GOVERNMENT OF ANDHRA PRADESH

ABSTRACT
Hardware & Software Lifecycle Management Policy – Guidelines for IT Road Map, Project formulation, Procurement, Maintenance and Replacement - Mechanism to be followed while implementing e-Governance Projects – Orders – Issued.

INFORMATION TECHNOLOGY & COMMUNICATIONS DEPARTMENT
(e-Governance wing)

G.O. Rt. No.268
Dated :08.08.2008

1. GO MS 40, IT&C Department dated: 14.8.2001,
2. G.O Ms. No.5, IT&C Department Dated.23.02.2005,
3. GO Ms No. 7, IT&C Department DATED: 13-07-2007,

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ORDER:

1. Preamble
Moore’s law states that “computing power doubles every 18-24 months while costs stay constant.” Inevitably, old technologies need to be replaced by new ones for improving productivity and efficiency. However with improvements in hardware happening faster, it is practical to replace hardware not at the rate technology improves but based on obsolescence and usability of hardware. Similarly, software also undergoes change rapidly and it needs to be replaced/ upgraded from time to time. With increase in use of IT in Government functioning, it is imperative that Government departments follow certain standards in software development for enabling data sharing across departments and making different applications talking to each other. To address these issues of hardware replacement, software upgradation and interoperability of applications, the following ‘policy guidelines’ are issued for adoption by all Departments and agencies of the Government of Andhra Pradesh.

POLICY GUIDELINES

2. IT vision and the roadmap:

To harness the potential of IT in providing improved services to citizen and improving internal working efficiency, it is essential that each department should have IT vision and a road map. The vision should identify various objectives, services to be provided, milestones to be achieved etc in a fixed time frame. Ideally, the vision should be driven by the leadership of the Department and owned by all functionaries. Chief Information Officers (CIOs) of the concerned Departments have to play an important role in drafting IT vision and the roadmap.

3. Project formulation

The next logical step to be followed is project formulation. It could be either a single or multiple projects as per the road map / departmental vision and availability of resources. All the Government departments and agencies of Andhra Pradesh must prepare Detailed Project Report (DPR) duly vetted by a Qualified Agency on the points of project objectives, deliverables, time frame, IT Standards (ref 1), data standards (ref 2) and the security policy (ref 3), service level performance metrics (SLPM), Hardware and Software configuration, capacity building, project team and provision to meet the capital cost and maintenance expenditure over useful life period of the project. A suggestive list, but not limited to, of qualified agencies is at Annexure I.
4. **Procurement, Replacement and Maintenance of IT Hardware:**

IT hardware constitutes a major cost of any IT project. Adherence to best practices can help in procuring right size of the hardware, bring down cost of procurement substantially and reduce risk of IT hardware becoming obsolete before its useful life period. Quantity of procurement makes lot of difference in pricing of IT hardware. As IT hardware price tends to fall with time for same configuration, any delay in completing procurement cycle will indirectly increase cost of procurement. It is by and large true that maintenance of old hardware is a costly proposition. It is advisable to replace IT hardware on buyback with new hardware at the first opportunity feasible. Minimum IT hardware configuration and their indicative productive life as recommended by IT&C department are at Annexure II.

5. **Procurement of Operating System (OS), RDBMS and Office Tools:**

Software companies release newer versions of OS and RDBMS from time to time with additional features, improved productivity and security features. Application which are stabilized and does not require many changes in functionality and performance do not require change in OS and RDBMS for long time. However critical applications working on 24x7 and delivering citizen services needs continuous improvement in performance and security to meet the expectations of citizens. For such applications it is advisable to upgrade OS and RDBMS on continuous basis by adopting AMC route. For most of the users, office tools like ‘office’ may require replacement only after users face compatibility problems.

These instructions/orders shall apply to and be implemented by all the departments, agencies of the Government and Public Sector Undertakings for implementing the IT projects including the projects in the pipeline.

