

Certificate

Standard **ISO 9001:2015**

Certificate Registr. No. **01 100 1634770**

Certificate Holder:



DOST - Industrial Technology Development Institute

DOST Compound, Gen. Santos Ave.,
Bicutan, Taguig City, Philippines

Scope:

Generation and transfer of innovative technologies and provisions of scientific and technological services in the fields of biotechnology, chemicals and minerals, environment, foods processing, fuels and energy, materials science and packaging.

Proof has been furnished by means of an audit that the requirements of ISO 9001:2015 are met.

Validity:

The certificate is valid from 2020-10-29 until 2023-10-28.
First certification 2020

2020-10-29

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Precisely Right.

CERTIFICATE 01 100 1634770

Audit Report as per

ISO 9001:2015

for

**DOST – Industrial Technology Development
Institute**

**DOST Compound, Gen. Santos Ave., Bicutan,
Taguig City, Philippines**

Client	Standard	Certification Number(s)	Audit Type
DOST - Industrial Technology Development Institute	ISO 9001:2015	01 100 1634770	1 st Follow-Up Audit

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Audit Leader	:	Ms. Sandee Edrada (acting LA for monitoring)
Audit Team	:	Mr. Lionell Aala, Ms. Michelle Pestanas, Ms. Grace Balobalo – Monitoring Auditor
Client’s representative	:	Ms. Zorayda Ang - QMR
Audit Date	:	August 19, 2021

1 Audit result

Management system effectiveness was verified on site by means of random sampling by an appropriately selected audit team. This applies in particular to the compliance of workflows with standard requirements and the descriptions in management system documentation. The audit objectives as mentioned in the audit plan, the special features of the organization’s business activities, the applicable statutory and regulatory requirements and the requirements set forth in other generally applicable documents were also taken into account. This was done by means of a sampling approach, by conducting interviews and reviewing the appropriate documentation. Audit findings and recommendations regarding opportunities for improvement have been set forth in Sections 4 of this report.

<input type="checkbox"/>	The last audit revealed nonconformities which have been demonstrably corrected. The corrections and corrective actions taken in this respect have been verified.
<input type="checkbox"/>	A stage 1 audit was performed and the organization found ready for certification. Identified weaknesses, if any, have been eliminated and the respective corrective action verified.
<input checked="" type="checkbox"/>	The current audit revealed 0 major nonconformities and 0 minor nonconformities.
<input type="checkbox"/>	The major nonconformities (No. x) with individual standard elements require a re-audit to verify the effectiveness of the corrections and corrective actions (probable date:.ddmmyyyy)
<input checked="" type="checkbox"/>	The organization has established and maintains an effective system to ensure compliance with its policy and objectives. The audit team confirms in line with the audit targets that the organization’s management system complies with, adequately maintains and implements the requirements of the stand-

The auditor therefore recommends (**provided nonconformity response has been approved**):

<input type="checkbox"/>	Award of the new certificates.
<input checked="" type="checkbox"/>	Maintenance of the existing certification.
<input type="checkbox"/>	Inclusion of the changes (see Section 3) in the scope of application of existing certifications
<input type="checkbox"/>	Maintenance or issue of the certificates only after successful completion of a re-audit.

2 Scope

2.1 Description of the organization

The Industrial Technology Development Institute or ITDI is one of the research and development institutes (RDIs) under the Department of Science and Technology (DOST), the main government agency responsible for managing science and technology in the Philippines.

ITDI is the flagship agency of the DOST, generating a large pool of technologies while providing technical services to industry. Its mandates are:

- Undertake applied research and development to generate new knowledge, technologies, and innovation in the field of industrial manufacturing, mineral processing and energy

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- Conduct knowledge translation or technology transfer and commercialization.
- Provide technical services, test and analyses, and metrology to ensure international traceability of the national units of measure.

However, The National Metrology Division (NMD) and Standards & Testing Division (STD) are excluded in the scope of the certification. These two divisions are ISO 17025 accredited.

