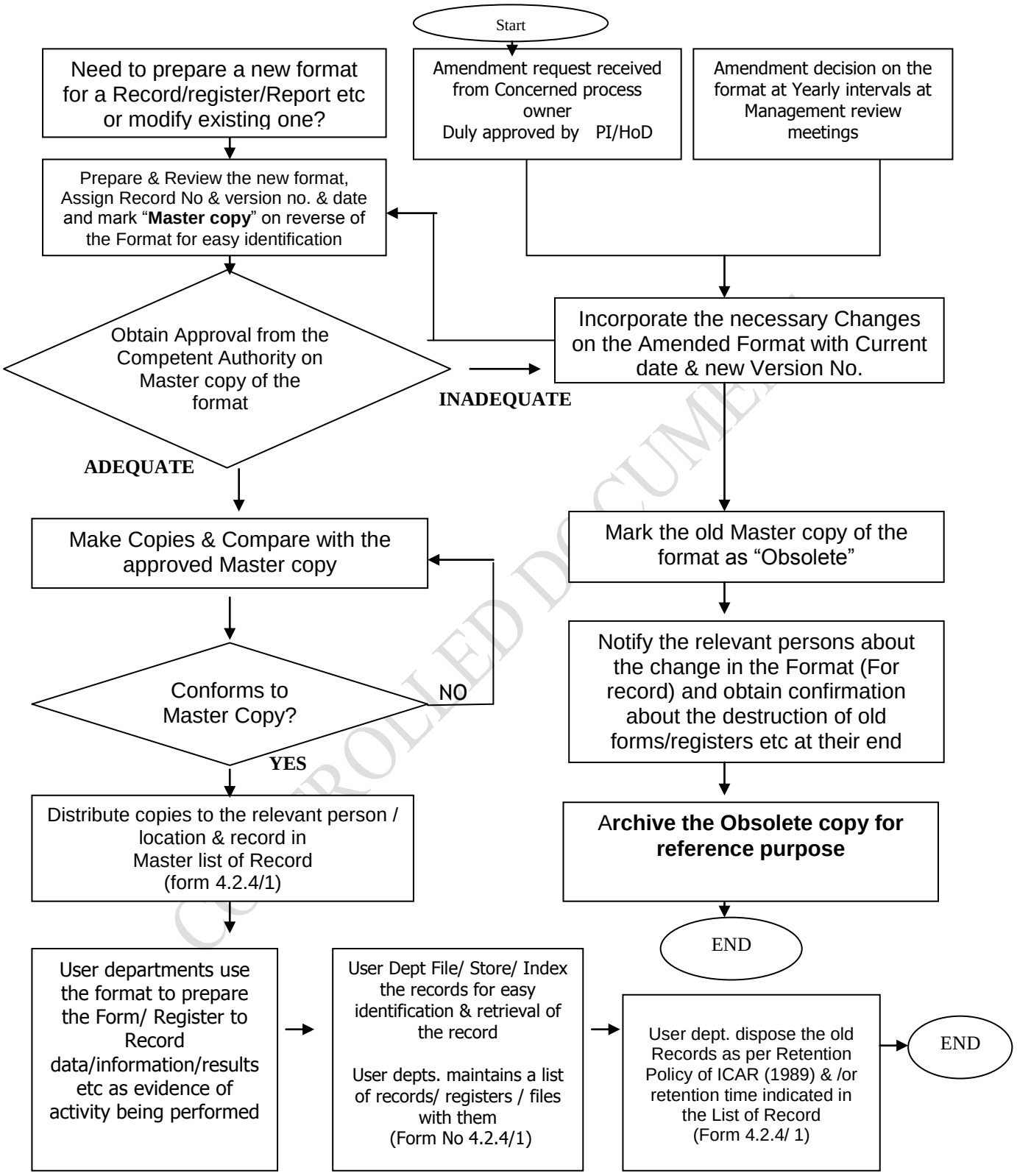


1.0 PURPOSE

To establish, implement, and maintain a documented procedure for Internal Audit in the Institute

2.0 SCOPE

Internal Audit of all the processes of the Quality Management System of the Institute

3.0 RESPONSIBILITY & AUTHORITY

Activity	Responsibility	Authority for Approval
Planning Internal Audit/ Follow up audit	Management Representative	Director
Preparation of Checklist & conduct Internal Auditing	Internal Auditor	Management Representative
Preparation of Audit Report and identifying Non-conformity (NC)	Internal Auditor	Do
Root cause analysis & Initiating Corrective/ Preventive action against the Audit Non-conformities	Auditee	Do
Review and approval of Corrective/ preventive actions & Closing of NC	Management Representative	Director
Reviewing the effectiveness of corrective action	Management Representative	Director

4.0 PROCESS

a. Internal Auditors are selected by the MR in consultation with the Director on the basis of their Qualification, experience, familiarization with ICAR processes, training on internal auditing attended etc.

b. Minimum two scheduled internal audits are performed in a year at proper intervals. Unscheduled audits may also be performed as and when the system demands.

c. Planning for individual rounds of audit are done by the MR describing area to be audited, auditee, auditors and scheduled date of audit, and are approved by the Director.

d. This is communicated as audit plan to the Divisions/sections

e. In panning internal audit it is ensured that the auditor do not audit their own work in order to maintain impartiality

f. Internal Audit, in general, is conducted by a team of one /two auditors. Only in exceptional cases, The MR has the authority to allow conducting of an audit by more than two auditors.

g Before conducting audit, the designated Auditors seek clarifications, if any, from the MR and confirm the date and timing with the Auditee. The auditors also go through the procedure/process to be audited and prepare checklist. During audit, the Auditors note down their observations and raise non-conformity reports once they find there are process deviation/non-compliances / failure to comply statutory /regulatory requirements etc.

h. The Internal Auditors furnishes audit report (Including the non-conformity reports, if any) within 2/3 days of conducting the audit in a standard form with one copy each to auditee and the MR.

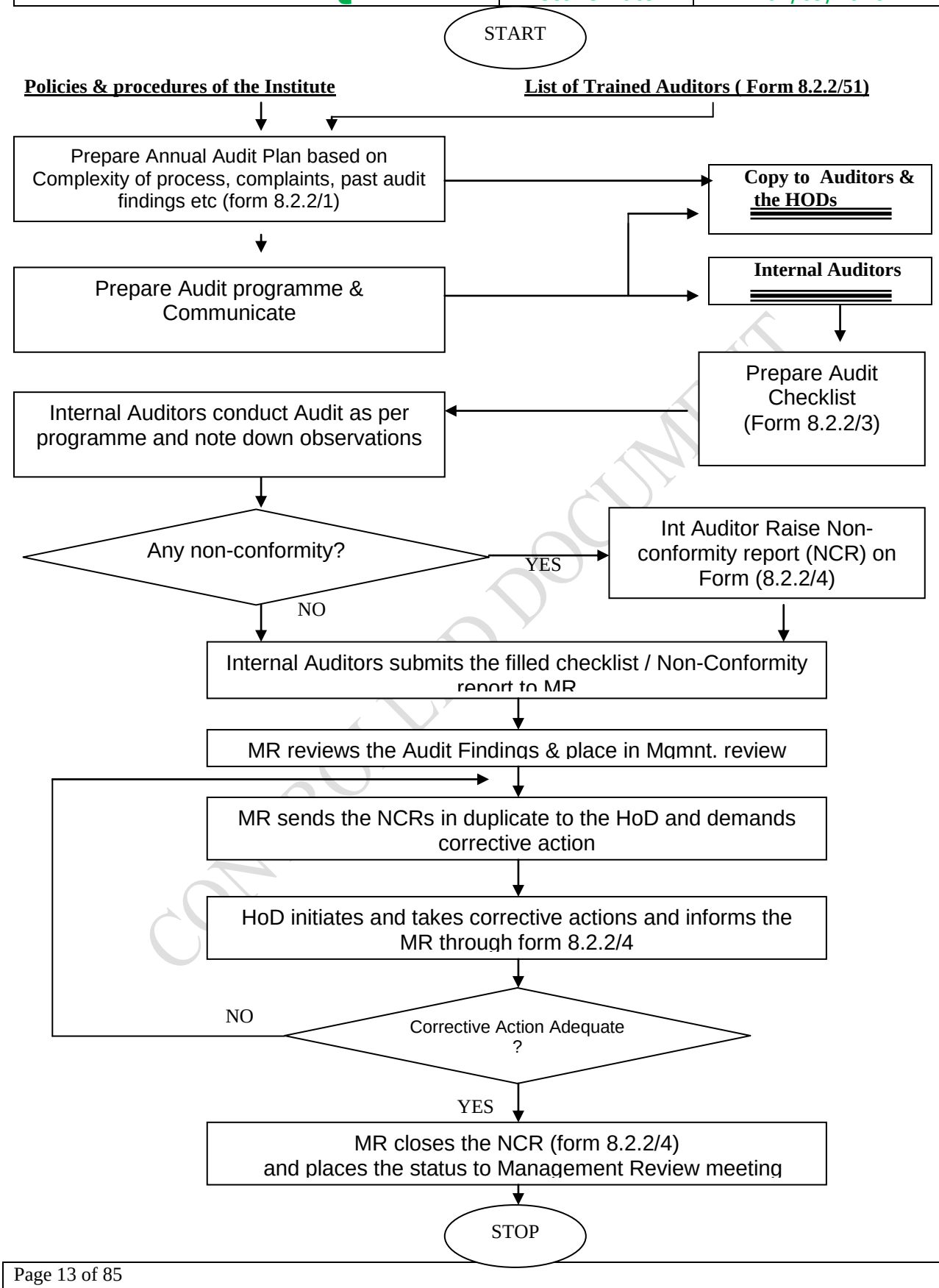
i Non-conformities identified in Audit, if any, are required to mentioned in the report, attributing clause of the ISO 9001:2015 standard / SOP No. / Guidelines etc against which it is raised.

j. The auditee dept initiates the necessary corrections/corrective or preventive measures against the non-conformities identified during the audit, after ascertaining the root cause.

k. Follow up audit, wherever needed, is planned by the MR and is conducted to verify and record the implementation and effectiveness of corrective action taken.

l. The audit finding and implementation status of corrective action is discussed in management review meeting held by the MR. All results are communicated to/ discussed with Director, for guidance and instructions, if any.

m. The MR maintains all records of audit and their subsequent actions.



1.0 PURPOSE

To document and establish a process of control of non-conforming products & services to ensure that:

1.1 In the event of non-conforming products & services being detected at any stage, it is reviewed for subsequent disposition by the competent authority, unless it is outright rejected or scrapped and segregated to prevent from unintended use/delivery &.

1.2 The Non-conforming products taken up for rectification and / or reworking are re-inspected after rectification / rework before subsequent processing/ disposal .

2.0 SCOPE

All products and services at all stages of production in the Institute

3.0 RESPONSIBILITIES & AUTHORITY

Head of the Division/ Principal Investigator in case of Research work
Head of the Section- in case of admin & Support services
Final authority for approval – Director

4.0 PROCESS

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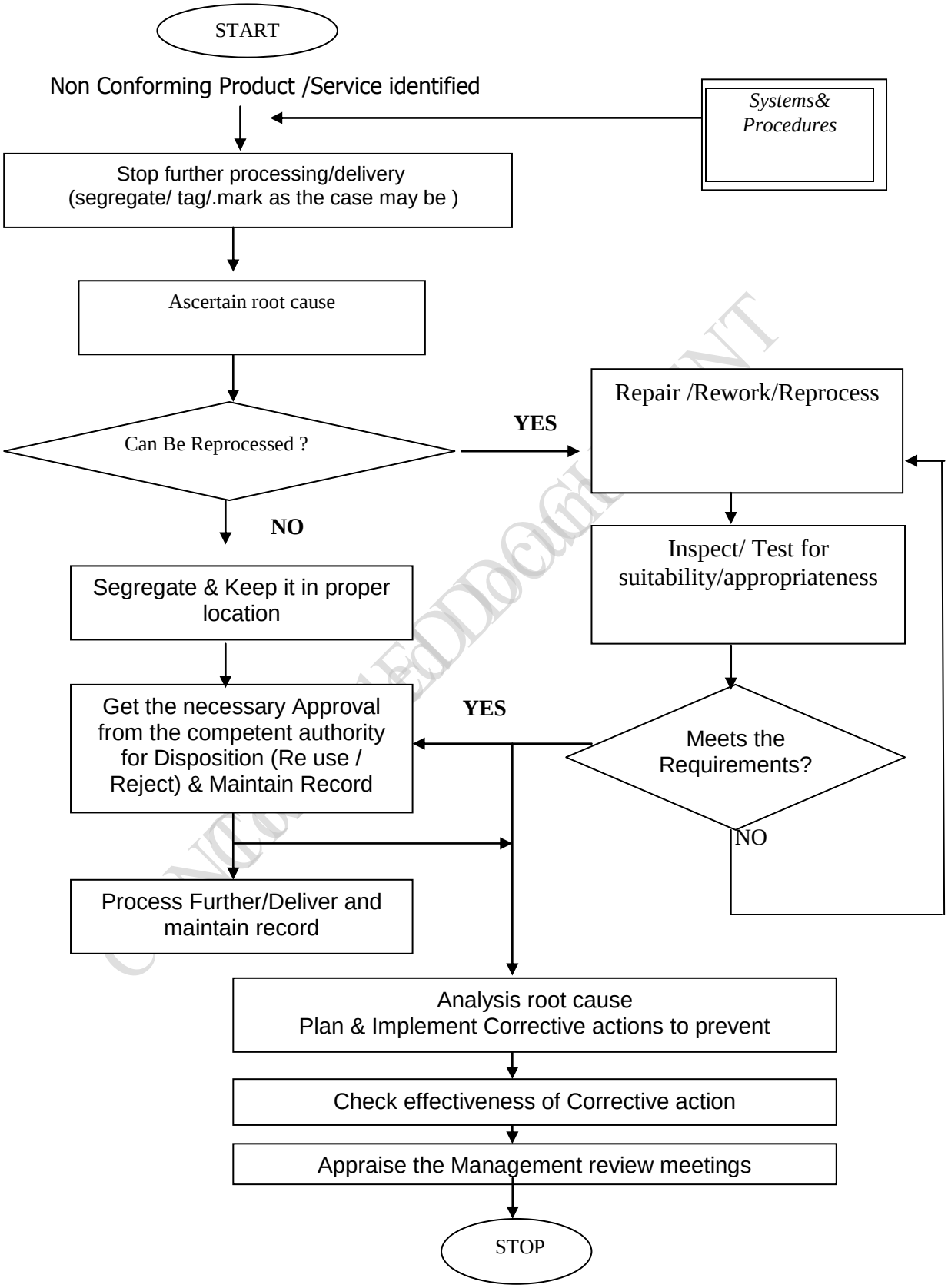
START
Non Conforming Product /Service identified
Systems& Procedures
Stop further processing/delivery (segregate/ tag/.mark as the case may be)
Ascertain root cause
Can Be Reprocessed ?
YES
NO
Repair /Rework/Reprocess
Inspect/ Test for suitability/appropriateness
Meets the Requirements?
YES
NO
Segregate & Keep it in proper location
Get the necessary Approval from the competent authority for Disposition (Re use / Reject) & Maintain Record
Process Further/Deliver and maintain record
Analysis root cause
Plan & Implement Corrective actions to prevent
Check effectiveness of Corrective action
Appraise the Management review meetings
STOP

1.0 PURPOSE

To establish and maintain a documented procedures for initiation, review, implementation and monitoring of Corrective actions in the Institute, in order to control the existing and potential non-conformities

2.0 SCOPE

All Corrective actions initiated in context to all non-conformity related to product, process & Customer complaints in the Institute.

3.0 RESPONSIBILITY & AUTHORITY

The overall authority to approve the Corrective actions - Director
Review of Corrective actions- PI /HoD/ Heads of Sections
Plan& implement corrective action -Concerned Process owner

4.0 PROCESS

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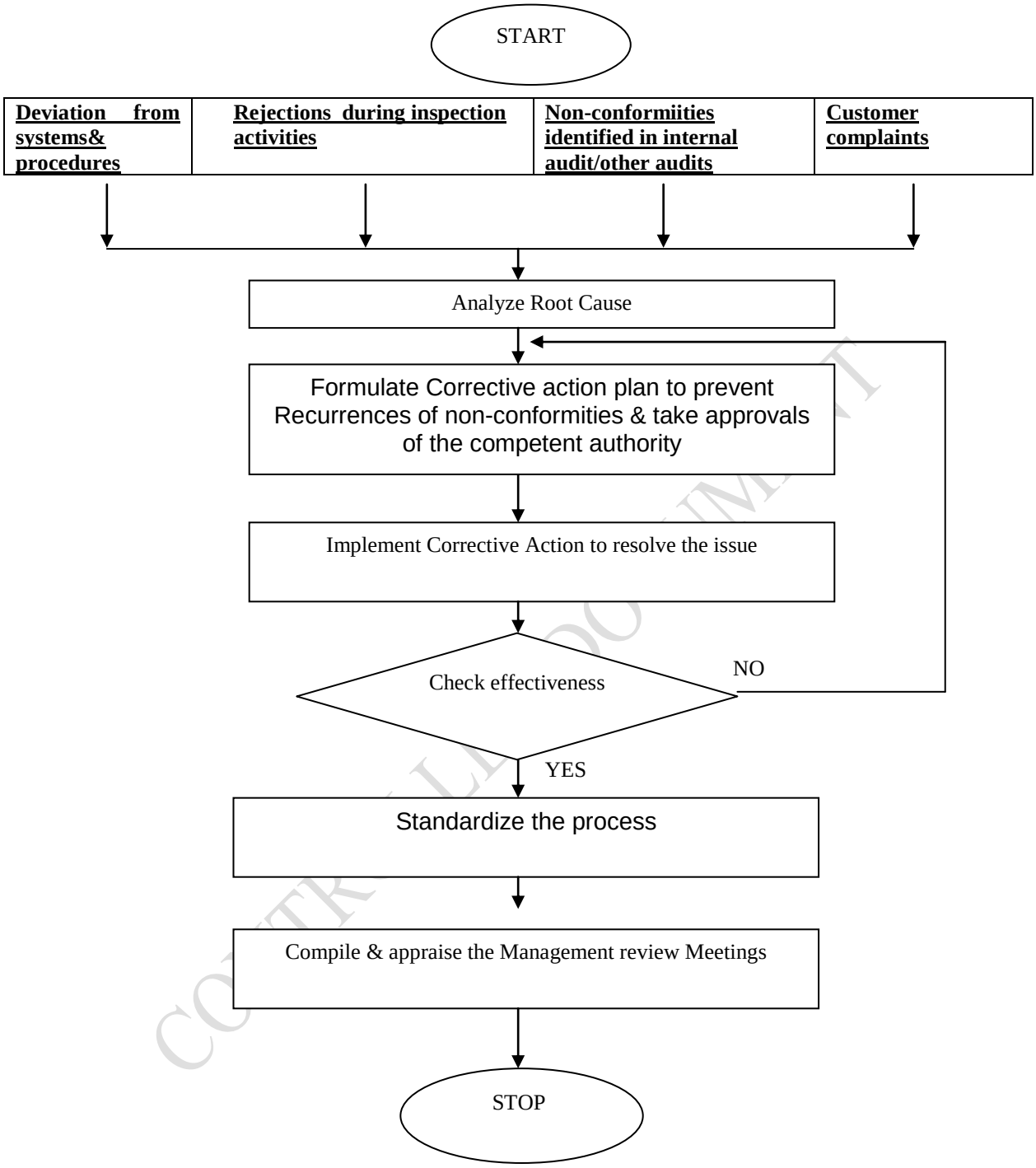

1.0 PURPOSE

To establish and maintain documented procedures to identify potential problems before they occur so that risk-handling activities may be planned and involved as needed across the life of the product or project to mitigate adverse impacts on achieving objectives.