**(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)**

SURESH CHANDA  
SECRETARY TO GOVERNMENT

To
1. All departments of Secretariat
2. All HoDs / Agencies/ PSUs
3. The Accountant General (Audit), Hyderabad.
5. The Director of Treasuries and Account, Hyderabad.
6. The Pay and Accounts Officer, A.P. Hyderabad.
7. The Dy, PAO, Secretariat branch, Hyderabad
8. The Joint Director & DDO, IT&C dept (3copies)

Copy to
PS to Prl. Secretary, IT&C Dept.
PS to Secretary, IT&C Dept.
SC/SF

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Annexure I

Government of India empanelled agencies:
1. National Institute of Smart Governance (NISG)
2. PWC
3. IL&FS
4. Wipro
5. 3iInfotech

Government of AP Agencies:
1. AP Technology Services
2. Centre for Good Governance (CGG)

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SECRETARY TO GOVERNMENT

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### Annexure II
**Suggested configurations As on 01.08.2008 and Economical Life of IT Hardware**

<table>
<thead>
<tr>
<th>S No</th>
<th>Item</th>
<th>Minimum specification</th>
<th>User Profile</th>
<th>Economical life period (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a</td>
<td>High-end Server</td>
<td>The server sizing should be based on the actual requirement.</td>
<td>Critical 24x7 applications</td>
<td>5</td>
</tr>
</tbody>
</table>
| 1.b  | Low End Server            | **Processor:** Dual-Core Dual processor 1.8 GHz with 1000 Mhz FSB, 2 MB Cache  
**Memory:** 4 GB RAM expandable to 16 GB  
**Hard drive** SATA / SCSI controller, 160 x3 GB SATA or 146 x3 SCSI HDD  
**Optical drive** DVD combo drive  
**Ethernet:** 100/1000 Mbps Ethernet Card, | Small Department servers  | 5                              |
| 2.a  | PC / workstation          | **Processor:** Dual core Processor 1.8 GHz with 800 FSB, 1 MB Cache  
**Memory** 2 GB RAM  
**Hard drive** SATA controller, 80 GB SATA  
**Ethernet:** 10/100 Mbps Ethernet Card  
4 USB (Back), + 2 USB (Front)  | Heavy users                  | 3                              |
| 2.b  | PC                        | **Processor:** Single core processor 1.8 GHz with 800 FSB, 1 MB Cache  
**Memory** 512 MB RAM  
**Hard drive** SATA controller, 80 GB SATA  
**Ethernet:** 10/100 Mbps Ethernet Card  
4 USB (Back), + 2 USB (Front)  
10/100 Mbps Ethernet Card  | General Users                | 5                              |
| 3.a  | Laptop (Senior Executives)| **Processor:** Dual core processor 2.3 GHz, 800 MHz FSB  
**Memory** 2 GB / 4 GB, DDR2 SDRAM, 800 MHz  
**Hard drive** 160 GB, Serial ATA  
**Optical drive:** DVD combo drive  
**Wireless:** Wireless, Bluetooth Version 2.0 + EDR  
**Ethernet:** Integrated 1000 Gigabit Ethernet  
**Weight:** 2.0 Kg or less  
**Warranty:** Three years parts and labor, Carry case with AC Power Adopter | Secretary and above rank    | 3                              |
| 3.b  | Laptop (general Users)    | **Processor:** Dual core processor 1.6 GHz, 800 MHz FSB  
**Memory** 1 GB  
**Hard drive** 80 GB, Serial ATA  
**Optical drive:** - DVD combo drive  
**Wireless:** Wireless, Bluetooth Version 2.0 + EDR  
**Ethernet:** 10/100 Mbps Ethernet  
**Warranty:** Three years parts and labor, Carry case with AC Power Adopter | Other users                  | 5                              |
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</table>
|   | Laser Printer | **Print technology:** Monochrome Laser  
Print speed (black, normal quality, A4): above 20 ppm  
