



Republic of the Philippines  
**Department of Education**  
 REGION I  
 SCHOOLS DIVISION OF VIGAN CITY

January 30, 2025

**DIVISION MEMORANDUM**

No. 62, s. 2025

**VALIDATION ON THE IMPLEMENTATION OF INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) SUPPORT TO SCHOOLS FOR IMPROVED LEARNING OUTCOMES**

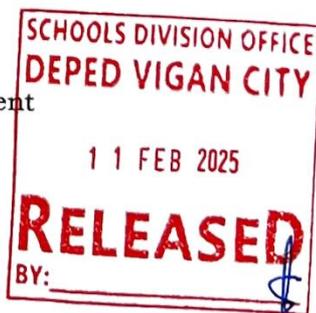
To: Assistant Schools Division Superintendent  
 Chief Education Supervisors (SGOD and CID)  
 Public and Private Secondary School Heads  
 All Others Concerned

1. Relative to Joint Memorandum OM-OSEC-OUOPS-OASICTS-A043 re: Supplemental Guidelines on DepEd Memorandum No. 001, s. 2025, titled "Operational Guidelines on the Implementation of Support to Schools for Improved Learning Outcomes, this Office shall conduct a validation on the implementation of Information and Communications Technology (ICT) support to schools for improved learning outcomes on February 11-12, 2025.
2. The activity ensures that the devices and internet connectivity are adequately prepared and optimized for the upcoming assessment cycle.
3. The validation team shall be composed of the following:

Chairman:	Rommel R. Rabo
Members:	Eric L. Tapat
	Aldrich B. Quiocho

4. Enclosed is the validation tool on the implementation of ICT support to schools for improved learning outcomes for your reference
5. Should you have queries or concerns, please coordinate with Curriculum Implementation Division (CID) specifically Mr. Rommel R. Rabo (09399193783).
6. This Memorandum serves as Locators Slip of the monitoring team.
7. Immediate dissemination of the Memorandum to all concerned is desired.

**VILMA D. EDA, CESO V**  
 Schools Division Superintendent



Encl: Validation Tool  
 Reference: JM OM-OSEC-OUOPS-OASICTS-2025-A043  
 DM No. 001, s. 2025  
 To be indicated in the Perpetual Index  
 Under the following subjects:

INFORMATION AND COMMUNICATIONS TECHNOLOGY

ASSESSMENT



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Your Feedback is important to us. Visit this link [bit.ly/SDOViganCityCSM](https://bit.ly/SDOViganCityCSM)





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**VALIDATION TOOL ON THE IMPLEMENTATION OF INFORMATION AND  
 COMMUNICATIONS TECHNOLOGY (ICT) SUPPORT TO SCHOOLS  
 FOR IMPROVED LEARNING OUTCOMES**

**Name of School:** \_\_\_\_\_

**School Address:** \_\_\_\_\_

**School Head:** \_\_\_\_\_

**Part I. Device and Connectivity Field**

Items	Readiness		Remarks
	Evident	Not Evident	
<b>1. Device</b>			
<i>1.1 Device Allocation</i>			
a. The school maintains a device-to-learner ratio of one device per learner, with an additional three devices allocated as backups.			
b. The school meets a maximum device requirement per school of 45 units (42 devices for learners + 3 backups).			
c. The school with fewer learners (e. g. 5 learners), a minimum of 8 devices is available.			
d. The school ensures that all devices are regularly maintained, updated, and functional to support interruption.			
e. The school provides secure storage and charging stations for all devices to prevent loss, damage, and power shortages during use.			
<i>1.2 Laptops vs. Desktops</i>			
a. The school has laptops available which is preferred for used due to their portability and lower power consumption.			
b. The school has desktops to be used as supplemental devices if laptops are insufficient.			
c. The school has desktops supported by an uninterrupted power supply (UPS) and/or a standby generator to address potential power interruptions.			
d. The school ensures that all laptops and desktops have the necessary software and security measures to support safe and effective use.			