2.0 SCOPE

This procedure shall apply to activities under QMS being dealt at organization, based on the situation and risk under consideration to achieve desirable outcomes.

3.0 RESPONSIBILITY & AUTHORITY

The overall authority to approve the Preventive actions - Director
Review of the preventive action & Its effectiveness- Management Representative
Implementing Risk Management – PL/PI/HoDs/Heads of Sections

4.0 PROCESS

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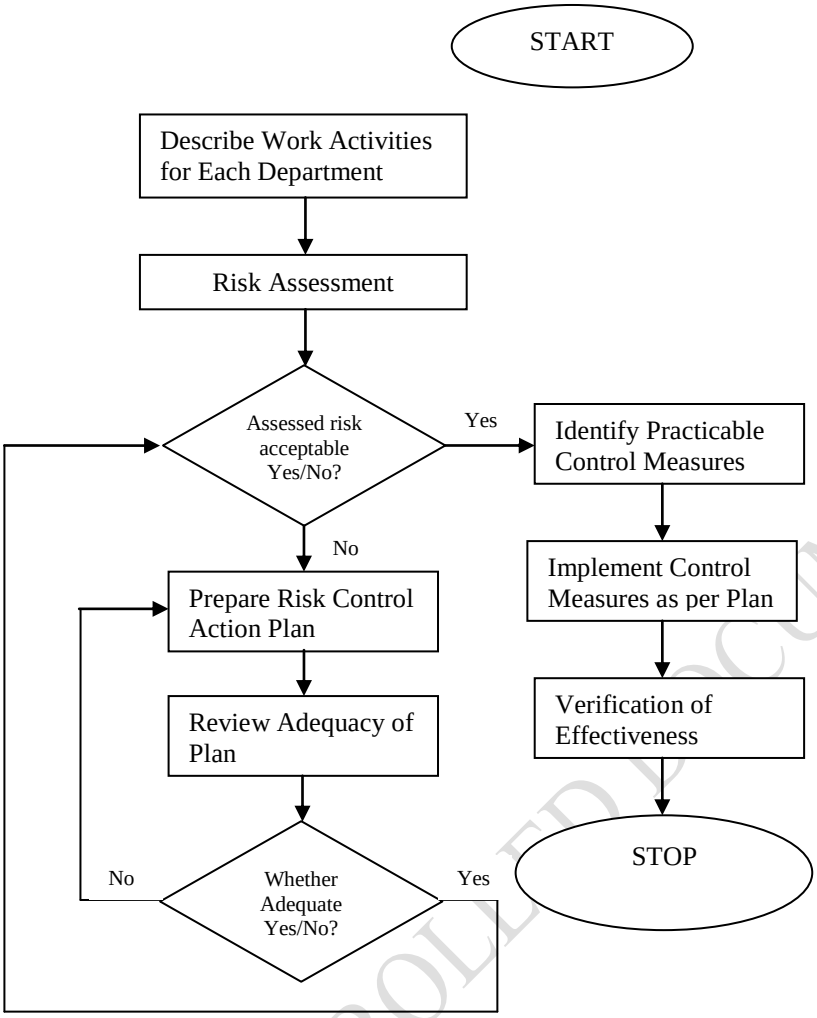


1.0 PURPOSE

To establish, implement, and maintain a documented procedure for Management Review of the Quality management system in the Institute

2.0 SCOPE

All the Review activities by the Top Management with regard to QMS in the Institute

3.0 RESPONSIBILITY & AUTHORITY

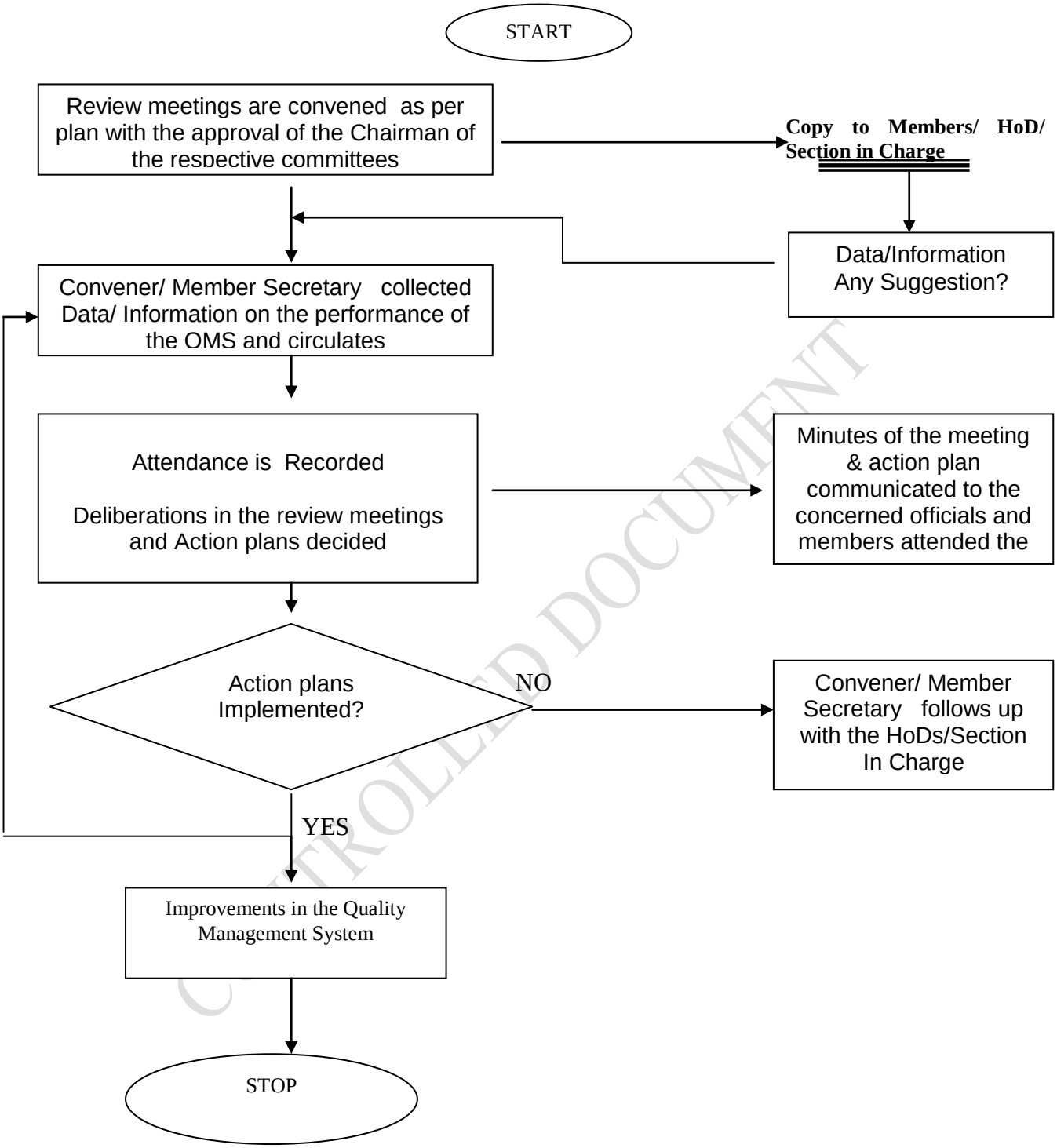
Activity	Responsibility	Authority for Approval
Planning / Convening Review meeting	Convener	Director/ Chairman of the commitee
Preparation of Agenda Notice & Communication	do	Do
Preparing Minutes & Communication	do	do
Participation & Deliberations in review meetings	Invitees	
Formulation of Action Plan	Convener	Director/ Chairman of the committee

4.0 PROCESS

4.1 Management Reviews are done in planned activity

4.2 the Following agenda points shall be discussed in such a manner so that all the agenda items are covered at least once in a year

Agenda / Review by >	QRT	RAC	IRC	IMC	MRC
Minimum Frequency	Once in five yrs	Once in a year	Once in a year	Twice in a year	Twice in a year (Preferably after Internal audits)
Convener	Member Secretary	Member Secretary	Member Secretary	Member Secretary	Management Representative
Approver	Chairman of Committee	Chairman of Committee	Chairman of Committee	Chairman of Committee	Director
a) The status of actions from previous management reviews	yes	yes	yes	yes	yes
b) Changes in external and internal issues that are relevant to the quality management system	x	x	x	x	yes
c) Information on the performance and effectiveness of the quality management system, including trends in:					
1) customer satisfaction and feedback from relevant interested parties;	x	x	x	x	yes
2) the extent to which quality objectives have been met;	x	x	x	x	yes
3) process performance and conformity of products and services;	yes	yes	yes	yes	x
4) nonconformities and corrective actions;	yes	yes	yes	yes	yes
5) monitoring and measurement results	yes	yes	yes	yes	x
6) audit results	x	x	x	x	yes
7) the performance of external providers	yes	yes	yes	yes	yes
d) The adequacy of resources	yes	yes	yes	yes	yes
e) The effectiveness of actions taken to address risks and opportunities	yes	yes	yes	yes	yes
f) Opportunities for improvement	yes	yes	yes	yes	yes



1.0 PURPOSE

To establish, implement, and maintain a documented procedure for conducting Scientific Research in the Institute

2.0 SCOPE

All the Scientific Research activities of the following divisions/Research Stations in the Institute:

- Crop Improvement Division
- Crop Production Division
- Crop Protection Division &
- Crop Chemistry & Soil Science Division
- Research Stations

3.0 RESPONSIBILITY & AUTHORITY

Activity	Responsibility	Authority for Approval
Initiation/formulation of Research proposal	PI	HoD/Head of Station
Review of Research Proposal	HoD/Head of Station /Director	Director, Chairman of the respective committee
Conducting Research	PI/Co-PI	Director
Review of progress	PI/HoD/Head of Station	Director, Chairman of the respective committee
Validation of Research findings	PI/HoD/Head of Station	Director
Verification of Research findings	HoD/Head of Station /Director	Director, Chairman of the respective committee

4.0 PROCESS

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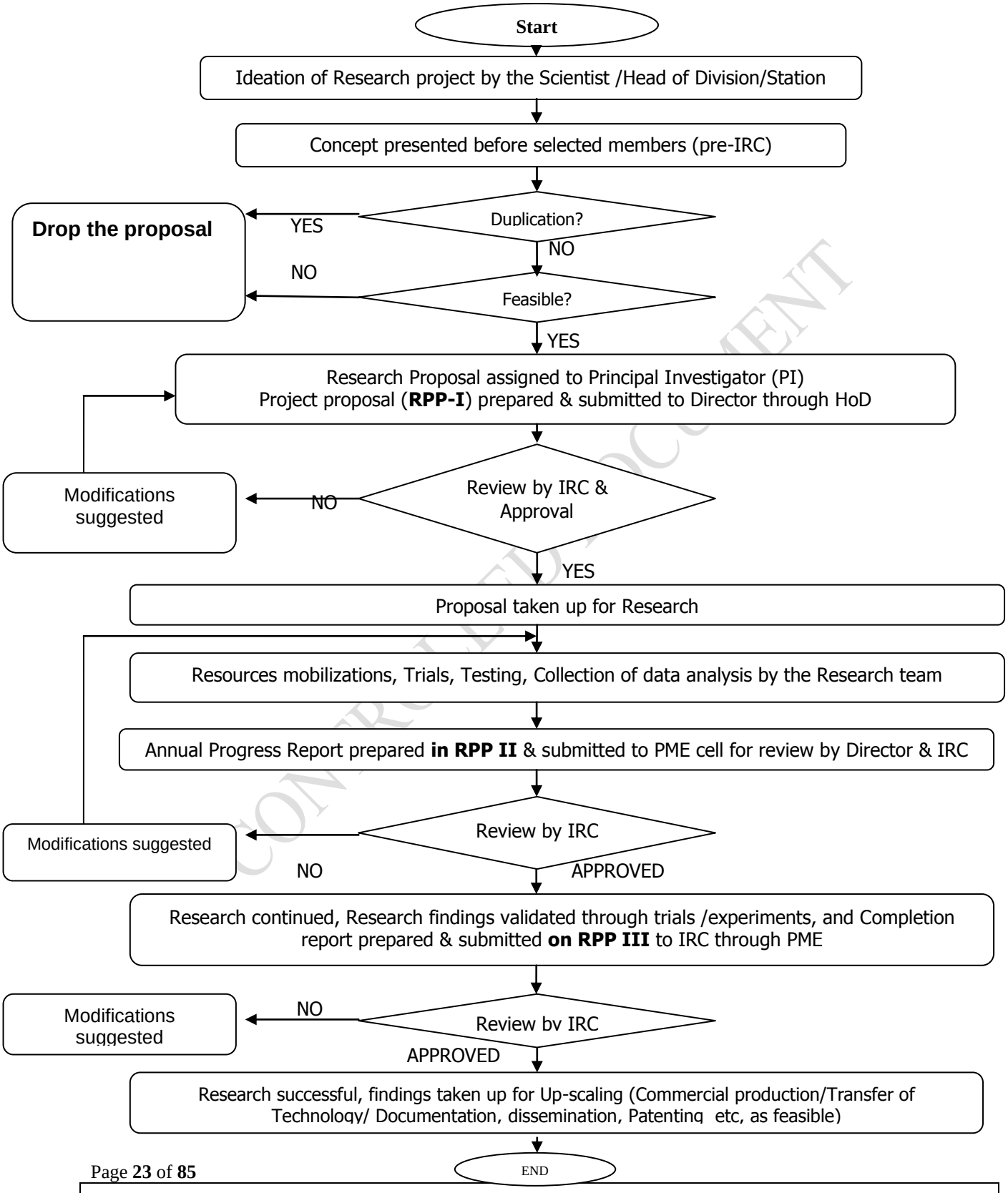
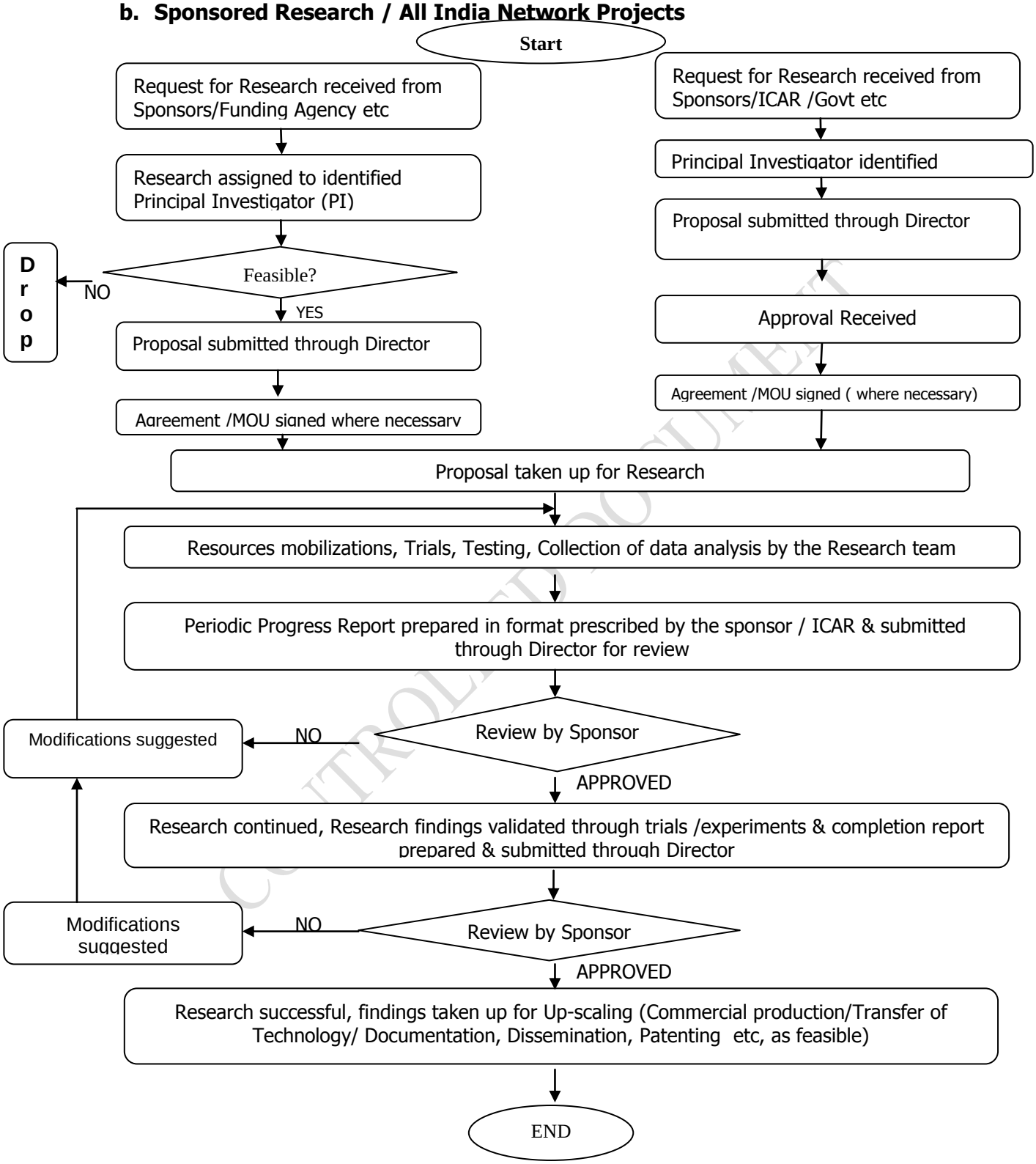
a. Research Projects Initiated by the Institute



b. Sponsored Research / All India Network Projects



1.0 PURPOSE

To establish, implement, and maintain a documented procedure for conducting Trainings in the Institute