Print quality (black, best quality): Up to 600 x 600 dpi (1200 dpi effective output)  
Duplex print  
Connectivity: Parallel / Ethernet print server / Hi-Speed USB port | Heavy use | 3 |
| 4.a | Laser Printer | **Print technology:** Monochrome Laser  
Print speed (black, normal quality, A4): Up to 20 ppm or more  
Print quality (black, best quality): Up to 600 x 600 dpi (1200 dpi effective output)  
Duplex print options: manual  
Standard media sizes: A4, A5, A6, B5, postcards, envelopes (C5, DL, B5)  
Connectivity: Parallel / Ethernet print server / Hi-Speed USB port | General Use | 5 |
| 4.b | DMP Printer | Print Head Type: 24 Pin  
Print Direction: Bi-directional logic seeking  
Print Width: 136 column / 80 columns | Heavy use | 3 |
| 5.a | DMP Printer | Print Head Type: 9 pin / 24 pin  
Print Direction: Bi-directional logic seeking  
Print Width: 136 column / 80 columns | General Use | 5 |
| 5.b | Photocopier | Printing/copying Speed: 25 ppm  
Duplex: Automatic  
Image Manipulation: 50% - 200% | Heavy use | 3 |
| 6.a | Photocopier | Printing/copying Speed: 10 ppm  
Duplex: Automatic  
Image Manipulation: 50% - 200%  
Stack Bypass: A5R - A3, Envelopes | General Use | 5 |
| 6.b | Inkjet Printer | **Printing system:**  
Print technology: Inkjet  
Print quality - Black - Up to 1200 x 1200 rendered dpi  
Print quality - colour - Up to 4800 x 1200 optimized dpi color and 1200 input dpi  
Print speed (colour, normal quality, A4): 20/25 ppm or more | Heavy use | 3 |
| 7.a | Inkjet Printer | **Printing system:**  
Print technology: Inkjet  
Print quality - Black - Up to 1200 x 1200 rendered dpi  
Print quality - colour - Up to 4800 x 1200 optimized dpi color and 1200 input dpi  
Print speed (colour, normal quality, A4): 10/15 ppm or more | General Use | 5 |
| 7.b | Online UPS | **Input**  
Input voltage range for main operations: 160 - 280V | All purposes | 5 |
<table>
<thead>
<tr>
<th></th>
<th>Battery Type: Sealed Maintenance Free</th>
<th>Audible Alarm: Alarm when on battery, Distinctive low battery alarm, Overload continuous tone alarm, Surge Protection and Filtering</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Standard Warranty: 2 years repair or replace</strong></td>
<td><strong>Output</strong> Output Power Capacity: as required Nominal Output Voltage: $230V \pm 2%$ Output Frequency (sync to mains): $48 - 52 \text{ Hz}$ for $50 \text{ Hz}$ nominal Waveform Type: Sine-wave</td>
<td></td>
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<tr>
<td></td>
<td><strong>8.b Off Line UPS</strong></td>
<td><strong>Input</strong> Input voltage range for main operations: $160 - 280V$ Battery Type: Sealed Maintenance Free Audible Alarm: Alarm when on battery, Distinctive low battery alarm, Overload continuous tone alarm, Surge Protection and Filtering <strong>Standard Warranty: 2 years repair or replace</strong> Output Power Capacity: as required Nominal Output Voltage: $230V \pm 2%$ Output Frequency (sync to mains): $48 - 52 \text{ Hz}$ for $50 \text{ Hz}$ nominal Waveform Type: Sine-wave</td>
<td>All purposes 7</td>
</tr>
<tr>
<td>9</td>
<td>Network elements</td>
<td>The sizing to be done on the actual requirements. The expansion for future to be considered for Routers, Switches, Hubs like items</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>Modems</td>
<td>Where ever possible the MLL to be opted for leased lines. For dialup procure $56 \text{ Kbits/s}$</td>
<td>5</td>
</tr>
</tbody>
</table>

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