2.2 Scope of certification

Scope of certification:	Generation and Transfer of innovative technologies and provision of scientific and technological services in the fields of biotechnology, Chemical and Materials, Environment, Food Processing, Fuel And Energy, Material Science and Packaging
ISO 9001 standard requirements which are not applicable:	NA
Reasons for non-applicability:	NA

ITDI operates with the following Work Schedule/Alternative Work Arrangement during COVID-19 period:

3x per week – 2 days wfh; 4x per week – 1 day wfh; 5 days office; 5 days office, next week 5 days wfh etc.
Flexible time: 7am-4pm, 8am – 5pm Monday-Friday

The following sites and their scopes are included in the scope of certification:

Site No. (CN ext.)	Sites included in cert. Name/address of site	No. of emp.	Scope and processes	Standard	Audited
01	DOST – Industrial technology Development Institute DOST Compound Gen. Santos Ave., Bicutan, Taguig City, Philippines	216	Generation and Transfer of innovative technologies and provision of scientific and technological services in the fields of biotechnology, Chemical and Materials, Environment, Food Processing, Fuel And Energy, Material Science and Packaging	ISO 9001	<input checked="" type="checkbox"/>

3 Changes in the management system / Contract review

No major changes have been made to the management system and the management system documentation since the last audit. The order details which form the basis of the audit (including number of employees, scope and sites) reflect the actual situation in the organization. However, the following were implemented to ensure continuity of service during the COVID-19 Lockdowns:

- Enhancement of IT Infrastructure specifically to address the WFH employees and customer Information System Strategic Plan as approved by The Department of Information and Communications Technology (DICT).
- Appointment of New Director R&D, Ms. Marie Montessa, May 2021
- Appointment of New Deputy Director Admin and TSD, August 12, 2021
- Manpower decreased from 239 to 216

The implementation of these changes in the existing management system and the management system documentation was verified within the framework of the audit.

The description of the scope in the certificate appropriately reflects the scope of the management system.

The audit plan was not changed during the audit.

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4 Audit findings

The audit findings related to the audited standard are listed in the Annexes to this report (see. Annex ISO 9001). All information gained during the audit will be treated with strict confidentiality by the auditor and the certification body. In view of the sampling approach applied to the audit, weaknesses and nonconformities may still exist which have not been identified during the audit.

No.	Unit/Department Site	Positive findings
1	Top Management	Enhancement of the IT infrastructure, development of systems to address WFH Setup and to address the concerns of the customers are noteworthy.
2	General	Customer (e-payment) internally developed by IT Employees and adapted by the regional offices of the DOST is noteworthy.
3	General	Recipient of 2020 DOST International Publication Award for “Functionalized Carbon-based Quantum Dots: Optical Characterization and Potential Application as Bio-fluorophore” received last 01 December 2020.
4	Finance Management Division	Received Unqualified Opinion from COA dated June 26, 2021. Achievement of 102.92% for collection as of Q2 2021 is noteworthy.
5	Management / Planning	First Strategic Plan covering a five years (Year 2021 – 2025) planning which may also serve as guide on business / operational direction is commendable.
6	Technical Service Division	Continuous efforts exerted for free trainings / webinars which might also serve as tool for livelihood and ideas is commendable.

The following recommendations and opportunities for improvement provided by the auditor are intended to contribute to the continuous improvement of the management system.

No.	Unit/Department Site	Recommendations and opportunities for improvement
1	Food Processing Division	May consider including customer satisfaction survey for other applicable projects. Current practice, objectives related for customer satisfaction in limited to contract projects.
2	Material Science Division	May need to include the expiration of reagents in the Inventory of Chemicals. Relevant to Risk and Opportunities Identification and Evaluation Sheet – Delayed submission of terminal report after project completion (Medium Risk), consider including actions related to request and approval of time extension in the Risk Treatment Plan. Need to review relevant information that should be declared/input in the Record Maintenance and Daily User’s Logbook.

