



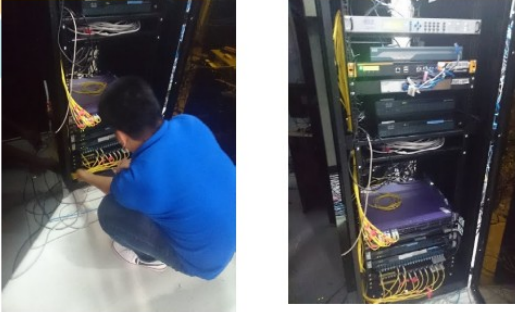
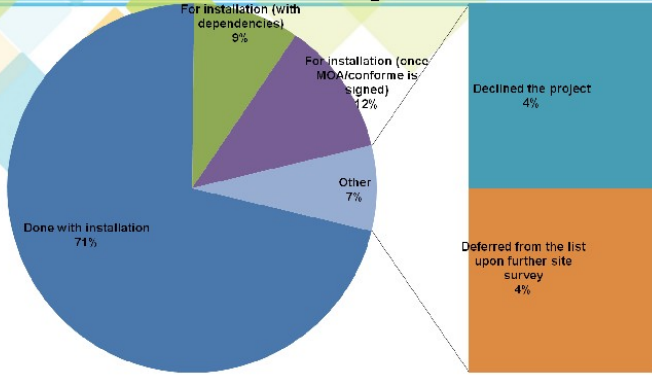
### AFTER MEETING REPORT

**SUBJECT** : Kapihan ng mga Hepe: GovNet  
**DATE AND TIME** : 22 September 2015, 8:00 AM – 10:00 AM  
**VENUE** : Ral's Restaurant, UP Ayala Technohub

AGENDA	HIGHLIGHTS	ACTION ITEMS
Introduction of participants	There are 15 attendees for this event: <ul style="list-style-type: none"> <li>• 7 CIOs (ICT Office, BIR, OVP, PNP, CA)</li> <li>• 3 CIOFF officials</li> <li>• 3 iGovPhil</li> <li>• 1 ASTI</li> <li>• 1 ICT Office</li> </ul>	
Presentation on GovNet  <i>Eric Toledo</i> <i>DOST-ICTO</i>	<div style="background-color: #e0f0ff; padding: 5px; text-align: right;"><b>Objective</b></div> <p>To connect government agencies to a data center, which acts as the medium of communications, traffic controller, server and application host, and keeper and manager of data.</p>	
	<div style="background-color: #e0f0ff; padding: 5px; text-align: right;"><b>Objective</b></div> <p>To help people in government communicate faster, coordinate activities better, facilitate collaborative work and increase productivity, resulting in speedier and more efficient delivery of goods and services to citizens</p>	



AGENDA	HIGHLIGHTS	ACTION ITEMS
	<p style="text-align: right;"><b>Major Activities</b></p> <ul style="list-style-type: none"> <li>• Signing of:           <ul style="list-style-type: none"> <li>– MOA: a five-page document that binds DOST-ICT Office and the client/Point-of-Presence (PoP) agency</li> <li>– Conforme: a one-page document to facilitate Fiber-to-the-Building installation</li> </ul> </li> <li>• Fiber-to-the-Building (FTTB) installation           <ul style="list-style-type: none"> <li>– Upon signing of the abovementioned documents, the agency is subject for scheduling of the physical installation done by the contractor (WifiCity Inc.)</li> </ul> </li> </ul> <p><i>If you signed the Conforme, it means that your agency has already given us an approval of installing the fiber in your building.</i></p>	
	<p style="text-align: right;"><b>Major Activities</b></p> <ul style="list-style-type: none"> <li>• Optical Distribution Frame (ODF) installation           <ul style="list-style-type: none"> <li>– After FTTB installation, the contractor will proceed to the ODF installation inside the data center (if existing) or room where the network will be terminated</li> </ul> </li> <li>• Testing and Acceptance           <ul style="list-style-type: none"> <li>– An FOC activity that aims to test the integrity and continuity of the fiber installed; done by the contractor, witnessed by the iGovPhil FOC team and approved by the FOC core team.</li> </ul> </li> </ul> <p><i>We are giving two-core fibers for the equipment and two-core fibbers for the redundancy.</i></p>	
	<p style="text-align: right;"><b>Major Activities</b></p> <ul style="list-style-type: none"> <li>• Network equipment deployment           <ul style="list-style-type: none"> <li>– Once the agency is tested and accepted, the network team will deploy the following equipment:               <ul style="list-style-type: none"> <li>• Media converter for the client agencies</li> <li>• VLAN switch for POP agencies</li> </ul> </li> </ul> </li> </ul>	