2.0 SCOPE

All training activities conducted by the Institute

3.0 RESPONSIBILITY & AUTHORITY

Activity	Responsibility	Authority for Approval
Planning	Scientist (training co-ordinator)/HoD	Director
Preparation	HoD	Director
Conducting Training	Trainer(s)	Director
Feedback, analysis & evaluation	Scientist (training co-ordinator)/HoD	Director

4.0 PROCESS

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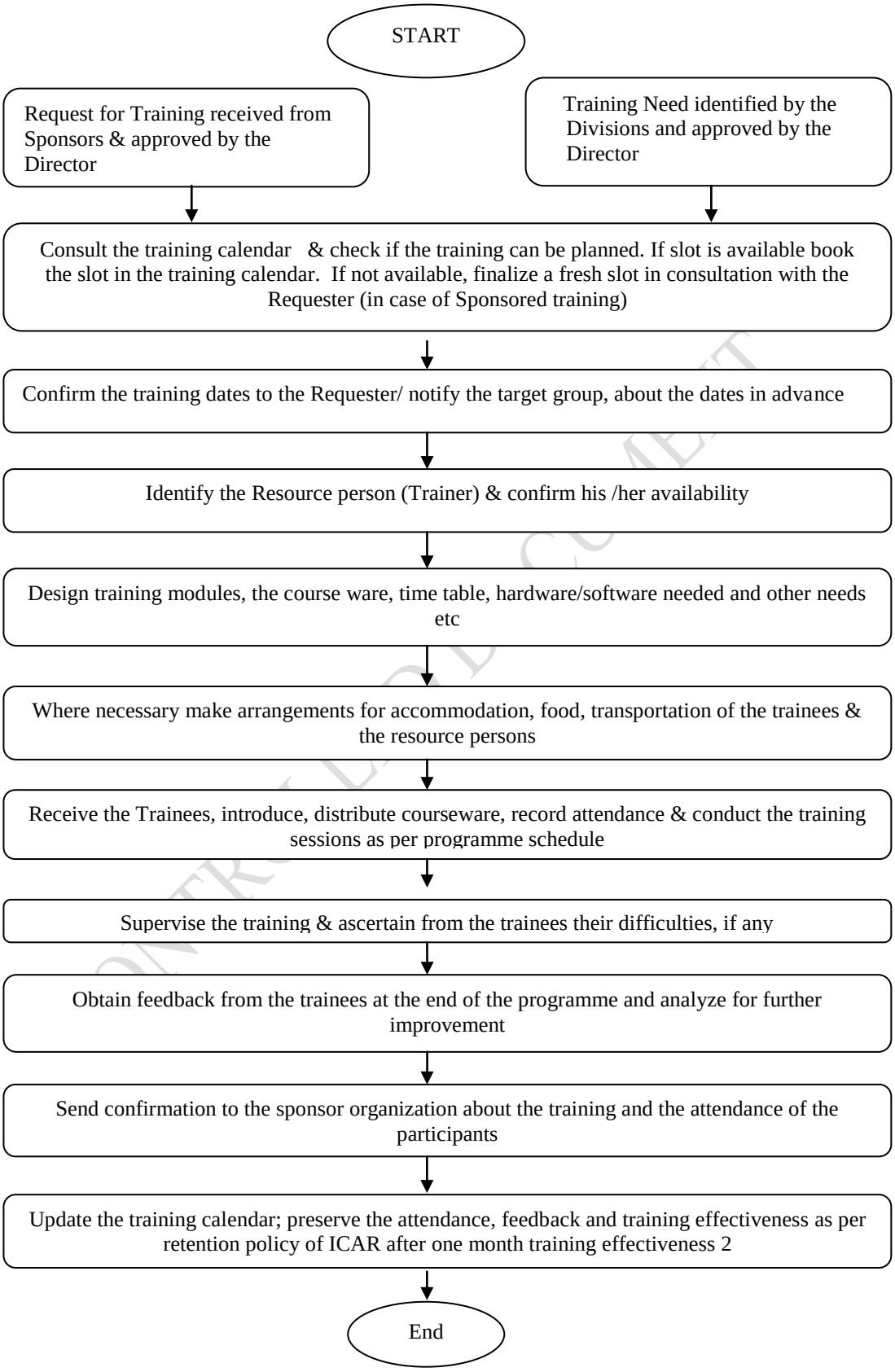
START
Request for Training received from Sponsors & approved by the Director
Training Need identified by the Divisions and approved by the Director
Consult the training calendar & check if the training can be planned. If slot is available book the slot in the training calendar. If not available, finalize a fresh slot in consultation with the Requester (in case of Sponsored training)
Confirm the training dates to the Requester/ notify the target group, about the dates in advance
Identify the Resource person (Trainer) & confirm his /her availability
Design training modules, the course ware, time table, hardware/software needed and other needs etc
Where necessary make arrangements for accommodation, food, transportation of the trainees & the resource persons
Receive the Trainees, introduce, distribute courseware, record attendance & conduct the training sessions as per programme schedule
Supervise the training & ascertain from the trainees their difficulties, if any
Obtain feedback from the trainees at the end of the programme and analyze for further improvement
Send confirmation to the sponsor organization about the training and the attendance of the participants
Update the training calendar; preserve the attendance, feedback and training effectiveness as per retention policy of ICAR after one month training effectiveness 2
End

1.0 PURPOSE

To establish, implement, and maintain a documented procedure for review, Updation and content management of the website of the Institute

2.0 SCOPE

All the contents of the website available in public domain

3.0 RESPONSIBILITY & AUTHORITY

Activity	Responsibility	Authority for Approval
Request for Updation of contents	HoD/ SAO/ AAOs	Director
Updation	AKMU-in- charge	Director
Periodic Review of contents, navigation & updation	HoD/ SAO/ AAOs & AKMU in charge	Director
Access control	AKMU in charge	Director

4.0 PROCESS

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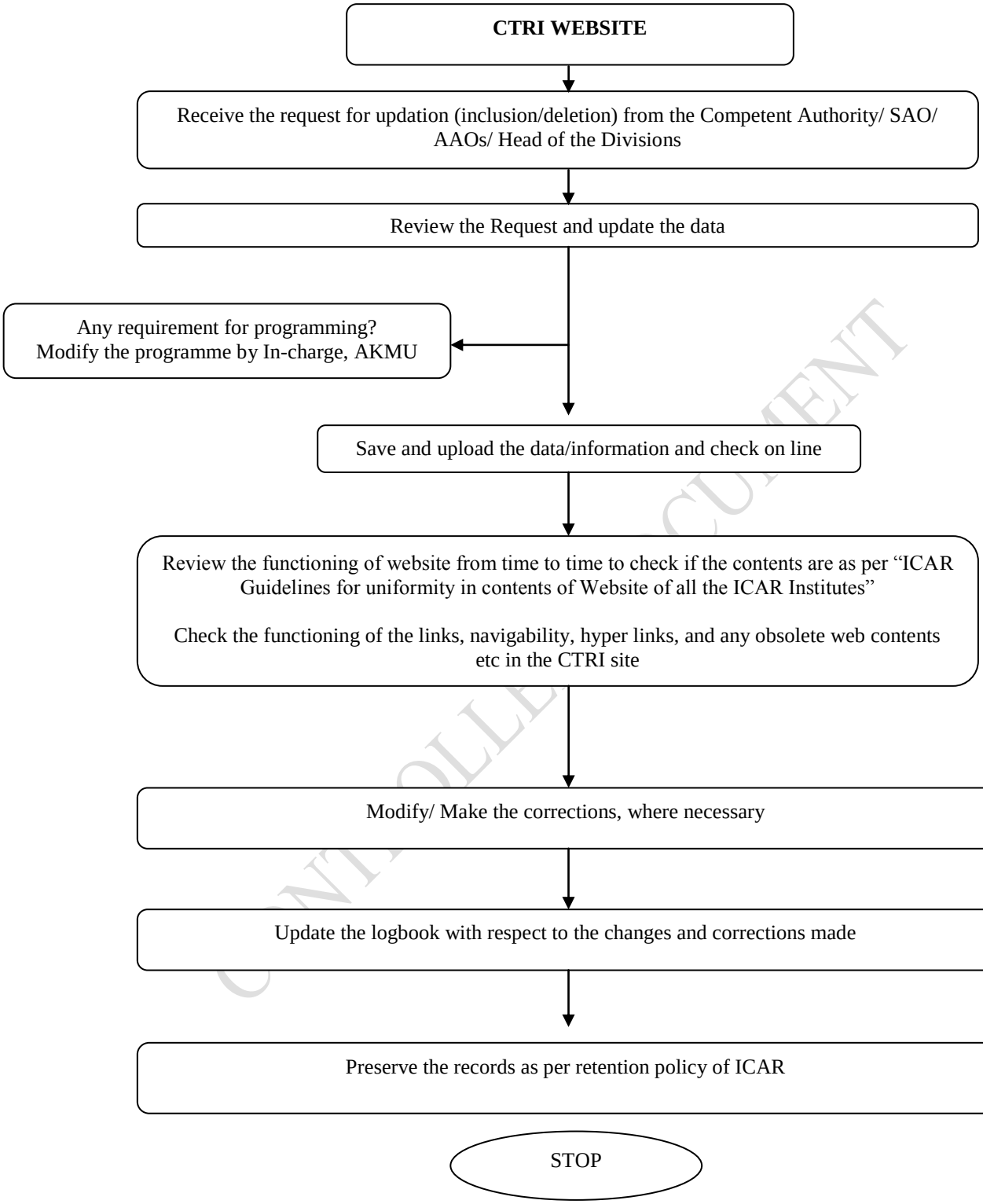
CTRI WEBSITE
Receive the request for updation (inclusion/deletion) from the Competent Authority/ SAO/ AAOs/ Head of the Divisions
Review the Request and update the data
Any requirement for programming?
Modify the programme by In-charge, AKMU
Save and upload the data/information and check on line
Review the functioning of website from time to time to check if the contents are as per "ICAR Guidelines for uniformity in contents of Website of all the ICAR Institutes"
Check the functioning of the links, navigability, hyper links, and any obsolete web contents etc in the CTRI site
Modify/ Make the corrections, where necessary
Update the logbook with respect to the changes and corrections made
Preserve the records as per retention policy of ICAR
STOP

1.0 PURPOSE

To establish, implement, and maintain a documented procedure for updating data & information in Permisnet

2.0 SCOPE

Data & information on personal, professional and referential attributes of personnel of the Institute

3.0 RESPONSIBILITY

Activity	Responsibility
Updation	Nodal Officer, PERMISnet
Periodic Review	Nodal Officer
Access control	ICAR-IASRI

4.0 RATIONAL

Personnel Management Information System Network (PERMIS*net*-II) for ICAR has been redesigned and developed at Indian Agricultural Statistics Research Institute (IASRI) using .NET technology and has been enriched with new parameters in the database and additional modules for effective data management and reporting. PERMIS*net*-II has vast Information coverage as it contains personal, professional and referential attributes of personnel along with information on plan wise cadre strength and institutional parameters for different categories of ICAR institutions.

The System provides different access rights to Research Management Personnel (RMP), Nodal Officers and Individual users of the system. RMP have the privilege to view the information at different levels which ranges from single institute to compiled reports for all ICAR institutions and Subject Matter Divisions. Nodal Officers have access to data management module along with exhaustive report modules. Selective Reports provides the flexibility to generate reports at different levels on user selected parameters. Individual users have the right to view, print and update their information

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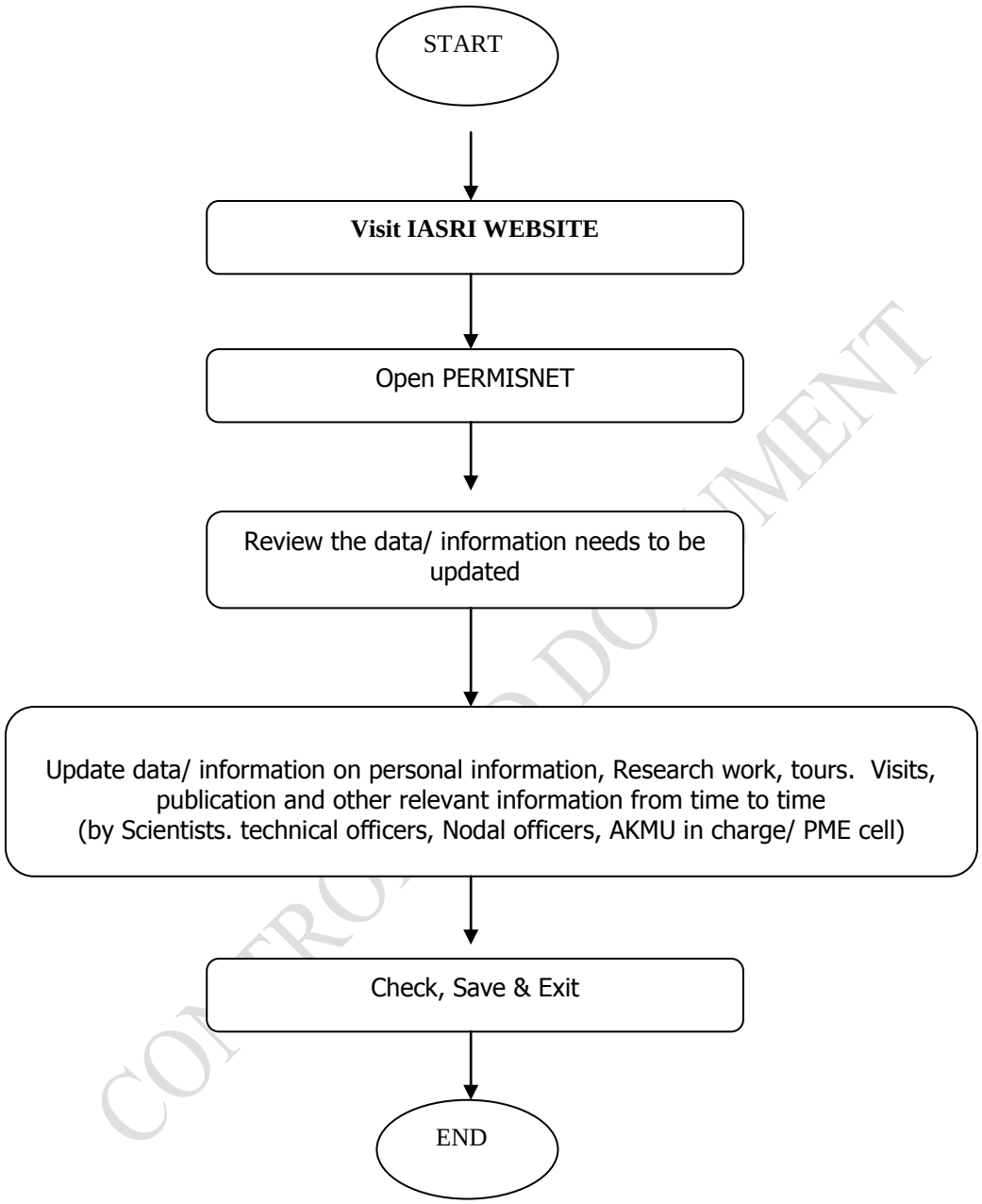


1.0 PURPOSE

To establish, implement, and maintain a documented procedure for updating data & information in PIMS-ICAR to facilitate on-line monitoring and concurrent evaluation of the ongoing research projects