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3	Finance Management Division	<p>May need to determine or set indicators for simple, complex and highly technical transactions in relevance to ARTA requirement for disbursement issuance objective.</p> <p>On a macro view perspective, consider documenting and monitoring the achievement of Budget Utilization for External Funded projects.</p>
4	Administrative Division - HR	<p>May review the Individual Assessment Form in relevance to manner of assessing the Degree of Work Importance and Current Skills Level to be able to provide a consistent and objective evaluation.</p> <p>Implementation of Coaching Form will be check next visit.</p> <p>Ongoing establishing tool/form to be use for Self Learning activities as part of intervention to address competency gap, this will be further check next audit.</p>
5	CED, EBD & PTD	<p>Risk Management</p> <p>Ensure to review the usage of ROIES and check uniformity throughout the organization</p>
6	Documented Information	<p>Ensure that documented information will be uploaded in the database for easy retrieval especially during audit.</p> <p>Ensure to update Project Monitoring Sheet, Input information on deviations, root cause and actions taken as this is part of project records.</p>
7	Chemical Handling	<p>Ensure the Chemical Handling and Inventory.</p> <p>In CED, the date acquired/delivered and expiration dates were not recorded while in PTD, expired chemicals are stored on a separate rack with proper label together with Chemicals in Use</p> <p>As mentioned by the representative of the Chemical Inventory Team, Guidelines are already created and waiting for approval. Implementation will be checked on the next audit.</p>
8	Internal Audit	<p>Last audit conducted was June 23 to July 6, 2021. Ensure IQA report is carried out as planned. This will be checked next visit.</p> <p>Previous internal audit findings status is monitored per Division IQA report. Consider to have an overall status monitoring or reflect in the overall report or at least Management Review the status.</p>
9	Admin- Procurement	<p>Due to COVID 19 and quarantine restrictions, there were several delayed deliveries were encountered. May consider to analyze and put into report the effect of delayed deliveries on the operations.</p>

5 Dates

Due Date for the next audit

2022-08-19

Agreed date for the next audit

2022-08-19

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19 August 2021

Date



Sandee B. Edrada

Audit Leader / Auditor(s)

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Annex ISO 9001:2015

Item	Audit result
Context of the organization	<p>The organization has determined internal and external issues related to the following subject areas (Note: subject areas can be legal requirements, co-operations, competition, community etc.)</p> <p>Political Variables</p> <ul style="list-style-type: none"> • National and international policies and relationships • Implementation of ARTA • Harmonized results-based performance management system as a directive from DBM through DAP-AO 25 <p>Economic Variables</p> <ul style="list-style-type: none"> • National and international economic agenda of the country • Globalization; Global innovation index • Competitiveness amidst technological innovations • Public good, participation in economic groups • Road map of other government agencies • COVID-19 Pandemic <p>Social Variables</p> <ul style="list-style-type: none"> • Philippine customer demographics • Social media as a mode of communication • Cultural Lifestyle • Addressing the needs of vulnerable groups • Digital inequality relative to access to internet • Physical Spaces, social distancing <p>Technological Variables</p> <ul style="list-style-type: none"> • Focus on innovation, including green innovation technologies, artificial intelligence, industry 4.0 • Setting up of new laboratories as indicated in the roadmap • Digitization of processes • Cyber security <p>Internal</p> <ul style="list-style-type: none"> • Implementation of ITDI Road Map and Divisional Road Map • Implementation of ISSP 2020 – 2022 • Alternative Work Arrangements • COVID-19 Pandemic

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	<p>The organization has identified interested parties and the requirements of these parties. Examples for such parties are:</p> <ul style="list-style-type: none"> • External Providers – Timely delivery and Payment Schedule • Customer – Efficient services / R&D • Stakeholders (DOST, DENR, DOE, BFAD, DTI, Academe, Industry, ISTA, FDA, DOST Regional Offices) – ITDI Plans and Programs/ Performance reports, Financial Reports, Technologies for transfer /services, project proposals / MOA, Accomplishment Reports • CSC – Reports, HR Management • DBM- Budget Proposal, Financial Reports, On time Payment • COA – Project accomplished reports, Financial Reports • Employees – remuneration, training and development
Policy / objectives	<p>Top Management has declared its quality policy binding and implemented. The quality policy is appropriate and provides a framework for the respective quality objectives. It commits all employees to pursue continuous quality system improvement. The quality objectives are measurable and are controlled, communicated and updated regularly.</p> <p>Key quality objectives include:</p> <ul style="list-style-type: none"> - To complete and disseminate 90% of targeted R&D activities to meet the needs of local industries to become globally competitive (Actual: 77%, Unmet target was due to the pandemic, project durations were extended up to the following year) - To deliver 90% of targeted technical services according to mutually agreed terms and conditions and existing applicable regulatory and statutory requirements (Actual: 100%) - To attain at least a very satisfactory customer satisfaction rating for the year through the continual improvement of QMS (Actual: 4.72 Excellent)
Process control including outsourced processes	<p>The processes available in the organization have been identified and documented. Process workflows and interactions have been described and appropriately controlled. The processes are evaluated at regular intervals by means of key performance indicators.</p> <p>Key processes within the scope of product realization include:</p> <p>R&D and Technical Services</p> <ul style="list-style-type: none"> • Chemical and Energy Division <ul style="list-style-type: none"> - Industrial Chemical Section - Energy Section (with laboratories) - Pharmaceutical Section - Process Development Section • Environment and Biotechnology Division <ul style="list-style-type: none"> - Industrial Fermentation Technology Section - Cleaner Production Section - Waste Management Section - Microbial Treatment Section • Packaging Technology Processes <ul style="list-style-type: none"> - Label Design Development