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e. The school provides regular technical support and maintenance for both laptops and desktops to maximize device longevity and usability.			
<b>2. Connectivity</b>			
<i>2.1 Internet Service Provider (ISP)</i>			
a. The school has access to fixed-line providers (e. g., PLDT, Converge, Eagle Vision) must upgrade to a minimum speed of 100 Mbps.			
b. The school with smaller learner populations (e.g., fewer than 10 learners) may suffice with a baseline speed of 40 Mbps.			
c. The school considers acquiring Starlink to ensure internet access.			
d. The school is situated in remote areas utilizing Starlink considers upgrading subscriptions from residential to enterprise-level plans to accommodate higher usage demands.			
e. The school considers the number of learners, expected concurrent usage and bandwidth requirements to maintain optimal performance.			
<i>2.2 Internet Access for Computer Labs</i>			
a. The school allocates a dedicated ISP connection exclusively for computer labs during readiness activities to ensure uninterrupted connectivity.			
b. The school ensures that the existing connections be password-protected to prioritize the requirements of computer labs.			
<i>2.3 Wired vs. Wireless Connections</i>			
a. The school prefers wired connections, such as Local Area Network cables, for their reliability and stability that requires IT assistance for installation.			
b. The school ensures that the devices and routers support modern Wi-Fi standards, such as Wi-Fi 5 (802.1ac or Wi-Fi 6 (802.11ax), to achieve optimal speeds.			
c. The school uses the 5 GHz frequency band for higher speeds and minimizes interference by switching to less congested Wi-Fi channels.			
<i>2.4 Router Placement and Configuration</i>			
a. The school positions the routers in the central and elevated locations with minimal obstructions to ensure optimal signal distribution.			



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b. The school updates router firmware regularly and considers the deployment of switches to improve wired connection performance if necessary.			
c. The school uses switches to enhance wired connections and prevent network bottlenecks in high-device environments.			
d. The school uses load balancer routers in areas with multiple internet sources to optimize bandwidth, reduce congestion, and ensure seamless failover.			
e. The school engages ICT specialists or school division IT officers to assess the need for and installs load balancer routers where applicable.			
f. The school uses a managed router solution overseen by a skilled ICT administrator to handle its complex network.			
<b>2.5 Backup Power for Connectivity</b>			
a. The school ensures that all network devices, including routers, modems, and switches, are equipped with backup power solutions to maintain connectivity during power outages.			
b. The school utilizes UPS or a generator to provide reliable backup power for network infrastructure, preventing disruptions in internet access.			
<b>3 Infrastructure Support</b>			
<b>3.1 Multiple Connectivity Sources</b>			
a. The school has access to multiple connectivity options that is distributed to the users.			
b. The sources prevent overloading to a single connection.			
c. The school prioritizes fixed-line internet over satellite connectivity to avoid dependence on weather-sensitive systems.			
<b>3.3 Load Balancing</b>			
a. The school implements load-balancing configurations to manage traffic efficiently across multiple internet sources.			
b. The school utilizes dual or multiple internet service providers (ISPs) to ensure continuous connectivity in case of network failures.			
c. The school deploys network monitoring tools to track bandwidth usage and optimize internet performance.			
<b>4 Power Backup Recommendations</b>			



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<i>4.1 Backup for Desktops</i>			
a. The school equips desktops with UPS to maintain functionality during brief power interruptions.			
b. The school utilizes generators for extended power outages to sustain device operations.			
<i>4.3 Backup for Internet Devices</i>			
a. The school uses network devices such as routers, switches, and modems to ensure stable and efficient internet connectivity.			
b. The school provides dedicated UPS support for network devices to maintain uninterrupted internet access during power interruptions.			