2.0 SCOPE

All research projects conducted in the Institute

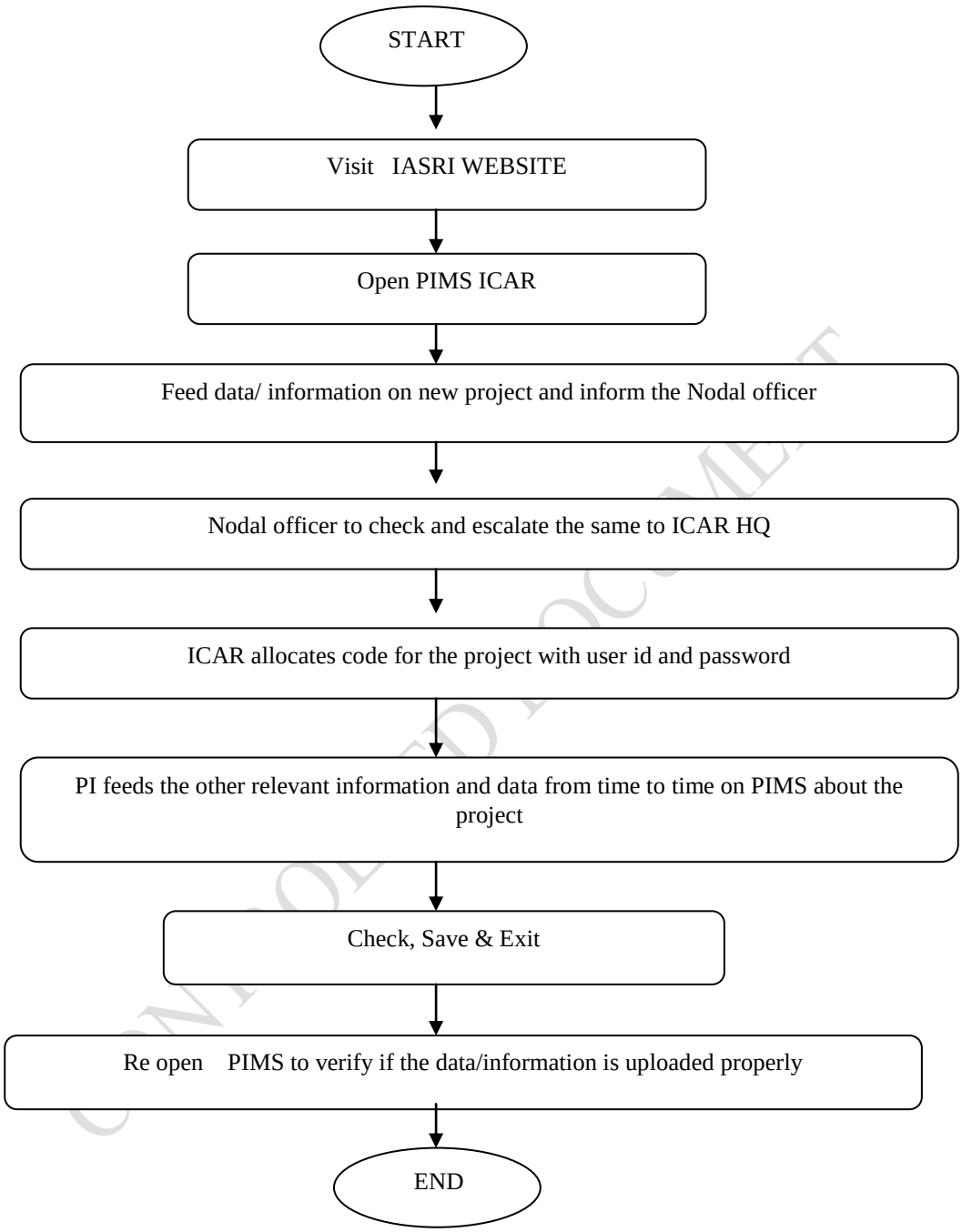
3.0 RESPONSIBILITY

Activity	Responsibility
Updation	Researcher/PI
Periodic Review	Nodal Officer, PIMS-ICAR
Access control	ICAR-IASRI

4. RATIONAL

The Project Information & Management System of ICAR (PIMS-ICAR) has been designed and developed at Indian Agricultural Statistics Research Institute (IASRI)with objectives to check duplication in research projects both at divisional as well as inter divisional level, for on-line monitoring and concurrent evaluation of the ongoing research projects and for other management requirements. The system is accessible to System Administrators and other class of users like Principal Investigators, Nodal Officers, Head of the Divisions, Directors, ADGs, DDGs and Director General of ICAR. PIMS-ICAR has the following modules:

Data Management **Duplication Checking** **Monitoring** **Reports & Queries** & **Administration**


START
Visit IASRI WEBSITE
Open PIMS ICAR
Feed data/ information on new project and inform the Nodal officer
Nodal officer to check and escalate the same to ICAR HQ
ICAR allocates code for the project with user id and password
PI feeds the other relevant information and data from time to time on PIMS about the project
Check, Save & Exit
Re open PIMS to verify if the data/information is uploaded properly
END

1.0 PURPOSE

To establish, implement, and maintain a documented procedure for updating data & information in HYPM to enter proposed targets for the coming half-year and achievements of the completed half-year independently with respect to Research, Teaching, Training, Extension and Other Prioritized Activities.

2.0 SCOPE

All research projects conducted at the Institute

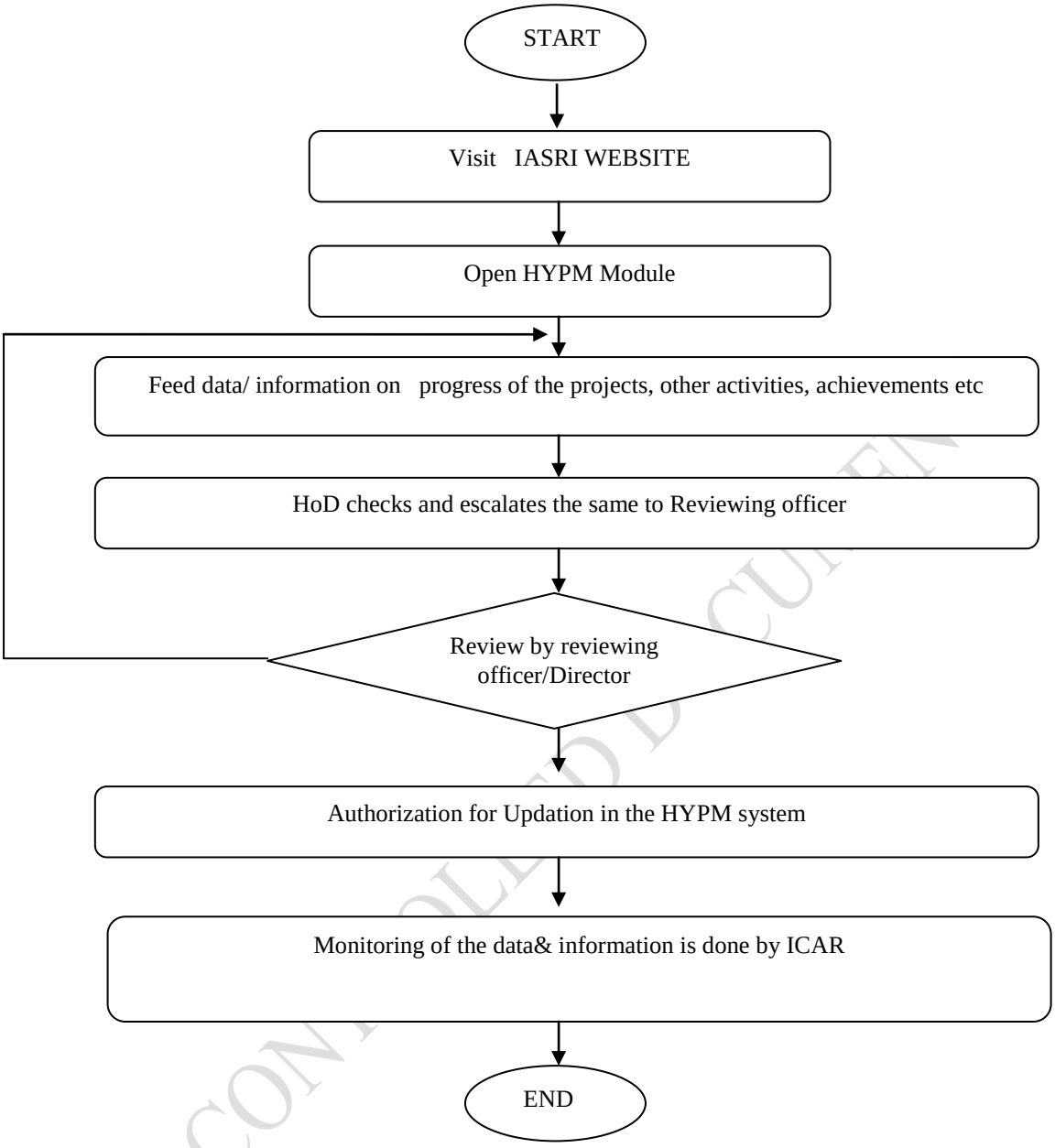
3.0 RESPONSIBILITY

Activity	Responsibility	Approval
Updation	Researcher/PI	HoD as Reviewing officer/ Director as Reporting officer
Periodic Review	Nodal Officer, HYPM/Reporting officer/Reviewing officer	Director
Access control	ICAR-IASRI, New Delhi	

4. RATIONAL

Half-Yearly Progress Monitoring (HYPM) of the Scientists in ICAR is done though a web based software, designed and developed at IASRI, New Delhi with a view to ensure more objective evaluation .The HYPM is being maintained at the Central Server of IASRI, New Delhi and is accessible at http://hypm.iasri.res.in/. Authenticated access (user id & password) has been given to all concerned scientists, reporting officers, reviewing officers and research managers. Facility has been provided to enter proposed targets for the coming half-year and achievements of the completed half-year independently with respect to Research, Teaching, Training, extension and Other Prioritized Activities.

The Reporting Officer has access to the Proposed Targets & Achievements details submitted by all concerned scientists. He/She may add his/her remarks and give recommendations on the basis of the progress reports/inputs submitted by the concerned Scientists every half year (August-September & October - March)



1.0 PURPOSE

To establish, implement, and maintain a documented procedure for Work flow management of the Laboratories in the Institute

2.0 SCOPE

In house tests done at the laboratories in the Institute

3.0 RESPONSIBILITY

Activity	Responsibility
Routine management	Lab in Charge
Supervision	HoD/ Lab in Charge
Routine maintenance, upkeep	Lab Technician
Testing & record management	Lab Technician

4.0 PROCESS

Next Page

Start

Receive the test request and the sample from the Scientist / Researcher

Review the requirements (of test) and the sample quantity, condition etc

Make entry of the sample details in the Sample Register, assign a sample number for the sample and write the sample number on the sample clearly

Store the samples in the designated area/tray etc and avoid mix up or contamination

Before testing, select the appropriate method, test equipments, glass ware, monitoring & measuring equipment

Prepare fresh Standards as required and write the name and date of preparation on the container, equipments, glass ware, Monitoring & Measuring equipment

Run the equipment with controls / calibrators/ standard reference materials/ certified material as required and record the data on the Lab book with date, time, and the experiment in a fresh page

Note down the environment data like room temperature, relative humidity etc on the on the Lab book, wherever necessary

Label the containers with lab number assigned

Perform the test as per validated method mentioned in the literature and record all the primary data like on the Lab book.

Do the necessary calculation using a calculator/table and write the same in the Lab book after rechecking. Wherever necessary, correlate the test data/ results obtained with the environmental data like room Temp& RH of any other factor used and record it. Repeat the test /experiment in case of doubt

Preserve & retain the primary sample (as per sample retention policy) in the designated area for future reference

Transfer the Test results in the Lab register against the sample No. and recheck.

Copy the Test results in the Test report & write the details of the sample reference, date of sample, date of tests, method, units of measure, sample conditions, the test request reference etc, crosscheck and issue the test report /certificate under signature of the Lab in-charge

The issued Test report forwarded to the concern through HoD

END

1. Establish and Follow Procedures

Develop basic procedures, for example, to receive, identify, assign, cue, test, report and dispose of samples.

Samples should not left unassigned in a receiving area; they should be logged in, given a unique identification number assigned to an analyst or analytic team within one to two working days of arrival at the laboratory.

Post-analysis sample retention & disposition should also follow an orderly process.

2. Maintain Your Proficiency

Education and apprentice training provide the foundation for and give a snapshot of an analyst's capability, but they do not guarantee a sustained capability. Periodically, analysts should be trained and/or participate in proficiency testing, which shows that the analyst maintains capability over time.

That gives customers and stakeholders a greater level of assurance that the laboratory is maintaining its ability to perform a test method in a manner that produces valid results.

3. Validate Methods

For testing laboratories, the goal in selecting a test method is to choose one that produces an accurate result within an acceptable uncertainty that can be reproduced by multiple analysts. Test methods originate from various sources: standards development Institutes, equipment and instrument manufacturers, universities, consortia and other Institutes and individuals. If you develop new or modify existing methods to fit specific test needs you encounter, make sure to validate the method and document. Successful validation requires that the results of multiple runs are all within an acceptable uncertainty value, that is, a statistically acceptable margin of error.

4. Use Traceable Standard Reference Materials/ Certified Reference Materials

Reference material uses include validating methods that help ensure accurate data from individual test runs, calibrating instruments and assessing analyst proficiency. NIST standard reference material is considered the "gold standard" for that material.

Apart from NIST SRM Standards from other Institutes are often valuable. Surplus test items may be retained and used as reference materials, particularly by laboratories that perform repetitive testing of an item and have unusual analytical requirements. In all cases, maintain high quality reference materials to maximize their usable life, and when you find a good one, don't let it out of your sight.

5. Run in Duplicate

The purpose of duplicate (sometimes triplicate) testing is to add to the confidence that the test run has produced good data for the test object. Replicate data that is in agreement is a good measure of method reproducibility but does not prove data accuracy (validity). If the same test run includes a reference material, then the confidence in the validity of the data for the test object is significantly raised. If the object's replicate test data is not in agreement, one or more of the data points may be invalid; the object should be retested and/or the procedure should be reviewed.

6. Keep Original Data

Whether data is first recorded in electronic/digital form or in a notebook or on the closest piece of scrap paper, keep it.

Laboratory should address how long test results will be maintained, which depends on the customer needs and the potential for legal actions. For this time period, laboratories should be able to preserve original data and retrieve, either by maintaining equipment or by transferring data to new media. (The golden rule is: *if you can't access a document, you didn't document it sufficiently*.)

7. Assign Instruments and Equipment to Analysts

Scientific instruments are temperamental tools; they need individual attention. The more sophisticated the instruments are, the more temperamental they can become, particularly if labeled research grade. When an instrument is used mainly by one staff member, usage time, calibration, maintenance and other issues are minimized. However, a good practice is to formally assign that analyst the responsibility for keeping the instrument operational and for alerting management to malfunctions. When an instrument is used by multiple staff members, assign these responsibilities to a primary user, who should schedule usage time for other staff members, provide training and mentoring to new users, ensure that any instrument control charts are current and ensure that calibration and maintenance occur on schedule.

If an instrument is out of order, the primary user should inform the laboratory management to call for a repair, and see that the repair is completed.

The primary user should also alert other users about the problem, perhaps with a simple, conspicuous "**out of service**" tags on the apparatus.

8. Calibrate Instruments

Instrument calibration is necessary to confirm that an instrument is working correctly before performing a test method, whether a simple balance or a sophisticated analyzer.

9. Use Control Charts

Control charts are excellent tools for several uses, including those already noted. A control chart enables a laboratory to track the results of a reference material and/or control sample at the end of each test run. It gives the laboratory a snapshot of test run quality and a picture of the quality of the laboratory's results for that particular test over time.

A Shewhart control chart plots individual test results for a reference material or control sample over time. While Shewhart set a 3-sigma deviation from the mean as acceptable control limits, control limits can be set on a case-by-case basis.

10. Document Everything and Maintain Good Records

Remember The golden rule of, "If you didn't document it, you didn't do it,"

Documenting records in an organized manner benefits the Laboratory. More important, when test results have to be defended, these documents are critical.

The need for documentation occurs at different points while conducting a test, so good laboratory practice places continuing responsibility on the individual analyst to initiate and maintain documents. The person who performs a test is responsible for documenting it and storing the record in its proper place.

1. Do not forget to wear Personal Protective Equipment (PPE)

Chemicals are often hazardous, and you can contaminate a sample when deciding to work with bare hands. Even if you do everything humanly possible to reduce the risk, there will always be a chance of something dangerous spilling, splashing or exploding onto your skin or clothes. Wearing proper PPE ensures that in the rare event of an accident you will be protected. PPE is inexpensive, durable and can be easily replaced, so wear your PPE every time.

2. Do not run a Control sample only once.

Controls serve two very important purposes. They show whether or not your chemistry worked appropriately and they serve as the basis by which you can make a definitive comparison between groups of samples. Consider running an experiment with a control. Run a control sample every time so you know.

3. Donot Update the laboratory notebook with only abbreviated details.

Often, The Researcher will revisit a project to review data before publication, rerun the experiment for validation or compare one experiment to another. Always making complete entries helps you to make sense of what you did in the past Give yourself a helping hand and be thorough with everything you write in your laboratory notebook.

4. Never forget to write anything down.

At the end of a project, the Supervisor/the Researcher may want to review procedures and data from beginning to end, so documentation will be helpful. Remember the golden rule, ***"If it wasn't written down, it probably didn't happen."***

5. Never forget to calibrate your equipment.

An uncalibrated machine can measure fantastical values. And if you calibrate it, but select the wrong measurement mode, you can run into a situation where you grossly under- or over-measure. Before using any piece of equipment, take a moment to ensure that it is properly calibrated first.

6. Do not Use tools or equipment that are "too big" for the job.

A 100ul volume can be measured with either a 100ul or 1000ul pipette, but the exact measurement between those two pipettes will differ. Even with a 1% error, the difference in volume pipetted could be 1ul or 10ul, respectively (+/- 10X). Every instrument has its limitations. Keep variability within your experiment low by selecting instruments that are the right size for your measurements.

7. Never fail to Work through your Calculations & units math only once

Practice the habit of double- and triple-checking your work. Before mixing up that expensive batch of media, review units and calculations to see that your numbers make sense.

8. Never Use samples before checking their quality

Chemical carryover of chloroform, phenol and ethanol can halt reactions in other experiments. Checking the integrity and quality of your samples through spectroscopy, gels or other means is a simple way to find out if you need to clean up before moving on. Strive to generate the highest quality samples that you can, above and beyond any noted lab- and assay-minimum requirements.

9. Never Put off required refresher training.

One may feel that periodic refresher training may seem redundant, yet it serves a very important purpose: to ensure that all staff are on the same plain when it comes to safety, conduct and responsibility. This training keeps important topics fresh in your mind. Who knows, one day you may draw upon it to help a colleague to return to good laboratory practices.

10. Never Forget to Communicate with your lab-mates regularly.

The road to a successfully completed Research project is filled with collaboration and communication. The more you communicate with those around you, the better chance you have of accommodating everyone's needs.