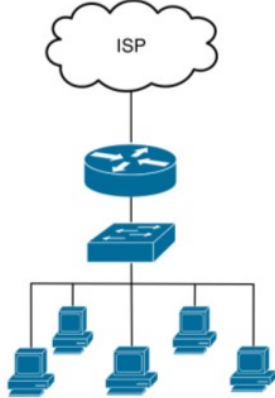
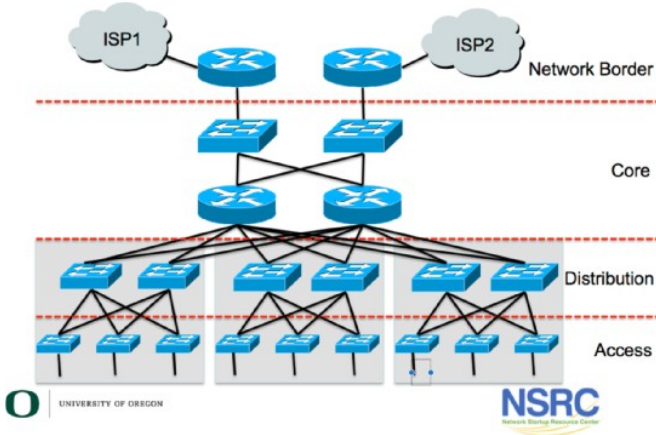
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	<p style="text-align: center;"><b>Major Activities</b></p> <p>Sample network deployment with PAG-ASA</p> 	
	<p style="text-align: center;"><b>GovNet Updates</b></p>  <p>Done with installation: 71%</p> <p>For installation:</p> <ul style="list-style-type: none"> <li>with dependencies – 9%</li> <li>once MOA/Conforme is signed – 12%</li> </ul> <p>Others:</p> <ul style="list-style-type: none"> <li>declined the project – 4% (6 agencies)</li> <li>deferred upon the list upon further site survey – 4%</li> </ul>	