**Part II. CIGPs, Proposed Solutions and Emerging Practices**

<b>Concerns/Issues/Gaps/Problems</b>	<b>TA Provided/Proposed Solutions</b>
<b>Emerging Practices</b>	<b>Suggestion/Recommendation</b>

Monitored by:

\_\_\_\_\_

Conforme:

\_\_\_\_\_



Republika ng Pilipinas  
**Department of Education**  
**OFFICE OF THE SECRETARY**



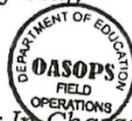
**JOINT MEMORANDUM**  
**OM-OSEC-OUOPS-OASICTS-2025- A043**

**TO :** **UNDERSECRETARIES**  
**ASSISTANT SECRETARIES**  
**BUREAU AND SERVICE DIRECTORS**  
**REGIONAL DIRECTORS**  
**SCHOOLS DIVISION SUPERINTENDENTS**  
**PUBLIC AND PRIVATE SECONDARY SCHOOL HEADS**  
**ALL OTHERS CONCERNED**

**FROM:**

*Fatima Lipp D. Panontongan*  
**ATTY. FATIMA LIPP D. PANONTONGAN**  
*Undersecretary and Chief of Staff*

*Malcolm S. Garma*  
**MALCOLM S. GARMA**  
*Assistant Secretary, Officer-In-Charge*  
*Office of the Undersecretary for Operations*



*Marcelino G. Veloso III*  
**MARCELINO G. VELOSO III**  
*Assistant Secretary for*  
*Information & Communications Technology*

**SUBJECT :** **SUPPLEMENTAL GUIDELINES ON DEPED**  
**MEMORANDUM NO. 001, S. 2025**

**DATE :** **23 JANUARY 2025**

1. In line with DepEd Memorandum No. 001, s. 2025, titled "Operational Guidelines on the Implementation of Support to Schools for Improved Learning Outcomes" the Department of Education (DepEd) remains committed to addressing infrastructure and connectivity challenges in schools and preparing for international large-scale assessments (ILSA). This memorandum provides supplemental guidelines to support schools in ensuring that devices and internet connectivity are adequately prepared and optimized for the upcoming 2025 assessment cycle.

2. Recent school audits and visits conducted by the Central Office Readiness Technical Working Group (TWG) and DepEd regional and division offices revealed significant areas requiring immediate action. These include insufficient devices, limited internet connectivity in rural and remote areas, and the need for reliable power backup systems such as generators and Uninterruptible Power Supply (UPS). The findings have highlighted the importance of a standardized approach to infrastructure and connectivity support to address gaps effectively.
3. This memorandum serves to issue operational field guidelines to ensure that schools are properly equipped and supported. These supplemental guidelines provide detailed recommendations and standards, which include:
  - 3.1. Device Allocation: Schools are required to provide a sufficient number of devices to accommodate all exam takers, with an additional three (3) backup units to ensure uninterrupted testing. The total number of required devices shall be determined by the number of exam takers at each testing site. Laptops are the preferred devices due to their portability and efficiency. For schools utilizing desktops, backup power systems such as UPS or generators must be installed to address potential power interruptions.
  - 3.2. Internet Connectivity: Schools must secure a minimum speed of 100 Mbps, either by upgrading current plans or exploring alternative solutions such as enterprise Starlink subscriptions, particularly in remote areas.
  - 3.3. Infrastructure Improvements: Recommendations for power backup systems, optimized router placement, and dedicated internet connectivity to ensure uninterrupted operations during readiness activities.
  - 3.4. Dedicated Internet Access: Schools must ensure that computer laboratories or testing rooms have exclusive access to Internet resources during readiness periods to prevent bandwidth congestion.
4. For further clarification, the Readiness TWG Secretariat may be reached through the Office of the Assistant Secretary for Information & Communications Technology Service at 8633-7256.
5. For immediate dissemination and compliance.

*Enclosure:  
Device and Connectivity Field Guidelines*



## **DEVICE AND CONNECTIVITY FIELD GUIDELINES**

These guidelines aim to ensure that schools optimize the use of devices and internet connectivity to meet the requirements for readiness activities and assessments.

### **I. Device Guidelines**

#### 1.1. Device Allocation

- A. Schools are required to maintain a device-to-learner ratio of one device per learner, with an additional three devices allocated as backups.
- B. The maximum device requirement per school is 45 units (42 devices for learners + 3 backup devices).
- C. For schools with fewer learners (e.g., 5 learners), a minimum of 8 devices is required (5 for learners + 3 backups).