1.0 PURPOSE

To establish, implement, and maintain a documented procedure for Work flow management of the Library of the Institute

2.0 SCOPE

The Library & reading Room in the Institute

3.0 RESPONSIBILITY

Activity	Responsibility
Routine management	Library in charge
Overall supervision	Library in charge
Approval and decision making	Director

4.0 PROCESS

Next Page

START

Search & Review the information received on new publication on a continuous basis

↓

Any new publication? Send the information to the respective Researcher / domain expert for Review comments

↓

If the Researcher indicate the need to purchase. Subscribe the same, put up the proposal before the Library committee / competent authority for approval

↓

If approved, contact the publisher and place order. Mention the requisite number of copies required

↓

On arrival, check the material received for pagination, damage, printing quality

↓

Catalogue the publication as per Dewey Decimal Classification (DDC) for accessioning. Identify if the publication is Issuable/ for Reference purpose (not to be issued)

↓

Label the publication, stamp, prepare & fix issue card & stack the publication in the respective shelf

↓

Enter the details of the book/periodical in the computerized library management system

↓

Include the book/journal in the list of new arrival for notification of the users

↓

Inform the Researcher about the arrival if he had requested for the book/publication

↓

Issue the book as per Issue Policy of the library. Send reminder to the borrower if not returned

↓

Always return the books /reports/ journals / periodicals in their respective place (shelf/rack etc)

↓

Display the library rules & regulations for the users

↓

Organise arrangement for preservation (pest control etc) of the books & periodicals of the library at periodical interval and wherever necessary mend the books/publications

↓

Keep a visitors book with the Library in charge & notify. review the comments and write the action taken

↓

Always make sure that the library is kept clean

END

1.0 PURPOSE

To establish, implement, and maintain a documented procedure for review and monitoring of All India Network Projects

2.0 SCOPE

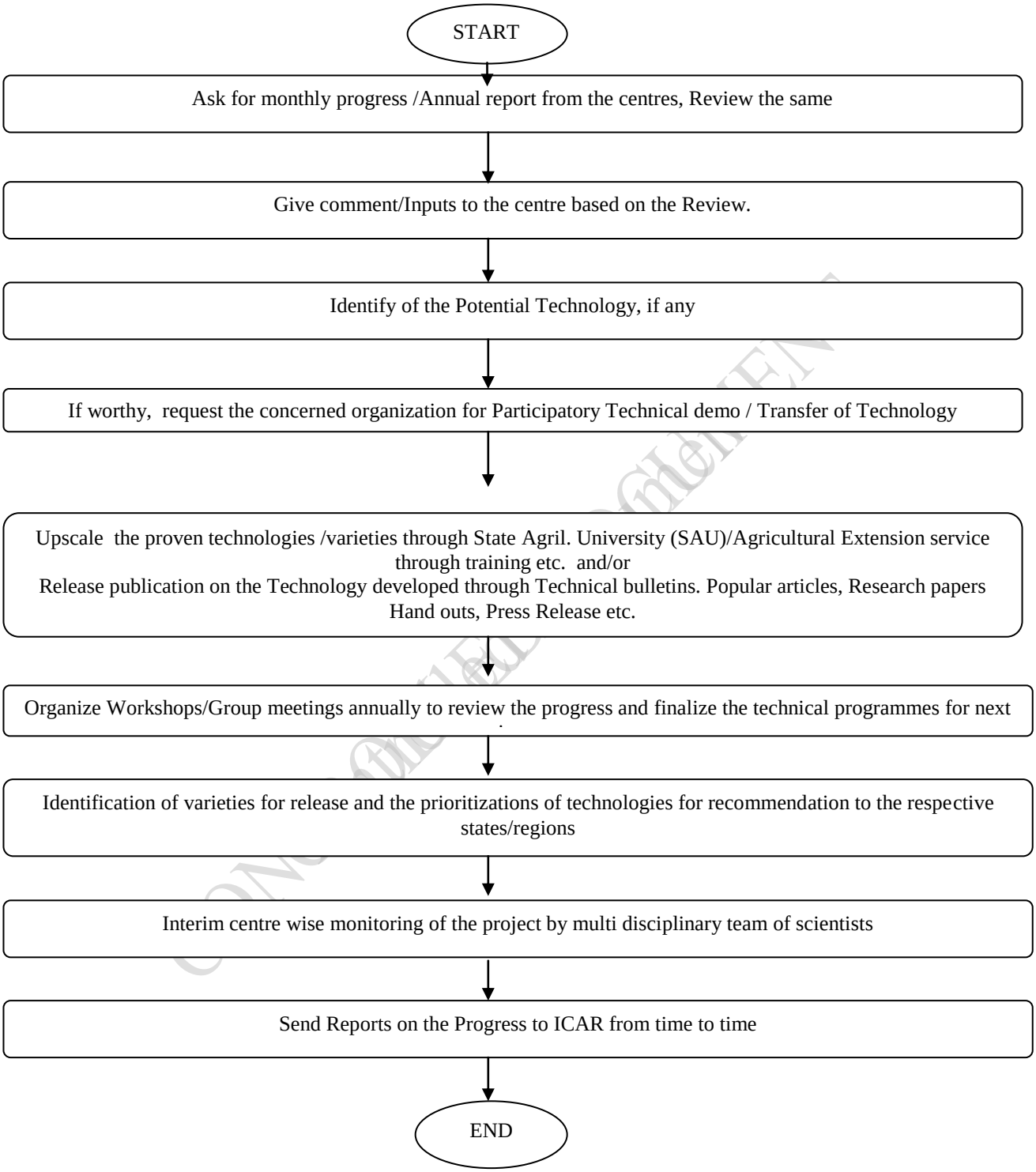
All India Network Projects on Tobacco

3.0 RESPONSIBILITY

Activity	Responsibility	Approval
Review & monitoring	Nodal Officer, AINP/Principal Investigator/Scientist in Charge of the respective AINP Centre	Director

4.0 PROCESS

Next Page


START
Ask for monthly progress /Annual report from the centres, Review the same
Give comment/Inputs to the centre based on the Review.
Identify of the Potential Technology, if any
If worthy, request the concerned organization for Participatory Technical demo / Transfer of Technology
Upscale the proven technologies /varieties through State Agril. University (SAU)/Agricultural Extension service through training etc. and/or
Release publication on the Technology developed through Technical bulletins. Popular articles, Research papers Hand outs, Press Release etc.
Organize Workshops/Group meetings annually to review the progress and finalize the technical programmes for next
Identification of varieties for release and the prioritizations of technologies for recommendation to the respective states/regions
Interim centre wise monitoring of the project by multi disciplinary team of scientists
Send Reports on the Progress to ICAR from time to time
END

1.0 PURPOSE

To establish, implement, and maintain a documented procedure for Skill development of the Scientists engaged at Institute.

2.0 SCOPE

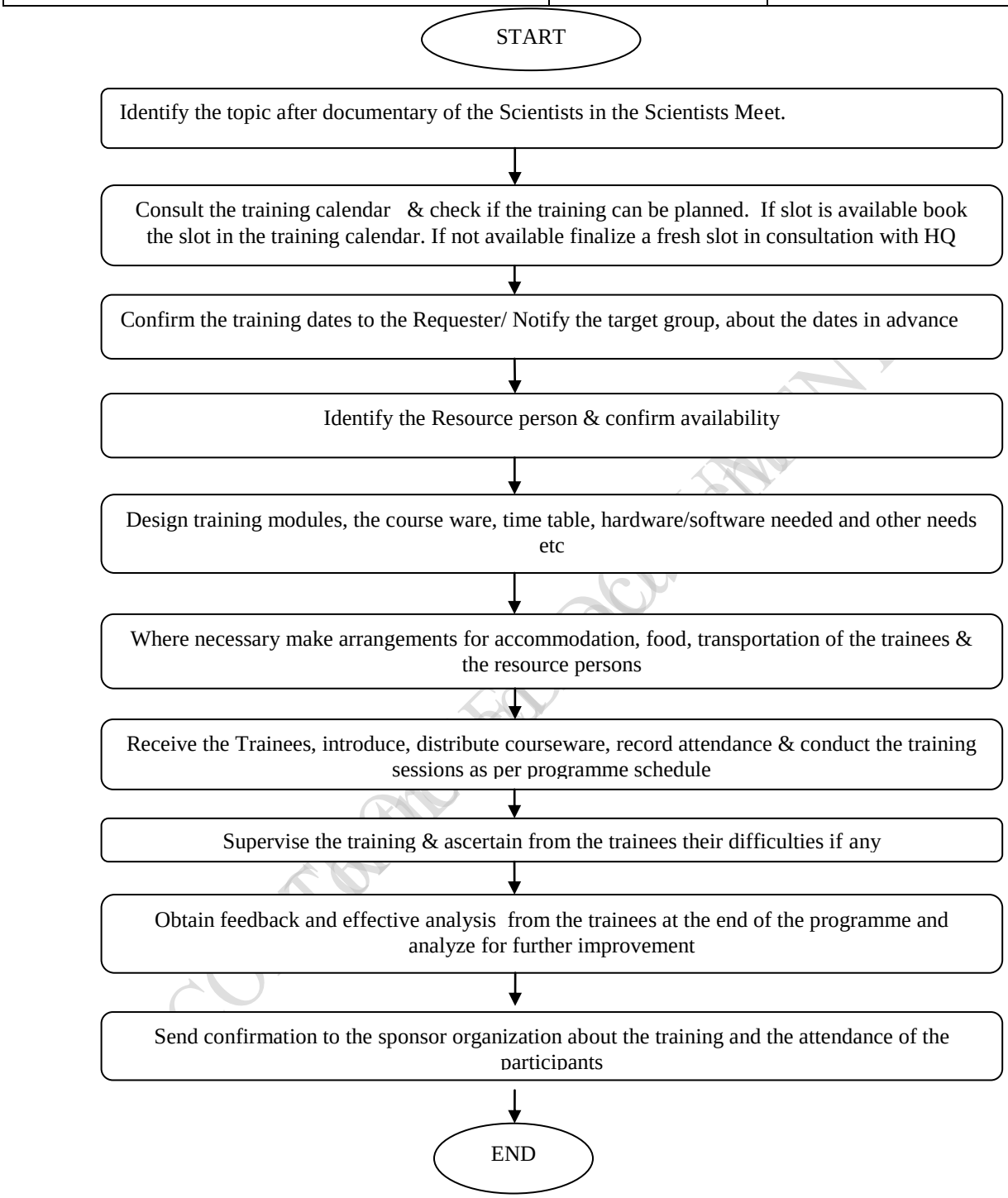
CTRI and its Research Stations

3.0 RESPONSIBILITY

Activity	Responsibility	Approval
Coordination	Nodal Officer, HRD	Director

4.0 PROCESS

Next page


START
Identify the topic after documentary of the Scientists in the Scientists Meet.
Consult the training calendar & check if the training can be planned. If slot is available book the slot in the training calendar. If not available finalize a fresh slot in consultation with HQ
Confirm the training dates to the Requester/ Notify the target group, about the dates in advance
Identify the Resource person & confirm availability
Design training modules, the course ware, time table, hardware/software needed and other needs etc
Where necessary make arrangements for accommodation, food, transportation of the trainees & the resource persons
Receive the Trainees, introduce, distribute courseware, record attendance & conduct the training sessions as per programme schedule
Supervise the training & ascertain from the trainees their difficulties if any
Obtain feedback and effective analysis from the trainees at the end of the programme and analyze for further improvement
Send confirmation to the sponsor organization about the training and the attendance of the participants
END

1.0 PURPOSE

To establish, implement, and maintain a documented procedure for representing ICAR-CTRI & AINP while participating in interface meetings of Ministry and others

2.0 SCOPE

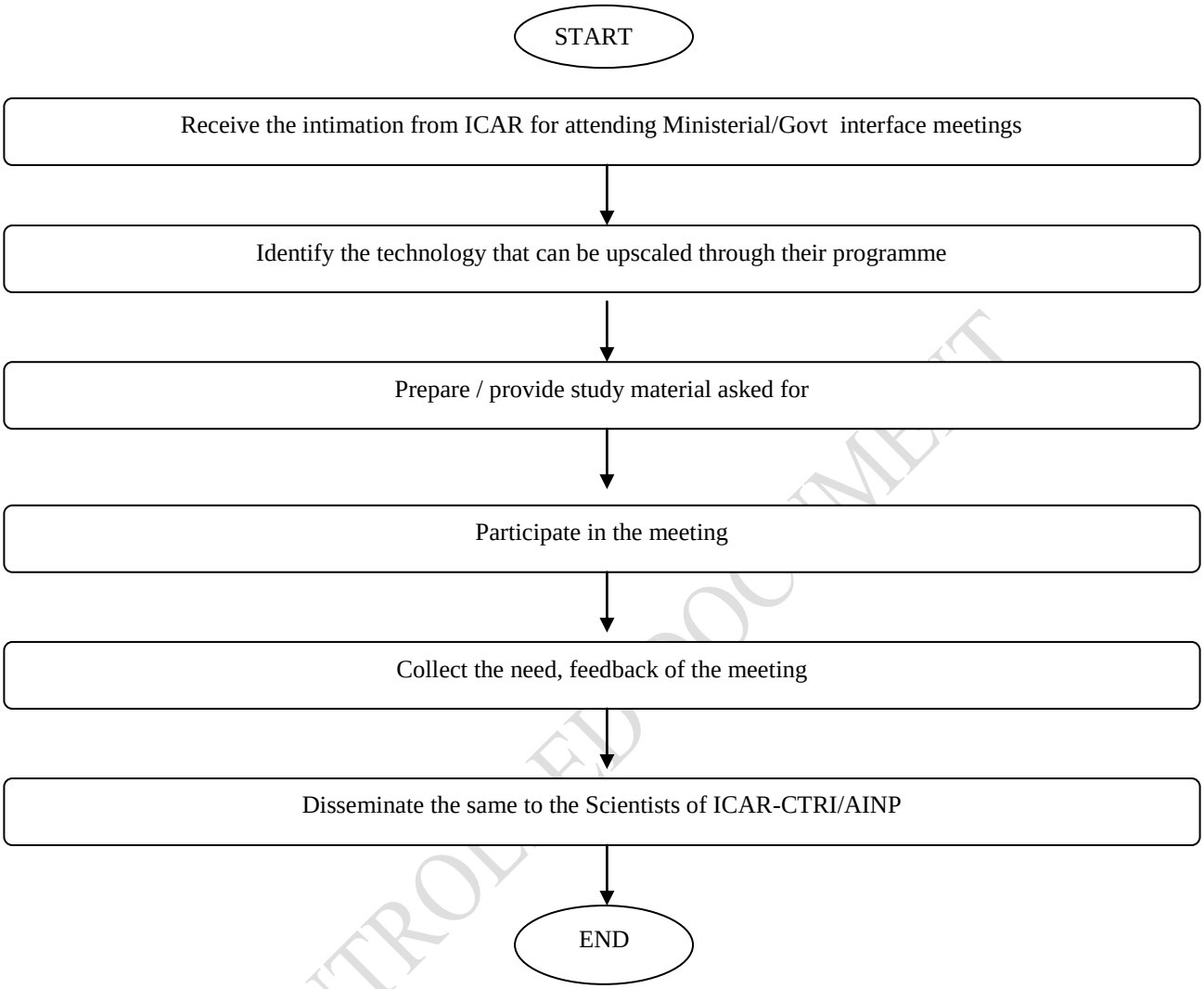
ICAR-CTRI and its research stations, and All India Network Projects (AINP) on Tobacco

3.0 RESPONSIBILITY

Activity	Responsibility	Approval
Coordination	Nodal Officer, PME/Nodal Officer, AINP	Director

4.0 PROCESS

Next page



1.0 PURPOSE

To establish, implement, and maintain a documented procedure for representing ICAR-CTRI & AINP and Participation in regional coordination meeting of ICAR, line departments, State Agril universities (SAU) etc.

2.0 SCOPE

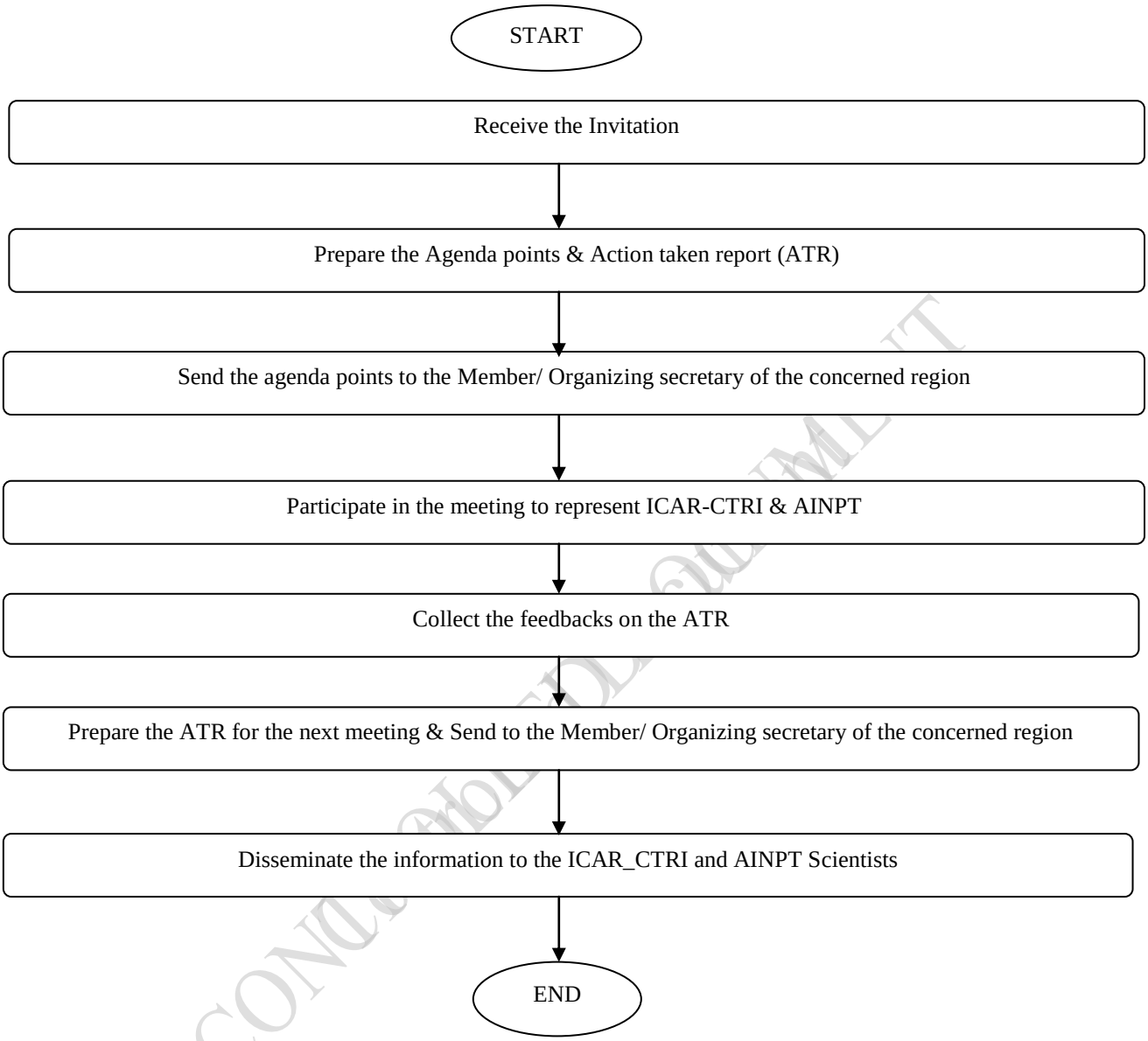
ICAR-CTRI and its Research Stations, and All India Network Projects on Tobacco