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	<ul style="list-style-type: none"> • Food Processing Division <ul style="list-style-type: none"> - Product Development - Food Engineering - Food Safety • Material Science Division • Technological Services Division • Administrative and Support Services <ul style="list-style-type: none"> - Administrative Services Division - Finance & Management Division - Planning and Management Information Systems Division <p>The following processes have been outsourced and are appropriately reviewed and controlled:</p> <ul style="list-style-type: none"> • Calibration • Repair and preventive maintenance • Test and analyses • Fabrication • Construction • Vehicle repair and maintenance
Risk-based thinking	<p>The requirements for risk-based thinking are being realized in the organization as follows:</p> <p>Risk-based thinking has been applied for the following processes:</p> <p>R&D and Technical Services</p> <ul style="list-style-type: none"> • Chemical and Energy Division <ul style="list-style-type: none"> - Industrial Chemical Section - Energy Section (with laboratories) - Pharmaceutical Section - Process Development Section • Environment and Biotechnology Division <ul style="list-style-type: none"> - Industrial Fermentation Technology Section - Cleaner Production Section - Waste Management Section - Microbial Treatment Section • Packaging Technology Processes <ul style="list-style-type: none"> - Label Design Development • Food Processing Division <ul style="list-style-type: none"> - Product Development - Food Engineering - Food Safety • Material Science Division • Technological Services Division • Administrative and Support Services <ul style="list-style-type: none"> - Administrative Services Division

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	<ul style="list-style-type: none"> - Finance Management Division - Planning and Management Information Systems Division <p>Examples of risks and opportunities of processes identified are:</p> <ul style="list-style-type: none"> • Safety of staff and equipment is compromised since some EBD buildings are on top of seismic fault • Unavailability of upgraded facilities • Delays in the implementation of projects and technical services due to unexpected equipment breakdown • Delayed/Suspension in R&D activities and services due to pandemic and other disaster. • Overload of duties due to unexpected special assignments from DOST & ITDI officials • Delay in the delivery of equipment, materials due to procurement issues • Delayed submission of terminal report after project completion <p>Examples of measures taken to react on identified risks are:</p> <ul style="list-style-type: none"> • Staff relocation and building renovation • Modernize equipment and facilities • Conduct regular maintenance and calibration • Procurement of spare parts • Skeletal workforce due to lockdowns. • Online Transactions • Conduct R&D activities during work from home • Assign additional staff to assist in the implementation of project activities • Early procurement activities • Consistent checking and follow up of documents <p>Examples of risks and opportunities concerning the context of the organization are:</p> <p>Opportunities:</p> <ul style="list-style-type: none"> • Change in political leadership allows refocusing institute direction • New government policies that would help guide direction for R&D and technical Services • International and local partnership for collaborative R&D • Additional avenue to promote ITDI and its services • Energy & Environment Integration <p>Risks:</p> <ul style="list-style-type: none"> • Climate changes & Other calamities • Other institutions compete with available funding • Change in political leadership could disrupt on-going activities and change strategic direction