AGENDA	HIGHLIGHTS	ACTION ITEMS																									
	<table border="1"> <thead> <tr> <th colspan="3" data-bbox="422 376 1107 450">Summary (Installation/Network)</th> </tr> </thead> <tbody> <tr> <td data-bbox="422 450 651 544">Done with installation</td> <td data-bbox="651 450 959 544">115</td> <td data-bbox="959 450 1107 544"> <table border="1"> <thead> <tr> <th data-bbox="970 450 1107 488">Connected</th> <th data-bbox="970 488 1107 544">60</th> </tr> </thead> <tbody> <tr> <td data-bbox="970 488 1107 544">For deployment (once accepted)*</td> <td data-bbox="970 544 1107 544">55</td> </tr> </tbody> </table> </td> </tr> <tr> <td data-bbox="422 544 651 611">For installation (with dependencies)</td> <td data-bbox="651 544 959 611">15</td> <td data-bbox="959 544 1107 611"></td> </tr> <tr> <td data-bbox="422 611 651 678">For installation (once MOA/conforme is signed)</td> <td data-bbox="651 611 959 678">19</td> <td data-bbox="959 611 1107 678"></td> </tr> <tr> <td data-bbox="422 678 651 745">Declined the project</td> <td data-bbox="651 678 959 745">6</td> <td data-bbox="959 678 1107 745"></td> </tr> <tr> <td data-bbox="422 745 651 813">Deferred from the list upon further site survey</td> <td data-bbox="651 745 959 813">6</td> <td data-bbox="959 745 1107 813"></td> </tr> <tr> <td data-bbox="422 813 651 846">TOTAL</td> <td data-bbox="651 813 959 846">161</td> <td data-bbox="959 813 1107 846"></td> </tr> </tbody> </table> <p data-bbox="422 869 734 898">* 39 already accepted (as of Sept 14)</p>	Summary (Installation/Network)			Done with installation	115	<table border="1"> <thead> <tr> <th data-bbox="970 450 1107 488">Connected</th> <th data-bbox="970 488 1107 544">60</th> </tr> </thead> <tbody> <tr> <td data-bbox="970 488 1107 544">For deployment (once accepted)*</td> <td data-bbox="970 544 1107 544">55</td> </tr> </tbody> </table>	Connected	60	For deployment (once accepted)*	55	For installation (with dependencies)	15		For installation (once MOA/conforme is signed)	19		Declined the project	6		Deferred from the list upon further site survey	6		TOTAL	161		
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Open Forum	<p data-bbox="422 954 845 987">Timeframe of installation in CCP:</p> <ul data-bbox="462 987 1021 1133" style="list-style-type: none"> <li data-bbox="462 987 1021 1055">• the contractor has said that permit has already been signed to install the duct.</li> <li data-bbox="462 1055 1021 1099">• 15 days</li> <li data-bbox="462 1099 1021 1133">• CCP has not yet signed the Conforme.</li> </ul>																										
	<p data-bbox="422 1189 877 1223">Concerns raised from Toto Magsino:</p> <ul data-bbox="462 1223 1101 1917" style="list-style-type: none"> <li data-bbox="462 1223 1101 1335">• The reason we are connecting the agencies in a government network is to connect them to the data center.</li> <li data-bbox="462 1335 1101 1469">• If they don't want to be connected to the data center, will they still be connected to the network? <ul data-bbox="510 1447 606 1469" style="list-style-type: none"> <li data-bbox="510 1447 606 1469">◦ Yes.</li> </ul> </li> <li data-bbox="462 1469 1101 1805">• I think the reason they don't want to connect to the data center is that they thought you would have access to their data. <ul data-bbox="510 1581 1101 1805" style="list-style-type: none"> <li data-bbox="510 1581 1101 1671">◦ If an agency does not want to be hosted in the data center, it is okay.</li> <li data-bbox="510 1671 1101 1805">◦ Some agencies thought iGov is funded by the PDAF. They don't want their integrity to be tarnished. iGov, however, uses eGovernment Fund, not PDAF.</li> </ul> </li> <li data-bbox="462 1805 1101 1917">• What resources are needed by the agencies to manage the network from their side? The responsibility of the agencies is for them to</li> </ul>	<p data-bbox="1129 1189 1469 1290">iGovPhil guarantees performance up to deployment of equipment.</p> <p data-bbox="1129 1335 1398 1435">iGovPhil will propose standard LAN configuration.</p> <p data-bbox="1129 1827 1445 1928">iGovPhil will provide the agencies the competencies needed in</p>																									



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	<p>have competency. If they do not know what to do, don't connect them.</p> <ul style="list-style-type: none"> <li>• Is it the number of application or the number of successful installation?</li> <li>• Have a policy that states the resources must be for official use only.               <ul style="list-style-type: none"> <li>◦ IgovPhil is already preparing the policies. Some services, e.g., Single Sign On, monitor the individual usage of resources.</li> <li>◦ There is still no MOA requirement on the Internet connection. Technically, the network is not yet fully accepted.</li> </ul> </li> </ul>	<p>managing the network.</p>
<p>Sample LAN presentation</p> <p><i>Rod Bio</i> <i>DOST-ASTI</i></p>	<p style="text-align: center;">Design</p> <ul style="list-style-type: none"> <li>• Depends on your needs</li> <li>• Typical components               <ul style="list-style-type: none"> <li>• Router/s; acts as gateway to the rest of the Internet; sometimes acts as a firewall, switch etc.</li> <li>• Switch/s and Access Point/s; distributes and aggregates</li> </ul> </li> </ul>	
	<p style="text-align: center;">Design</p> <ul style="list-style-type: none"> <li>• Optionally, you might also need:               <ul style="list-style-type: none"> <li>• web-proxy; faster access to web content by caching</li> <li>• IDS/IPS; prevents/detect unwanted traffic from L2-L7</li> <li>• Load Balancer; if you have multiple uplinks</li> <li>• LDAP or AD; for user authentication and access</li> <li>• Firewall and NAT; filters and translates from RFC 1918 address to public-addresses</li> </ul> </li> </ul>	