#### 1.2. Laptops vs. Desktops

- A. Preference: Laptops are recommended due to their portability and lower power consumption.
- B. Desktops: Desktops may be used as supplemental devices where laptops are insufficient. Desktops must be supported by an uninterrupted power supply (UPS) and/or a standby generator to address potential power interruptions.

### **II. Connectivity Guidelines**

#### 2.1. Internet Service Provider (ISP) Upgrades:

- A. Definition: ISP refers to an "Internet Service Provider," responsible for delivering Internet connectivity to schools.
- B. Fixed-Line Connectivity:
  - o Schools with access to fixed-line providers (e.g., PLDT, Convergence) must upgrade to a minimum speed of 100 Mbps.
  - o Schools with smaller learner populations (e.g., fewer than 10 learners) may suffice with a baseline speed of 40 Mbps.
- C. Satellite Connectivity:
  - o For schools without existing connectivity solutions, acquiring Starlink is strongly recommended to ensure adequate internet access.

- Schools in remote areas utilizing Starlink should upgrade subscriptions from residential to enterprise-level plans to accommodate higher usage demands.
  - The decision to upgrade or acquire Starlink should consider the number of learners, expected concurrent usage and bandwidth requirements to maintain optimal performance.
- D. Escalation of Delays: In cases where delays in ISP upgrades occur due to administrative processes, such as approvals from main offices, these concerns must be promptly escalated to Execom Focals for resolution.

## 2.2. Dedicated Internet Access for Computer Labs:

- A. Schools must allocate a dedicated ISP connection exclusively for computer labs during readiness activities to ensure uninterrupted connectivity.
- B. Alternatively, existing connections should be password-protected to prioritize the requirements of computer labs.

## 2.3. Wired vs. Wireless Connections:

- A. **Wired Connectivity:** Wired connections, such as those using LAN (Local Area Network) cables, are preferred for their reliability and stability. However, their installation may require the assistance of IT personnel.
- B. **Wireless Connectivity:** Ensure that devices and routers support modern Wi-Fi standards, such as Wi-Fi 5 (802.11ac) or Wi-Fi 6 (802.11ax), to achieve optimal speeds.
- C. For wireless setups, use the 5 GHz frequency band for higher speeds and minimize interference by switching to less congested Wi-Fi channels.

## 2.4. Router Placement and Configuration:

- A. Position routers in central and elevated locations with minimal obstructions to ensure optimal signal distribution.
- B. Update router firmware regularly and consider the deployment of switches to improve wired connection performance if necessary.
- C. Deploy switches as needed to improve wired connection performance and reduce network bottlenecks, especially in environments with multiple wired devices.
- D. In locations with multiple internet sources, the use of load balancer routers is strongly recommended. Local balancer routers ensure

efficient allocation of bandwidth across available connections, minimize network congestion, and provide a seamless failover mechanism.

- E. Engage ICT specialists or school division IT officers to assess the need for and install load balancer routers where applicable.
- F. For complex systems, where a school has many routers installed, a managed router solution may be engineered by a capable school ICT administrator.

**2.5. Backup Power for Connectivity:** All network devices, including routers, modems, and switches, must be equipped with backup power solutions such as UPS or generators to maintain connectivity during power outages.

### **III. Infrastructure Support**

#### **3.1. Multiple Connectivity Sources:**

- A. Schools with access to multiple connectivity options should distribute users across these sources to prevent overloading any single connection.
- B. Fixed-line internet should be prioritized over satellite connectivity to avoid dependence on weather-sensitive systems.

**3.2. Load Balancing:** Schools are encouraged to implement load-balancing configurations to manage traffic efficiently across multiple internet sources.

### **IV. Power Backup Recommendations**

#### **4.1. Backup for Desktops:**

- A. Desktops should be equipped with UPS to maintain functionality during brief power interruptions.
- B. Generators should be utilized for extended power outages to sustain device operations.

**4.2. Backup for Internet Devices:** Network devices such as routers, switches, and modems must have dedicated UPS support to ensure uninterrupted internet connectivity during power interruptions.