3.0 RESPONSIBILITY

Activity	Responsibility	Approval
Coordination	Nodal Officer, PME/Nodal Officer, AINP	Director

4.0 PROCESS

Next page



1.0 PURPOSE

To establish, implement, and maintain a documented procedure for handling of Parliament questions received by the Institute

2.0 SCOPE

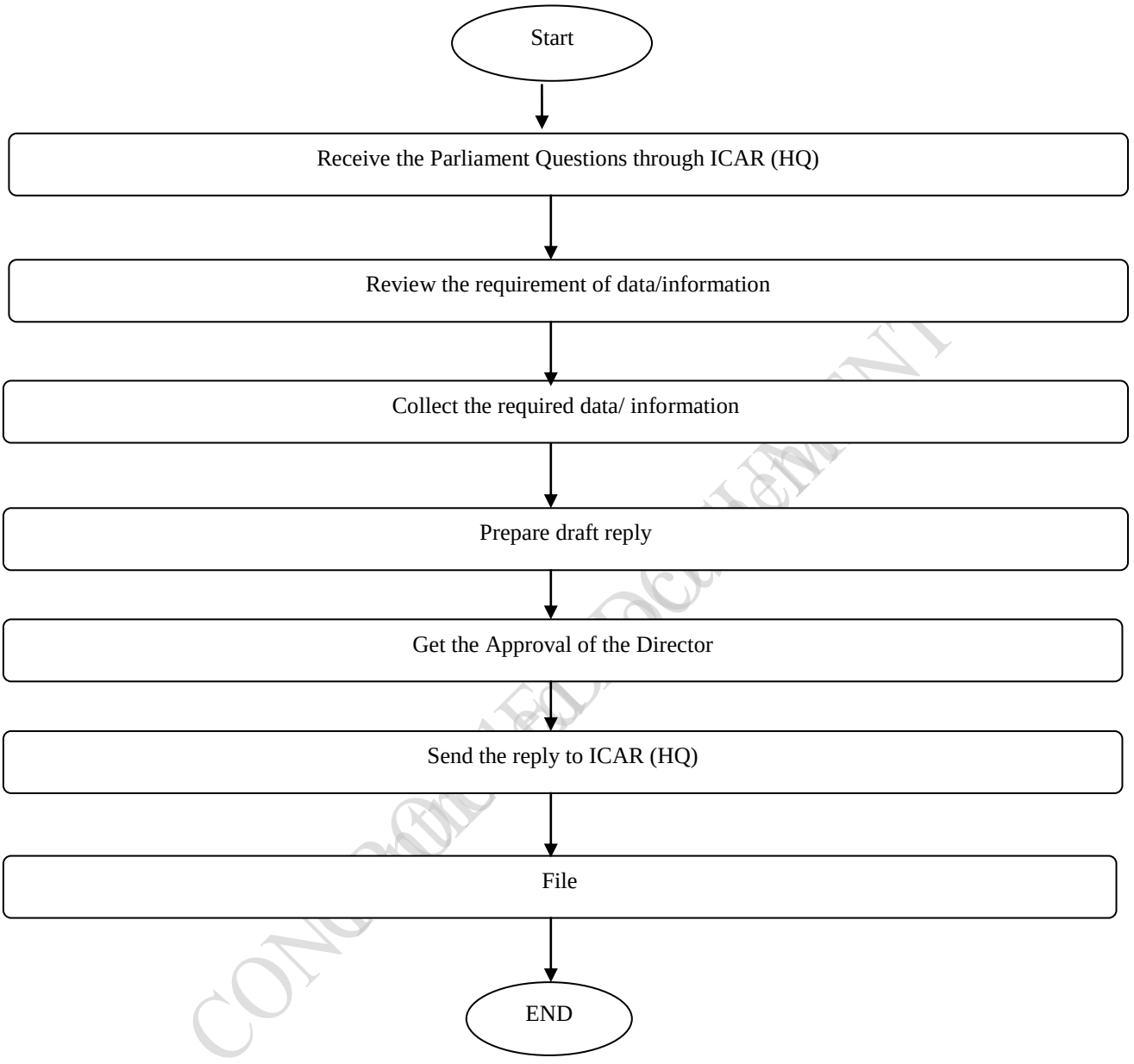
All Starred & un-starred parliament questions on Tobacco and other related issues

3.0 RESPONSIBILITY

Activity	Responsibility	Approval
Data collection and drafting	Nodal Officer, PME	Director
Reply to PQ	Do	Director

4.0 PROCESS

Next page



1.0 PURPOSE

To establish, implement, and maintain a documented procedure for handling of QRT quarries received by the Institute

2.0 SCOPE

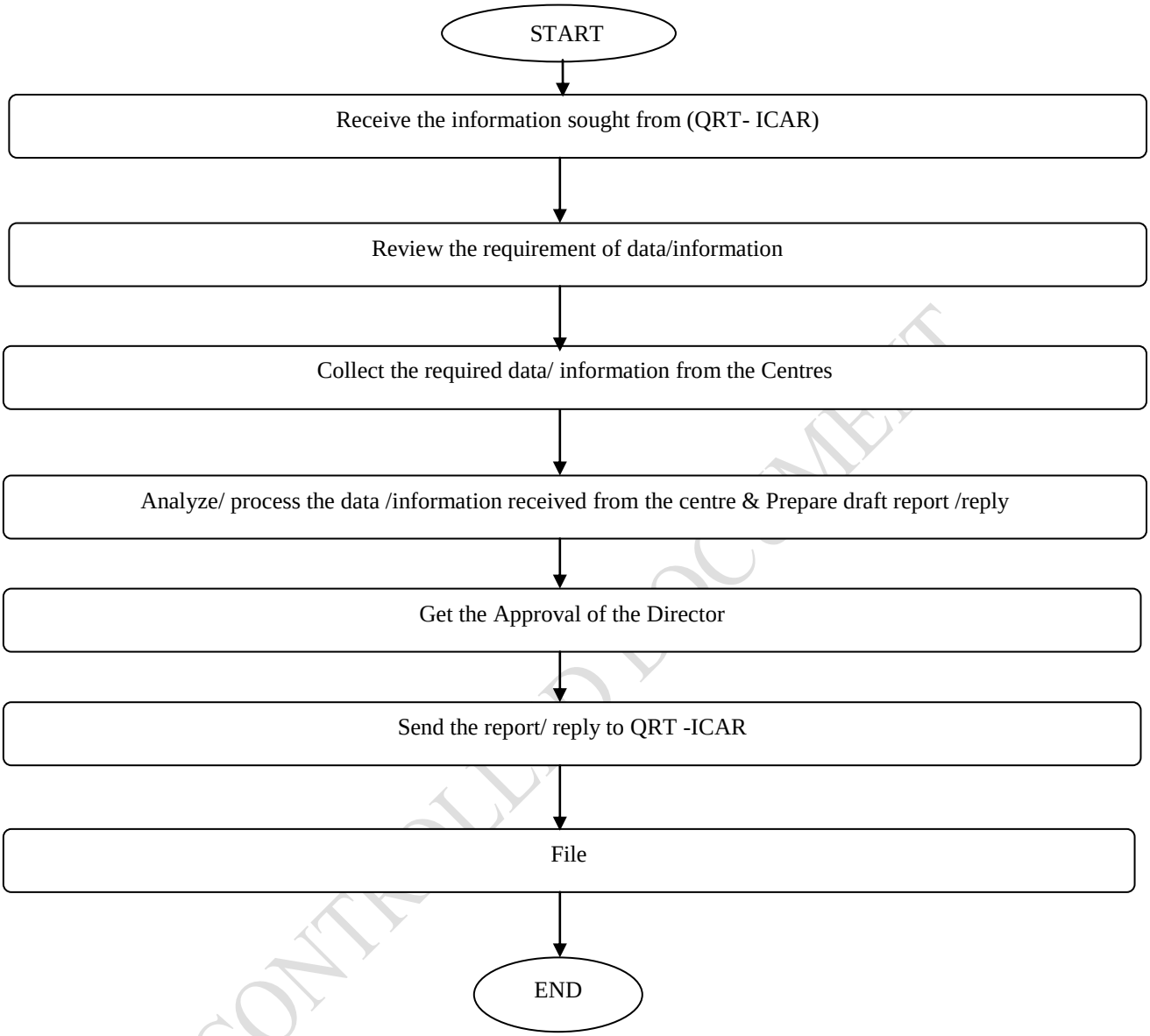
All QRT queries related on research of Tobacco

3.0 RESPONSIBILITY

Activity	Responsibility	Approval
Data collection and drafting	Member Secretary, QRT	Director
Reply to QRT	Member Secretary, QRT	Director

4.0 PROCESS

Next page



1.0 PURPOSE

To establish, implement, and maintain a documented procedure for preparation of budget, release and monitoring of funds related to ICAR-CTRI and AINPT

2.0 SCOPE

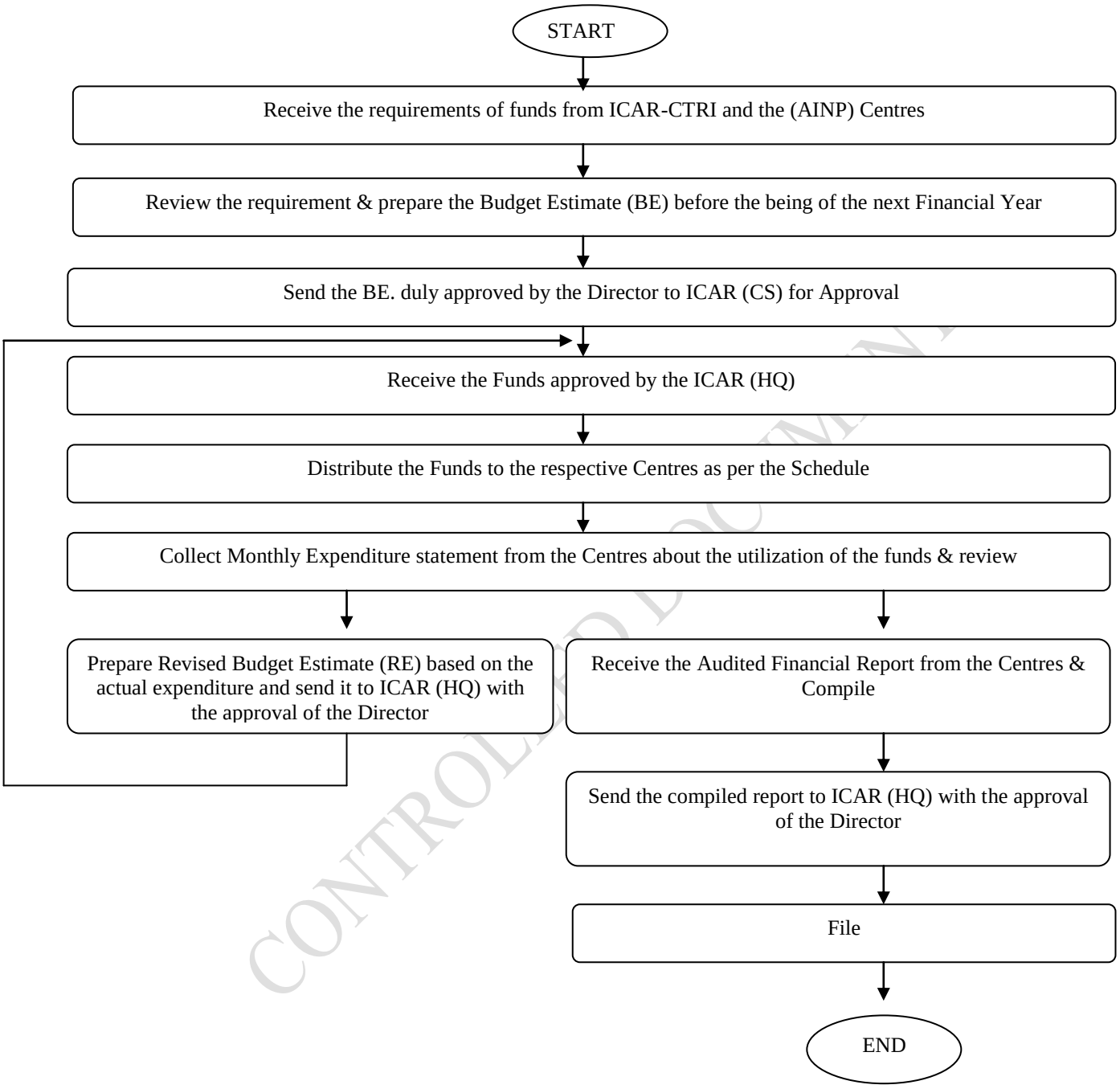
ICAR-CTRI and All India Network Projects (AINP) on Tobacco

3.0 RESPONSIBILITY

Responsibility	Approval
SFACO/PME/Nodal Officer, AINPT	Director

4.0 PROCESS

Next page



1.0 PURPOSE

To establish, implement, and maintain a documented procedure for dissemination of successful Plant Varieties, Technologies developed by the Institute etc.

2.0 SCOPE

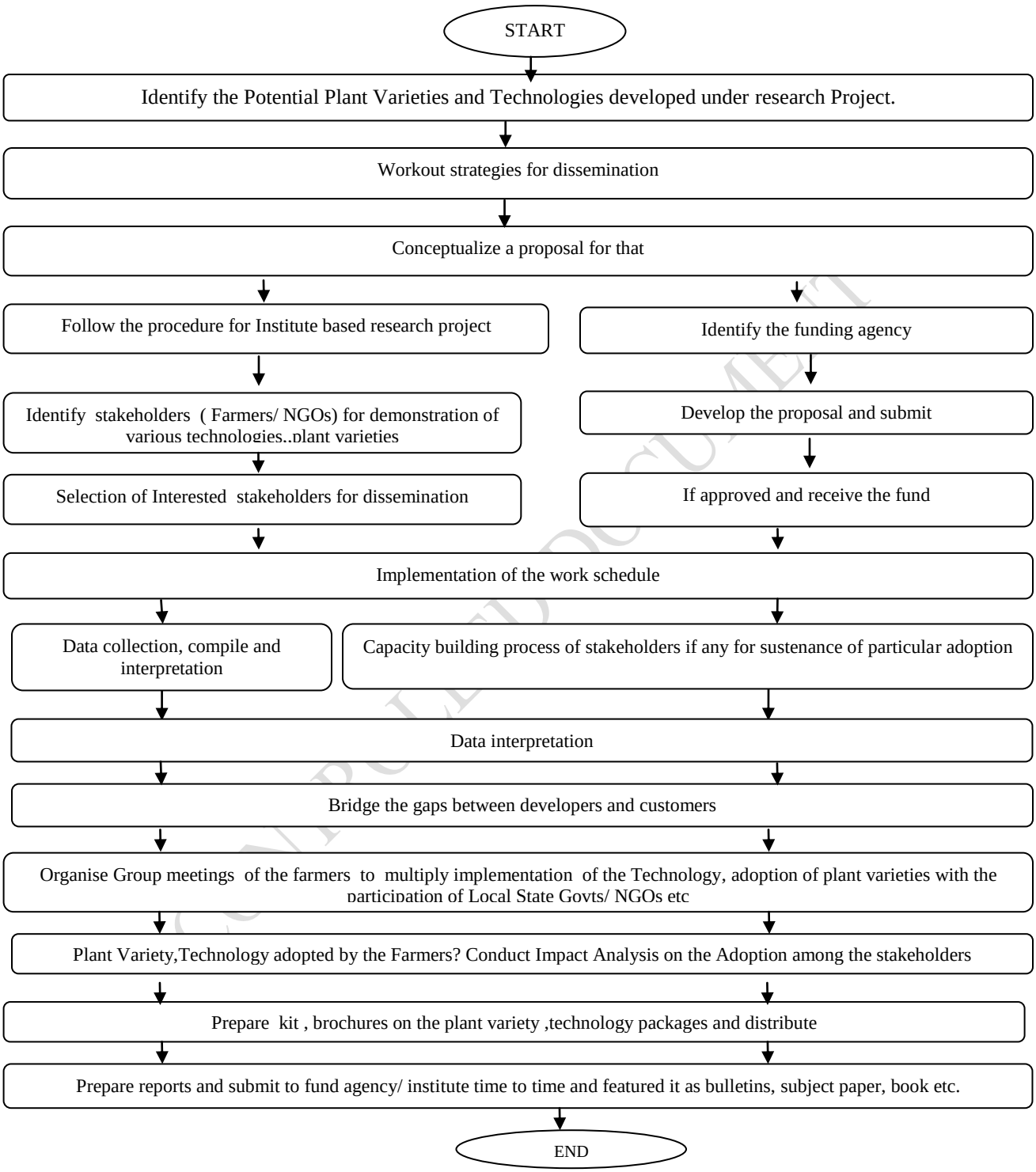
Successful Plant Varieties, Technologies etc. developed by the Institute

3.0 RESPONSIBILITY

Activity	Responsibility	Approval
Identification	PI/HoD/ Nodal Officer, PME/Scientist in Charge of the Agri. Extension Services	Director

4.0 PROCESS

Next page


START
Identify the Potential Plant Varieties and Technologies developed under research Project.
Workout strategies for dissemination
Conceptualize a proposal for that
Follow the procedure for Institute based research project
Identify the funding agency
Identify stakeholders (Farmers/ NGOs) for demonstration of various technologies..plant varieties
Develop the proposal and submit
Selection of Interested stakeholders for dissemination
If approved and receive the fund
Implementation of the work schedule
Data collection, compile and interpretation
Capacity building process of stakeholders if any for sustenance of particular adoption
Data interpretation
Bridge the gaps between developers and customers
Organise Group meetings of the farmers to multiply implementation of the Technology, adoption of plant varieties with the participation of Local State Govts/ NGOs etc
Plant Variety,Technology adopted by the Farmers? Conduct Impact Analysis on the Adoption among the stakeholders
Prepare kit , brochures on the plant variety ,technology packages and distribute
Prepare reports and submit to fund agency/ institute time to time and featured it as bulletins, subject paper, book etc.
END

1.0 PURPOSE

To establish, implement, and maintain a documented procedure for documentation of successful Plant Varieties, technologies developed at CTRI.