AGENDA	HIGHLIGHTS	ACTION ITEMS
	<h2 style="text-align: center;">Typical LAN</h2>  <ul style="list-style-type: none"> <li>• Keeping it Simple</li> <li>• a Router and/or a Switch</li> <li>• Switch then distributes to hosts below it</li> </ul>	
	<h2 style="text-align: center;">A more complicated design</h2>  <p style="text-align: right;">Network Border</p> <p style="text-align: right;">Core</p> <p style="text-align: right;">Distribution</p> <p style="text-align: right;">Access</p> <p>UNIVERSITY OF OREGON      NSRC</p>	
	<h2 style="text-align: center;">How should I design?</h2> <ul style="list-style-type: none"> <li>• Depends on your requirement</li> <li>• Do you need redundancy? high-availability?</li> <li>• Do we have resource? i.e. money and personnel</li> </ul>	



REPUBLIC OF THE PHILIPPINES

DEPARTMENT OF SCIENCE AND TECHNOLOGY



INFORMATION AND COMMUNICATIONS TECHNOLOGY OFFICE

AGENDA	HIGHLIGHTS	ACTION ITEMS
	<p data-bbox="448 383 1098 443">What will GovNet provide?</p> <ul data-bbox="437 479 1086 846" style="list-style-type: none"><li data-bbox="437 479 719 510">• Access to the Internet</li><li data-bbox="437 539 788 571">• a /29 Public IPv4 addresses</li><li data-bbox="437 600 692 631">• Do you need more?<ul data-bbox="464 660 1018 846" style="list-style-type: none"><li data-bbox="464 660 948 692">• Send us an email explaining your intent</li><li data-bbox="464 721 1018 752">• Or collocate your add'l service at GDC 1 or 2</li><li data-bbox="464 781 1086 846">• Join APNIC and have your own address space and AS Number then peer with us:)</li></ul></li></ul>	
	<p data-bbox="624 927 927 987">What will...</p> <ul data-bbox="443 1048 1075 1375" style="list-style-type: none"><li data-bbox="443 1048 906 1079">• Do you want IPv6 on your network?</li><li data-bbox="443 1108 927 1140">• We can provide you a /64 IPv6 block<ul data-bbox="470 1169 1075 1375" style="list-style-type: none"><li data-bbox="470 1169 826 1200">• equivalent to /24 with IPv6</li><li data-bbox="470 1229 1075 1294">• Thats 18,446,744,073,709,551,616 public IPv6 addresses</li><li data-bbox="470 1323 1023 1375">• We can also give out additional /64 blocks</li></ul></li></ul>	

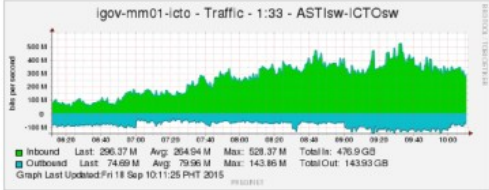


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	<p style="text-align: center;"><b>IPv6</b></p> <ul style="list-style-type: none"> <li>• What do you need for IPv6? Two things an IPv6-enabled router and an IPv6-enabled device (users)               <ul style="list-style-type: none"> <li>• No! You don't need an IPv6-enabled layer 2 switch.</li> <li>• If you use a firewall, you might also want to check if your firewall can do IPv6</li> </ul> </li> <li>• Do we still need IPv4 when we have IPv6?               <ul style="list-style-type: none"> <li>• Yes. Dual-stack is the preferred way... for now</li> <li>• Some services are not yet on IPv6</li> </ul> </li> </ul>	
	<p style="text-align: center;"><b>What will GovNet provide</b></p> <ul style="list-style-type: none"> <li>• Does your network have its own AS Number and Public IP address block?</li> <li>• Good! We can configure BGP and have your prefixes announce by us.</li> </ul>	
	<p style="text-align: center;"><b>Bandwidth</b></p> <ul style="list-style-type: none"> <li>• Expected bandwidth?</li> <li>• to services directly administered by iGOV-&gt; ~1Gbps</li> <li>• to other networks and the Internet -&gt; expect around 1Mbps to 900Mbps               <ul style="list-style-type: none"> <li>• Varying factors dictate the speed of access to outside networks, latency/transit capacity</li> <li>• Currently bidding additional bandwidth to international networks</li> <li>• Peering with other networks especially local ISP, i.e. PhOpenIX</li> </ul> </li> </ul>	