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	<p>Concerning risk based thinking the following tools are used:</p> <ul style="list-style-type: none"> • SWOT, PEST Analysis • Risk assessment criteria and matrix is established as a guide to determine the risk level. The risk level is equal to the probability multiply by the impact. Total rating of 1 to 3 is considered as low risk, 4 to 6 as medium risk and 7-9 as high risk. All high risk must be placed in the program and fully funded. • Customized Risk Register (qualitative-type) • Customize Action Plan (register) <p>Management review minutes of the meeting</p>
Customer-related and other requirements	<p>The organization analyses and evaluates customer requirements and/or enquiries and any documented, assumed, statutory and regulatory requirements within the scope of a production and feasibility study performed in a team.</p> <p>The person who prepared the offer reviews the contract to ensure its compliance with the offer and documents this compliance in an order confirmation. The same procedure applies to amendments.</p> <p>The following process requirements significantly affect product or service quality:</p> <ul style="list-style-type: none"> • Competency of the people • Provision of resources • Monitoring and evaluation of project • Technology Transfer • Timeliness and accuracy of the service report <p>Key regulatory, statutory and customer-related requirements include:</p> <ul style="list-style-type: none"> • E.O. No. 128, S.1987 • R.A. No. 8293 (Intellectual Property Code of the Philippines) • R.A. No. 9184 (Government Procurement Reform Act of 2003) • R.A. No. 9470 (National Archives of the Philippines Act of 2007) • Civil Service Commission (CSC) Issuances • R.A. No. 6713 (Code of Conduct and Ethical Standards for Public Officials and Employees) • R.A. No. 9485 (Anti-Red Tape Act of 2007) • E.O. No. 605, S.2007 • E.O. No. 265, S.2000 / NCC M.C. No. 2003-02 • COA Cir. No. 2001-04 (NGAS) • E.O. No. 43, S.2011 / A.O. No. 25, S.2011 / E.O. No. 80, S.2012 / CSC M.C. No. 6,S.2012 (SPMS) • R.A. No. 10173 (Data Privacy Act of 2012) • E.O. No. 2, S.2016 (Freedom of Information) • E.O. No. 605, S.2007 (GQMS) • AO 25 IATF M.C. No. 2017-1 / AO 25 IATF M.C. No. 2017-2 • DICT – Government Website Template Design (GWTD) Guideline • A.O. No. 39, S.2103 • E.O. No. 47, S.2011

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	<ul style="list-style-type: none"> Other relevant statutory, regulatory, legal and contractual requirements with regards to Environmental, Technology Transfers, Occupational Safety & Health, etc. Standard References – compliance with the standards in test, evaluation and analysis as to the Philippine National Standards, ASTM, Internal Standards, AOAC, JIS, EU, BAM, FDA
Customer satisfaction and complaints	<p>The organization maintains documented and effective procedures governing the handling of information, data analyses, improvement actions and responses to customer feedback.</p> <p>The Customer Satisfaction Survey Report 2020 was reviewed, verified and summarized below, based on the revised CSSF, *Service Quality Dimensions</p> <p>No. of Respondents: 1,389 Quality of Service – 4.73 Frontline Staff – 4.81 Technical Staff – 4.78 Promptness – 4.63 Premises – 4.66 Average for All *SQD – 4.72 Adjectival Rating - Excellent</p>
Internal audit and management review	<p>The organization measures the implementation, maintenance and effectiveness of the management system by means of annually scheduled system audits. The organization reliably carries out these audits. The records of the latest Internal Audit Cycle held from June 23 to July 06, 2021 with Observation – 45, OFI – 62 and NC – 0 were reviewed and verified.</p> <p>Top management reviews the organization's management system at regular intervals and in line with the requirements to ensure its continuous suitability, adequacy and effectiveness. The management review was carried out in accordance with the requirements and was effective</p> <p>Date of last management review: 16.07.2021</p>
Use of certificate and logo	The organization uses the logo and the certificate (e.g. on business cards, company brochures, websites etc.) in compliance with the requirements.

Chapter of standard	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	6.2	6.3		
Rating *	1	1	1	1	1	1	1	1	1	1		
No. of nonconformity	0	0	0	0	0	0	0	0	0	0		
Chapter of standard	7.1	7.2	7.3	7.4	7.5	8.1	8.2	8.3	8.4	8.5	8.6	8.7
Rating *	1	1	1	1	1	1	1	1	1	1	1	1
No. of nonconformity	0	0	0	0	0	0	0	0	0	0	0	0
Chapter of standard	9.1	9.2	9.3	10.1	10.2	10.3						
Rating *	1	1	1	1	1	1						
No. of nonconformity	0	0	0	0	0	0						

* **Rating:** 1 = conforming

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- 2 = not audited in this audit
- 3 = nonconformity (see nonconformity report)
- 4 = not applicable