2.0 SCOPE

Successful Plant Varieties, technologies developed at CTRI.

3.0 RESPONSIBILITY

Activity	Responsibility	Approval
Documentation	PI/ HODs/Nodal Officer, PME /Scientist in Charge of Agri. Extension Service	Director

4.0 PROCESS

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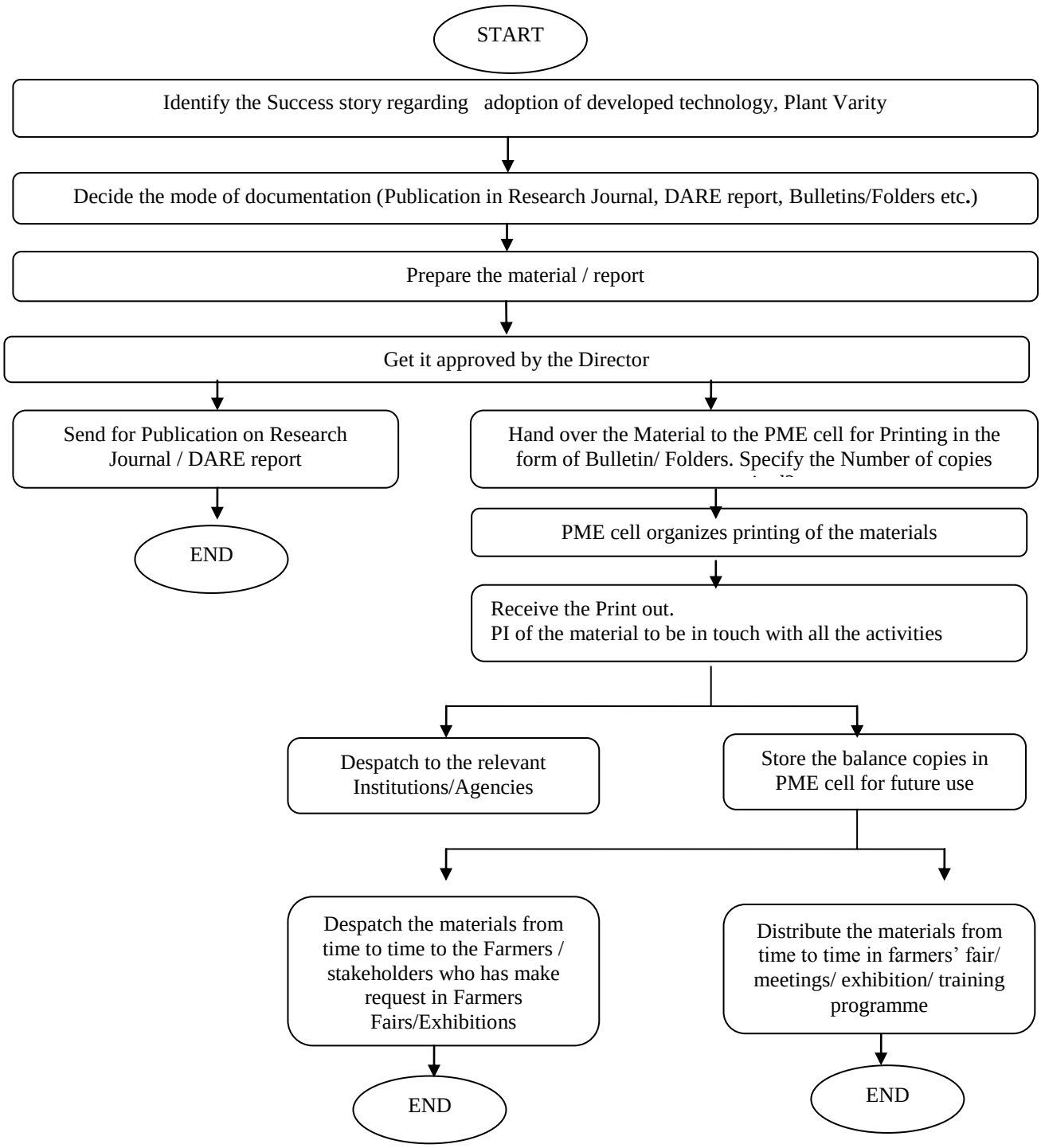

START
Identify the Success story regarding adoption of developed technology, Plant Varity
Decide the mode of documentation (Publication in Research Journal, DARE report, Bulletins/Folders etc.)
Prepare the material / report
Get it approved by the Director
Send for Publication on Research Journal / DARE report
END
Hand over the Material to the PME cell for Printing in the form of Bulletin/ Folders. Specify the Number of copies
PME cell organizes printing of the materials
Receive the Print out.
PI of the material to be in touch with all the activities
Despatch to the relevant Institutions/Agencies
Store the balance copies in PME cell for future use
Despatch the materials from time to time to the Farmers / stakeholders who has make request in Farmers Fairs/Exhibitions
END
Distribute the materials from time to time in farmers' fair/ meetings/ exhibition/ training programme
END

Opening and closing

Except on holidays the Library shall normally be opened on Monday to Saturday, 09.30 am to 5.00 pm (Lunch Break 1.00 to 2.00 pm)

Admission

In addition to employees of CTRI, the following persons may be granted a Reader's Card and admitted to the Library, but may not borrow books:

(a) Any persons over 18 who are engaged in private study or research, if supported by appropriate evidence of academic standing and fitness for admission.
(b) Undergraduates of any universities, colleges if supported by appropriate recommendations.

Loan of Publications to Staff

- Number of publications for different categories

Scientific, Technical and Administrative Officers	8 Publications (all types)
Other staff members	4 Publications (all types)
Research Associates/ Research Fellows	2 Nos. (including one periodical)

- Text books and back volumes of periodicals should be returned within ten days from the date of issue, or earlier by requisition by Documentation Officer, in case they are required for an urgent reference in the Library.
- Loose issue of periodicals, bulletins etc. should be returned within 7 (seven) days from the date of issue, or early in case they are required for any urgent reference in the Library.
- Divisions/ Sections are allowed to keep in their Division/ Section up to 5 (Five) publications of permanent reference nature for regular reference in their sections. These will be issued only to Division/ Section Head.
- In case any staff member required the publication(s) for a longer period (more than the specified period), he should first return the publication(s)) to the Library and then get it/them renewed in his name for another term, provided no other staff member required it/tem for his reference.
- Publications should not be taken out of the Station, or issued to outsiders.
- Staff going on long earned leave or medical leave should return the publications taken by the Library without fail.
- Reference publications, viz., Encyclopedia, Handbooks, Year Books etc. and other publications made as reference will not be issued.
- The publications should not be disfigured with exclamation Marks, Question Marks, Comments, etc. either with pencil or ink and they should be protected from dog-earings. No pages should be removed from the books. Defaulties will be debarred from the Library.

Publication Lost by the Reader

The staff are requested not to lose any of the Library publications taken on loan by them In case they lose the publications the following rules will be applicable.

- Any publication lost by staff members when taken on loan shall be replaced by same publication by the reader immediately. In case the Library has to procure on his behalf, 20% of the cost of the book shall be collected as handling charges in addition to the cost of book.
- If the same edition of the publication is not available for replacement, latest edition should be purchased and replaced to the Library by the staff member.
- In case the publication (even any edition) is no longer available it should be replaced with a Xerox copy/ microfilm/ micro fische version of the publication with the approval of the Director at the cost of borrower**.**

Use of Library materials

- The marking of any Library materials is forbidden; readers may be prohibited from using ink and may be asked to use pencils instead while consulting certain volumes in any of the reading rooms.
- All persons borrowing Library materials, or ordering materials for use within the Library, shall produce evidence of identity at the time of borrowing or ordering if requested to do so.

Behaviour in the Library

- Avoid gossiping and any kind of personal discussion in the Library.
- Readers must show their Reader's Card or identity card for inspection if requested by a member of the Library staff in the course of their duties.
- The use of portable laptops /computers may be permitted in the Library provided that they are quiet in operation. Users of such equipment may be required to work in specified areas or to stop using a computer if it constitutes a distraction to other readers.
- The use of equipment likely to disturb or distract other readers or to damage Library materials (e.g. digital scanners, radios, personal hi-fi equipment, or computers to perform any of the functions of such machines) is not permitted in the Library.
- Mobile telephones must be set to 'silent' mode in the Library; the use of mobile telephones is only permitted outside of the reading room and the courtyards of the Library.

- Overcoats, raincoats, and other kinds of outdoor clothing, umbrellas, bags, cases, cameras, photocopying devices, and similar personal belongings shall normally be deposited with the librarian in charge during each visit to the Library.

- Handbags, files, folders, coats, and the like, if allowed into the Library, shall be subject to examination on exit.

- Bottles of ink, correction fluid, and other potentially damaging substances shall not be taken into the Library.

- Water may be consumed in the Library as long as this is from bottles with a sealable top and is at the discretion of Library staff.

- Food is not allowed anywhere in the Library and reading room .

- Smoking is not permitted anywhere on the premises.

- Library staffs are empowered to stop any activity in the Library which they consider prejudicial to the safety, well-being, or security of readers or Library staff or to the preservation of the collections.

The Scientists, Researchers, Scholars, Research assistants & Technical staff are often required to undertake field visits for conducting experiments, collection of sample/data etc. As the nature of their research involves traveling through Agricultural fields, Water bodies, Rivers etc, it involves potential risks . Therefore it is necessary that while undertaking such visits the following guidelines should be followed across the hierarchy

1. Before visiting the area, collect and study the information available on the area, like climatic condition, rain fall pattern, availability of transport, nearby town hospital, police station etc
2. Always keep the local administration about the field visit in advance and on return
3. Seek their assistance wherever possible
4. Take a local guide / interpreter if necessary
5. Avoid travelling to disturbed area, declared by the Administration
6. Never venture alone if your are entering into more than knee deep water, forests, secluded area
7. Always prefer to work during availability of Sunlight , unless it is required to collect data after sunset
8. Avoid traveling at night
9. Avoid taking road side foods/snacks
10. Be sure that you had the necessary vaccinations against Hep B, Cholera, Tetanus, small pox . If not consult your physician and take vaccines as advised before undertaking the tour

11. Always carry-
    - Id card
    - Light food , water bottle, thermos,
    - A map of the site
    - Phone numbers of residence, office, local administrations, police
    - Personal belongings like extra clothing, winter garments (in winter) toiletries, books , diary
    - Torch, dry cell battery, small knife , scissor ,candles, safety match ,lighter, lock and key
    - Umbrella, rain coat, gum boot, sun glass, hard hat/caps a pair of gloves
    - Cell phone
    - Personal medicines as advised by the physician
    - A first aid kit comprised of antiseptic solutions, cotton, gauge, band aids, plaster, painkiller spray, paracetamol tablets, ORS pouch
    - Tents , sleeping bags , mosquito repellents, mosquito net, if one is required to stay overnight
    - Halogen tabs to purify water
    - Life saving rope, stick etc.

12. Only those who know swimming should undertake travelling on boats. However he/she needs to carry life saving vest or any other flotation devise

13. Researchers should always carry note book, writing devices, data collection forms with them for the purpose of

14. Always inform the Director / Admin Head/ Reporting authority about the travel plan, any change in plan or difficulties experienced, and on return to HQ/ Base.

1.0 PURPOSE

To establish, implement, and maintain a documented procedure for Patenting successful Technology/Product/Process/Equipment developed by the Institute

2.0 SCOPE

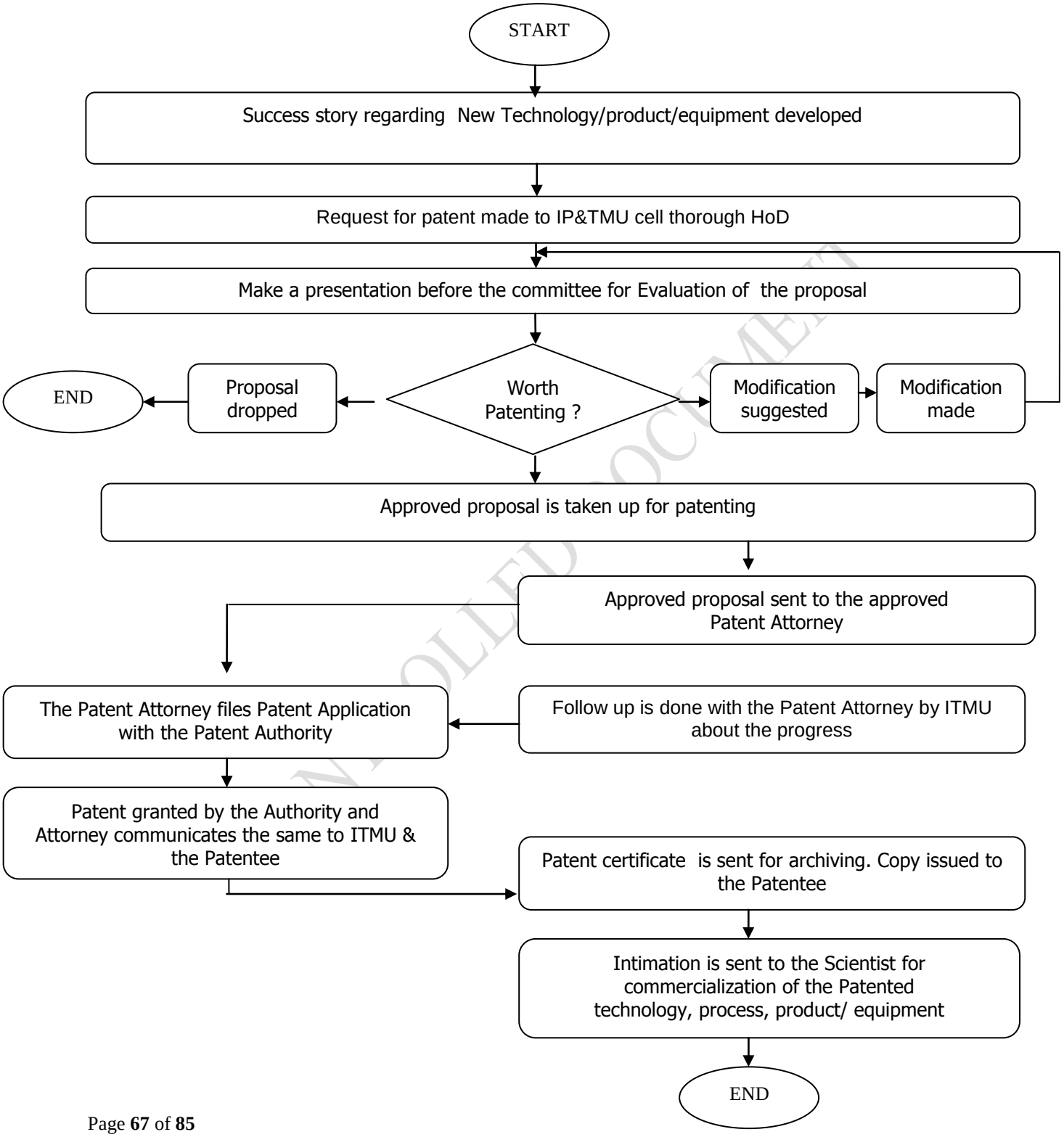
Successful technologies developed by the organization

3.0 RESPONSIBILITY

Activity	Responsibility	Approval
Evaluation & Approval	PI/HoD/NO, PME/ NO, Intellectual Property &Technology Management Unit (IP&TMU)	Director
Forwarding to Patent Attorney & follow up	NO, PME/ NO, IP&TMU	Director
Commercialization	NO, IP&TMU	Director

4.0 PROCESS

Next Page



1.0 PURPOSE

To establish, implement, and maintain a documented procedure for break down maintenance of Equipments in the Institute

2.0 SCOPE

Equipments, Proprietary equipment, Computers under breakdown

3.0 PROCESS

Sl No.	Activities	Responsibilities	Records
A	**EQUIPMENTs NOT COVERED UNDER AMC**		
1.	If any equipment (not covered under AMC) is not working and could not be rectified by the user ,a requisition is raised by respective department	TO/Scientist /HoD	Requisition /memo
2.	Requisition is received by HoD and directed to the MSU for due rectification	MSU	Requisition /memo
3	Equipment is taken up for repairing	MSU	
4.	On rectification MSU requests the Division to check the performance of the equipment and endorse (sign) the requisition.	In charge	Requisition /memo
5.	Certified copy of the requisition is filed in MSU file	Technical Officer	Requisition /memo
B	**EQUIPMENTs /COMPUTERS COVERED UNDER AMC**		
1.	If any equipment/computer (covered under AMC)is not working and could not be rectified by User the service provider (AMC) is contacted over phone. fax/ mail and the nature of the problem conveyed	TO/Scientist /HoD	
2	AMC Service provider deputes Service Engineer Technician/Mechanic to attend the problem	AMC Service provider	
3	Equipment is taken up for repairing	Service Engineer	
4.	On rectification the Service Engineer Technician/ Mechanic requests the User to check the performance of the equipment and prepares service report	In charge	Service report
5	If the performance is found satisfactory the service report is accepted, signed and filed.	TO/Scientist /HoD	Service report

1.0 PURPOSE

To establish, implement, and maintain a documented procedure for purchase of publications in the organization

2.0 SCOPE

Purchase activities related to books, journals & periodicals made by the Library section of the Institute

3.0 PROCESS

Sl No.	Activities	Responsibilities	Records
1.	Requisitions for books and periodicals are submitted to librarian for procurement	Scientist/HoD/OIC, Library & Documentation Service	Requisition
2.	Requisitions are scrutinized and Books and Journals are selected on priority basis	OIC, Library & Documentation Service	List of selected books
3.	Open tender are floated for purchase of those books& Journals as necessary	OIC, Library & Documentation Service & AAO(Stores)	Tender
4	Suppliers are selected on the basis of Technical & financial evaluation	OIC, Library & Documentation Service	Evaluation records
4.	The publications are purchased from the selected supplier (s) found eligible	OIC, Library & Documentation Service	Books along with bill and challan
5.	The items ordered are received in the library, tallied with the items ordered	OIC, Library & Documentation Service	Bill& challan
6	Bills and challan are sent to AAO (Stores) for payment to the supplier	OIC, Library & Documentation Service	Bill& challan

1.0 PURPOSE

To establish, implement, and maintain a documented procedure for Publication at CTRI

2.0 SCOPE

Publications made by the Institute

3.0 PROCESS

Sl No.	Activities	Responsibilities	Records
1.	Requisitions are received from divisional HoDs for arranging publishing of Research and other Publications	OIC, Library & Documentation Service/HoD/NO, PME	Requisition
2.	Arrangements for publishing is made within a time frame	OIC, Library & Documentation Service/HoD/NO, PME	Records of publication
3	Publications are received and the concerned HoD is informed	OIC, Library & Documentation Service/NO, PME	
4	The Publication is inventoried	OIC, Library & Documentation Service/NO, PME	Stock book
5.	Requests received from Customer interested to purchase any publication & the Request is forwarded to OIC, Library & Documentation Service	HoD/NO, PME/ Director	Letter
6	Bill & Cash Section makes arrangement for collection of the payment and issue money receipt	Accountant	Money receipt
7.	The material is handed over to the Customer	OIC, Library & Documentation Service/NO, PME	
8	Distribution of complimentary copies are made to the select institutions, organizations, other research organizations with the approval of the Director	OIC, Library & Documentation Service/NO, PME	

1.0 Purpose

To Establish, implement and maintain a document procedure for processing of purchases in the Institute.