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	<h2 data-bbox="619 389 906 450">Bandwidth</h2> <ul data-bbox="432 526 1086 813" style="list-style-type: none"><li data-bbox="432 526 991 589">• Why are we not getting the full 1Gbps when accessing the internet?</li><li data-bbox="459 622 1038 685">• packet-based vs circuit-based; Internet is the former</li><li data-bbox="459 719 1086 813">• Internet is a shared medium, every hop traversed increases the latency and decreases the bandwidth available</li></ul>	
	<h2 data-bbox="571 880 986 940">Other services</h2> <ul data-bbox="432 981 1094 1361" style="list-style-type: none"><li data-bbox="432 981 932 1010">• Google has its own caches under GovNet<ul data-bbox="459 1039 1034 1068" style="list-style-type: none"><li data-bbox="459 1039 1034 1068">• Access to Google services should now be faster</li></ul></li><li data-bbox="432 1099 1054 1162">• Akamai, a popular content delivery network, also has caches under GovNet</li><li data-bbox="432 1189 975 1218">• Others like DNS root services, j-root and i-root</li><li data-bbox="432 1245 1094 1308">• Polycom video conferencing and streaming services are also free</li><li data-bbox="432 1335 887 1364">• GovNet is also peered with PhOpenIX</li></ul>	
	<h2 data-bbox="719 1462 842 1523">FAQ</h2> <ul data-bbox="432 1671 1094 1834" style="list-style-type: none"><li data-bbox="432 1671 1062 1733">• Should we still keep our existing link from other telco?<ul data-bbox="459 1767 1094 1834" style="list-style-type: none"><li data-bbox="459 1767 1094 1834">• Yes! We recommend keeping at least one other uplink for redundancy</li></ul></li></ul>	

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	<h2 style="text-align: center;">How can I monitor my usage?</h2> <ul style="list-style-type: none"> <li>Monitoring via Cacti/MRTG</li> </ul>  <ul style="list-style-type: none"> <li>Shows yearly, monthly, weekly, daily and hourly traffic usage</li> </ul>	
	<h2 style="text-align: center;">Link issues?</h2> <ul style="list-style-type: none"> <li>Contact us if there are problems</li> <li>Refrain from sending ambiguous messages like "slow internet.. pls help"</li> <li>Kindly include description of issues you find and output of the tests conducted</li> <li>Some common network tools: <ul style="list-style-type: none"> <li>traceroute, ping</li> </ul> </li> </ul>	
Open Forum	<p>Concerns from Toto Magsino:</p> <ul style="list-style-type: none"> <li>How does the support organization of ICT Office look like? <ul style="list-style-type: none"> <li>All development phase is being done by iGov (personnel from ICTO and ASTI)</li> <li>All operations and maintenance will be transitioned to ICTO-Systems and Infrastructure Management Service. However, since SIMS is not yet ready to take over what iGov has started, we're going to outsource the operations and</li> </ul> </li> </ul>	



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	<p>maintenance of the network to third party provider.</p> <ul style="list-style-type: none"> <li>• Monitoring of resources               <ul style="list-style-type: none"> <li>◦ Once we launch the Single Sign On, all government resources will be monitored.</li> </ul> </li> </ul>	
	<p>Budget for additional Internet service providers</p> <ul style="list-style-type: none"> <li>• If an agency joins the network, can it no longer avail of the service of other ISPs?               <ul style="list-style-type: none"> <li>◦ That's the agency's prerogative. If an agency wants to join, it should join now when installation of fiber to the building is still shouldered by the contractor.</li> </ul> </li> </ul>	
<p>Brief Overview of GovRoam</p> <p><i>Antonette Torres</i> <i>DOST-ICTO</i></p>	<p>GovRoam is for all GovNet-connected agencies. Once the Single Sign On is already in place, there will be one public IP for all government employees. This means they will have access to the system of other government offices that they will visit; they can use their login credentials to enter the Internet. This is a unified access for all government employees.</p> <p>This will be LDAP access. They have to use their GovMail account.</p> <p>The agency will shoulder the router.</p>	
<p>Next Kapihan</p>	<p>October 29 Venue and time: to be announced</p> <p>We are looking for venue sponsors. Kapihan may also be held in the afternoon to allow more participants.</p>	

Prepared by:

Noted by:

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