2.0 Scope

Purchase through Limited / Open Tenders in accordance with GFR – 2017 and directive issued by ICAR from time to time.

3.0 Process

Sl No.	Activities	Responsibilities	Records
1.	Receive the Indent from Indenter	Store Section / A-III (P)	Proposal / Indent
2.	Place the Indent before Director for initial approval.	Director	
3.	Prepare Tender document and send to Indenter for approval.	Store Section / A-III (P) / Indenter	Drafting of Tender
4.	Float the Tender in the Institute Website as well as CPP Portal along with publication of Advertisement in Newspaper after draft is approved by the Indenter	Store Section / A-III (P)	Advertisement in Newspaper, Floating of Tender in Institute Website & CPP Portal
5.	Make arrangements for collection of tenders	Store Section / A-III (P)	Bids/Quotations
6.	Open the bids on due date by the IPC (Technical & Financial bids may be on separate date, as applicable)	IPC	Bids received in response to Tender Notice
7.	Deposit the EMD amounts received with quotations in ICAR account.	Store Section / A-III (P)/SFACO section	
8.	After preparing Comparative statement, put up to IPC for recommendations to finalize tender	IPC	Final Recommendations of IPC
9.	After final clearance by IPC, place it to SFACO for financial clearance.	SFACO section	Financial clearance

10.	After financial clearance, place it to Director for financial Sanction	Director	
11.	Thereafter, prepare & send the draft purchase order/ supply order/Agreement in case of AMC to the Indenter for approval.	Store Section/A-III(P)/Indenter	
12.	After clearance of draft PO/SO, issue final PO/SO to the successful bidder	Store Section/A-III(P)	Purchase Order /Supply Order
13.	Return the EMD of qualified bidder, on receipt of security deposit, as applicable.	Store Section/A-III(P)/SFACO Section	
14.	Return the EMD to the non qualified bidders during Technical / Commercial evaluation, as applicable.	Store Section / A-III (P)/SFACO section	

4.0 In addition to the above mentioned procedure, the following processes also to be followed for imports

1.	On receipt of Indent from Indenter, the same may be put up for Technical Vetting Committee (TVC)/Foreign Procurement Committee (FPC)/Institute Purchase Committee (IPC) as applicable for recommendations, if any.	Store Section/A-III(P)	TVC/FPC/IPC recommendations.
2.	On finalization of purchase order, make an application to Bank for opening Letter of Credit (LC).	Store Section/A-III(P)	LC
3.	Clear Consignment from Airport/Port after arrival of consignment	Airport / Port Authority / C&F Agency	Consignment
4.	After receipt and successful installation (& training, if required) of stores, send remittance advice to Bank to release balance payment.	Store Section/A-III(P)	Remittance Advice
5	Periodicals evaluation of external providers on case to case basis	Store Section/A-III(P)	Director

4.0 Purpose – Civil Works

To Establish, implement and maintain a document procedure for **processing of works to be carried out at** the Institute.

5.0 Scope

Works to be carried out through Limited / Open Tenders in accordance with GFR – 2017 and directives issued by **ICAR & CPWD** from time to time.

6.0 Process

Sl No.	Activities	Responsibilities	Records
1.	Receipt of Works Indent from Indenter	A-III (P)	Proposal / Indent
2.	Request for submission of approximate estimate by MSU	MSU	
3.	Place the Indent along with estimation before Director for initial approval, if estimation is below 05 lakhs.	Director	
4.	Submit the proposal for ICAR, DG(Works) for vetting, if the estimation is above Rs. 5.00 lakh	A-III (P) / ICAR	Statement of Case
5.	Prepare Tender document after getting approval from Director/ICAR and send to Indenter for approval.	A-III (P) / Indenter	Drafting of Tender
6.	Float the Tender in the Institute Website as well as CPP Portal along with publication of Advertisement in Newspaper after draft is approved by the Indenter	A-III (P)	Advertisement in Newspaper, Floating of Tender in Institute Website & CPP Portal
7.	Make arrangements for collection of tenders	A-III (P)	Bids/Quotations
8.	Open the bids on due date by the IPC (Technical & Financial bids may be on separate date, as applicable)	IPC	Bids received in response to Tender Notice
9.	Deposit the EMD amounts	A-III (P)/FACO	

Sl No.	Activities	Responsibilities	Records
	received with quotations in ICAR account.	section	
10.	After preparing Comparative statement, put up to IPC for recommendations to finalize tender	IPC	Final Recommendations of IPC
11.	After final clearance by IPC, place it to SFACO for financial clearance.	SFACO section	Financial clearance
12.	After financial clearance, place it to Director for financial Sanction	Director	
13.	Thereafter, prepare & send the draft work order to the Indenter for approval.	A-III(P)/Indenter	
13.	After clearance of draft WO, issue final WO to the successful bidder	A-III(P)	Work Order
14.	Return the EMD of qualified bidder, on receipt of security deposit, as applicable.	A-III(P)/FACO Section	
15.	Return the EMD to the non qualified bidders during Technical / Commercial evaluation, as applicable.	A-III (P)/FACO section	

1.0 PURPOSE

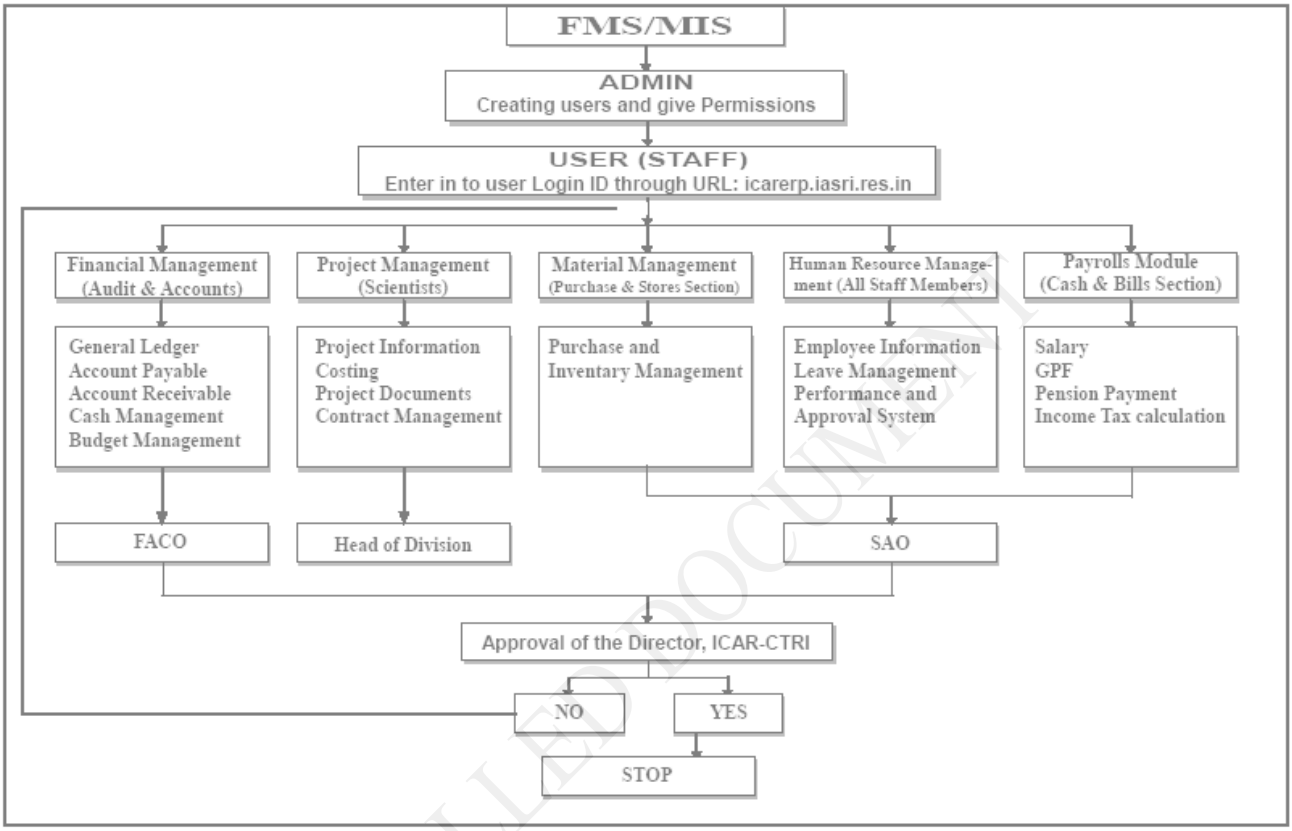
To establish, implement, and maintain a documented procedure for the development and successful implementation of MIS (including FMS) System which includes solution for Financial Management, Project Management, Material Management, and Human Resource Management & Payroll at ICAR-CTRI.

2.0 SCOPE

Financial Management, Project Management, Material Management, and Human Resource Management & Payroll at ICAR-CTRI.

3.0 PROCESS

Activity	Approval
Initiation of the process	Individual employees
Forwarding and approving authority	Director/ HOD/Section Head/ Station Head



1.0 PURPOSE

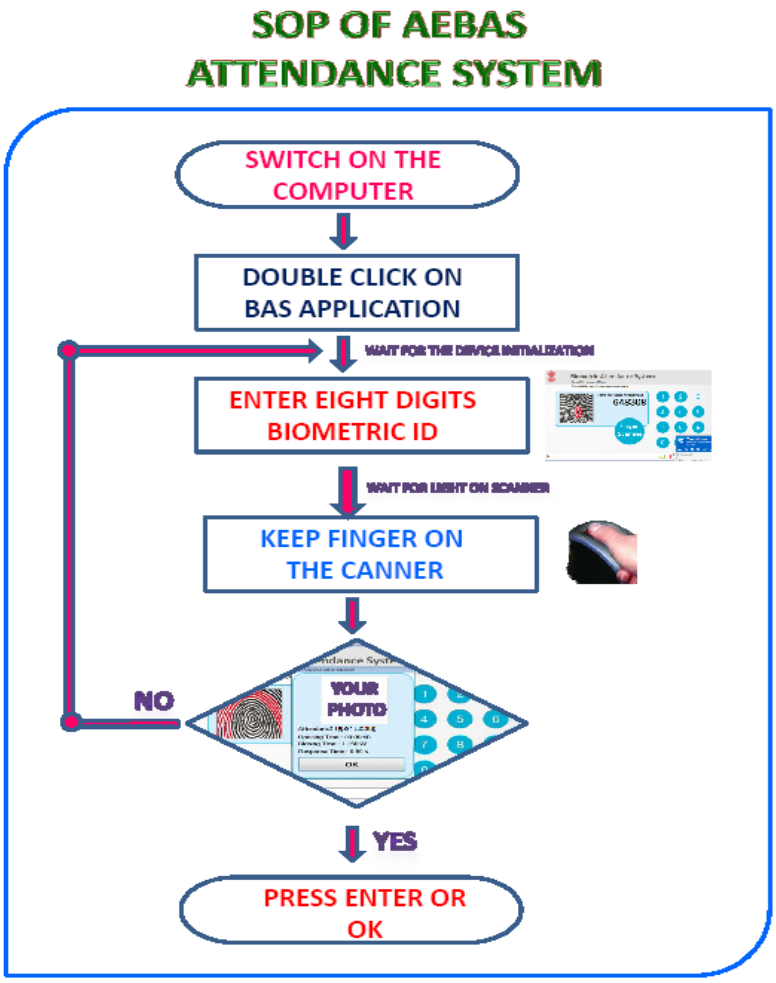
To establish and implement Aadhar Enabled Biometric System at ICAR-CTRI.

2.0 SCOPE

Implement Aadhar Enabled Biometric System at ICAR-CTRI

3.0 PROCESS

Activity	Approval
Initiation of the process	Individual employees


SOP OF AEBAS
ATTENDANCE SYSTEM
SWITCH ON THE COMPUTER
DOUBLE CLICK ON BAS APPLICATION
WAIT FOR THE DEVICE INITIALIZATION
ENTER EIGHT DIGITS BIOMETRIC ID
WAIT FOR LIGHT ON SCANNER
KEEP FINGER ON THE CANNER
NO
YOUR PHOTO
YES
PRESS ENTER OR OK

FORMATS OF QMS RECORDS

Master List of QMS Document – Format 7.5/1

SL.No	Document ID	Title of the Document	Version No	Effective Date	Issued to	Issued to	Date of withdrawal
					Copy No	Copy No	

Master List Records (Registers/Files etc) – Format 7.5/2

Sl. No.	Name of the Register/file/Record/format	Code No.	Retention Period

Directory of Testing Services - Format 7.1.5/1

Test Code	Primary Test Material	Test	Test method	Approx. Qty./Size to be received from customer (Regulation size /qty)	Condition of sample to be received from the customers	Turnaround Time (from receipt of sample to issue of test report)

List of Testing Measuring & Monitoring Equipment : Format 7.1.5/2

Sl. No.	Name of the Equipment	Model No	Manufacturer	Ranges & least count	Equipment ID No	Calibration plan

Annual Audit Programme - Format 9.2/1

Clause no.	Areas/ PROCESS/ to be Audited	YEAR/ MONTHS											
		April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar

Internal Audit Plan Format 9.2/2

Date	Time	Dept/ Process to be audited	Process Owner/ Dept head	Auditor	Method to be used

Internal Audit Checklist - Format 9.2/3

Sl No. Checklist	Findings (Yes/ No)	Objective evidence /Ref of the doc/record	Remarks (Non-conformity etc)

Summary of Nonconformities Identified During Internal Audit - Format 9.2/ 4

NCR No.	DEPARTMENT/ ACTIVITY	DATE OF AUDIT	AUDITOR	DETAILS OF NON-CONFORMITY	ROOT CAUSE	CORRECTIVE ACTION PROPOSED / TAKEN (WITH DATE)

List of Internal Auditors Format 9.2/5

Sl No	Name of the internal auditors	Dept	Training attended on Int auditing

RESEARCH PROJECT BRIEFS

PROFORMA FOR SUBMISSION OF BRIEF NOTE ON THE RESEARCHPROJECT

(Brief note should not be either too short or too long. i.e. ideally it should be 2 to 3 pages in length when typed with 12 point size, Times New Roman font and in single line spacing)

Project:				
1. Research Project Title	:			
2. Investigators	:			
3. Year of Start	:		Year of Completion :	
4. Location of the Project	:			

I.	Objectives of the Project
II.	Executive Summary of the project (Should cover work done, detailed results and inferences drawn, and be presented in the running text form only and without superfluous information)
III.	Most salient research findings/Achievements in bullet form (2-4 bullets)
IV.	Proposed work plan for next year (in bullets)

Form 8.3/1

Principal Investigator Head of the Division

EVALUATING RISK LIKELIHOOD AND CONSEQUENCE Format 6.1/1

RISK IDENTIFICATION AND OPPORTUNITIES FOR IMPROVEMENT													
PROCESS				PROCESS OWNER / TEAM									
QUALITY													
												02.02.16	
PROCESS OWNER RESPONSIBILITY & AUTHORITY													
										After Mitigation Plan			
Process	**Control**	**Criteria and methods employed to ensure the effectiveness of the process**	**Potential Risks / Opportunities for Improvement**	**Risk Severity**	**Chances of occurance**	**Cumu lative (exf)**	**Mitigation plan**	**Resources / Control needed**	**Implementation plan**	**Risk Severity**	**Chances of occurance**	**(k x l)**	**Remarks**
Reviewed & Approved								Signature					

Severiety Ranking		
Rank	**Effect**	**Criteria: Severity of effect**
10	Spoils company reputation	Lost customer permanently
9	Customer lost	Lost Customer temporarily
8 & 9	Customer lost	Customer has penalized the organization
7	High	Reasonable revenue expenditure / loss
6	Moderate	Customer dissatisfied
5	Low	No financial impact
3 & 4	Minor	Can be amended when the mistake is detected

2	Very Minor	Our ortanization or customer not afffected
1	None	No discernible effect

Occurrence Score

Score	Chances of detection
1	One mistake out of 200
2	One mistake out of 150
3	One mistake out of 100
4.5.6	One mistake out of 75
7,8,9	One mistake out of 50
10	One mistake out of 25

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