Connectivity and access to reliable telecommunications services has become a key component of successful development programs

<table>
<thead>
<tr>
<th>Typical Conditions</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Service is unavailable in the desired geography</td>
<td>• Implementing Partners (IPs) adapt processes to compensate for limited or no connectivity</td>
</tr>
<tr>
<td>• Service is available but unreliable</td>
<td>• IPs do not use valuable applications that could improve project performance</td>
</tr>
<tr>
<td>• Service is availability, but data speeds are low</td>
<td>• IPs devote significant portions of their budget to obtaining connectivity</td>
</tr>
<tr>
<td>• Service is available but prohibitively expensive</td>
<td></td>
</tr>
</tbody>
</table>

Connectivity and access to reliable telecommunications services has become a key component of successful development programs.
To help address the connectivity issue, The Demand Aggregation “How to Guide” was developed

- Designed for USAID staff interested in assisting program officers and IPs to take advantage of USAID broad buying power as it relates to the procurement of telecommunications/ broadband services
- The “How to Guide” provides a roadmap for USAID Missions and operating units
- The Guide helps implementing partners become better purchasers of internet and mobile connectivity
- The Guide fosters collaboration between IPs and network providers that will expand access to digital services
- It enables USAID to understand and document the cost of internet and mobile services currently being spent on programs
- The Guide helps determine where connectivity coverage gaps and affordability gaps exists, and highlight approaches to bridge those gaps
Bandwidth is like… laundry detergent

150 oz.
Purchased at Target
$17.74

Price per ounce $0.11

50 oz.
Purchased at Giant
$7.89

Price per ounce $0.16

25 oz.
Purchased at Tiger Mart
$5.89

Price per ounce $0.23
The Demand Aggregation How To Guide recommends six primary activities:

1. Group according to need
2. Capture Requirements and Socialize the Program
3. Analyze, Quantify and Consolidate Requirements
4. Understand the Landscape
5. Package Demand and Present Value Proposition
6. RFI/RFP/Contract Development
Capturing IP telecommunication requirements enable data consolidation

• Organize workshops
• Identify key data elements
  o Location
  o Telecommunications requirements
  o Size
  o Current monthly spend
  o Plans for growth
• Develop survey instrument
• Implement survey across organization
• Socialize finding

We did your market research for you!
Research should reveal important commonalities

Typical findings include:

• Significant geographic overlap;
• Similar connectivity requirements including a need for both fixed and mobile services
• Significant monthly spend on telecommunications requirements
• Expanding, multiyear requirements

NetHope has extensive data visualization capabilities available to Missions and Implementing Partners
Broadband providers seek to maximize profits – Network expansion is risky

\[ C + O < (L)R + SB - (L)CL \]

- Will a new technology be cheaper?
- Cheaper ways to market and sell?
- How can I keep my customers longer?
- Can I raise prices?
- Can I sell another service over this network?
- Can I keep competitors away?

\( C = \) Capital
\( O = \) Operating expenses
\( L = \) Likelihood (probability)
\( R = \) Revenue
\( SB = \) Spillover Benefits
\( CL = \) Competitive loses
By organizing and packaging collective demand, USAID can help service providers make better decisions on where to invest

\[ C + O < (L)R + SB - (L)CL \]

- Lower sales, marketing, billing costs of providers
- Lower risk of losing customers and risk of non-payment
- Increase revenue (more consumption)
- Increase spillover sales (video, government)

C = Capital
O = Operating expenses
L = Likelihood (probability)
R = Revenue
SB = Spillover Benefits
CL = Competitive loses
USAID program demand can unlock additional demand in the same geographic area

- USAID programs serve as “anchor tenants” supporting an infrastructure investment with long-term commitment to the region
- Service providers can employ a graduated approach
- Supply is the driver of adoption
- “Me too” effect – other institutions and individuals will see the value of telecommunications
Collectively this untapped demand can ensure that service providers achieve the necessary economies of scale

3G Cell site Economics

- Cost per subscriber
- Revenue per subscriber

Subscriber level breakeven point
USAID programs represent a stable customer base with several advantages

- Five-year funding cycle linked to USAID’s Country Development Cooperation Strategy, which is negotiated with the government
- Donor-funded – reliable, stable, sometimes long-term, multi-year revenue streams
- Often serve as communications service ‘intermediaries’ to broader user-customer community
- Higher spend/volumes more in line with business customer segment
- Willingness to pay for better quality
- Centralized nature of the market segment can lead to more unified business approaches (marketing, contracting, provisioning, service)
USAID program generated demand will also have a higher Life time customer value (LCV)

**USAID Program Customer Profile**

- Higher ARPU
- Longer length of service
- Lower acquisition costs
- Reduced churn

\[
LCV = ((\text{Average revenue per unit} - \text{Average operating cost per unit}) \times \text{Average Length of Service}) - \text{Cost per Gross Addition}
\]

![Diagram showing the distribution of customer profiles over time and the calculation of LCV.](Image)
The How To Guide includes a revenue forecasting model

<table>
<thead>
<tr>
<th>Revenue (USD)</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>District A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementing Partners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IP 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>1,200</td>
<td>2,520</td>
<td>2,520</td>
<td>3,780</td>
<td>3,780</td>
</tr>
<tr>
<td>Medium</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,890</td>
<td>1,890</td>
</tr>
<tr>
<td>Large</td>
<td>2,640</td>
<td>2,772</td>
<td>2,772</td>
<td>2,772</td>
<td>2,772</td>
</tr>
<tr>
<td>IP 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>2,400</td>
<td>2,520</td>
<td>2,520</td>
<td>2,520</td>
<td>2,520</td>
</tr>
<tr>
<td>Medium</td>
<td>-</td>
<td>1,890</td>
<td>1,890</td>
<td>3,780</td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>-</td>
<td>-</td>
<td>2,772</td>
<td>2,772</td>
<td>2,772</td>
</tr>
<tr>
<td>Sub Total</td>
<td>6,240</td>
<td>15,246</td>
<td>14,364</td>
<td>15,624</td>
<td>17,514</td>
</tr>
<tr>
<td>Other Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>13,200</td>
<td>15,246</td>
<td>16,632</td>
<td>18,018</td>
<td>19,404</td>
</tr>
<tr>
<td>Medium</td>
<td>7,680</td>
<td>10,080</td>
<td>10,080</td>
<td>10,080</td>
<td>10,080</td>
</tr>
<tr>
<td>Large</td>
<td>-</td>
<td>2,772</td>
<td>2,772</td>
<td>2,772</td>
<td>2,772</td>
</tr>
<tr>
<td>Hospitals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>12,000</td>
<td>13,860</td>
<td>15,120</td>
<td>16,380</td>
<td>17,640</td>
</tr>
<tr>
<td>Medium</td>
<td>7,200</td>
<td>9,450</td>
<td>9,450</td>
<td>9,450</td>
<td>9,450</td>
</tr>
<tr>
<td>Large</td>
<td>-</td>
<td>3,150</td>
<td>3,150</td>
<td>3,150</td>
<td>3,150</td>
</tr>
<tr>
<td>Government Offices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>21,000</td>
<td>25,200</td>
<td>29,400</td>
<td>33,600</td>
<td>37,800</td>
</tr>
<tr>
<td>Medium</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Large</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sub Total</td>
<td>21,000</td>
<td>25,200</td>
<td>29,400</td>
<td>33,600</td>
<td>37,800</td>
</tr>
<tr>
<td>Impacted Beneficiaries</td>
<td>21,000</td>
<td>25,200</td>
<td>29,400</td>
<td>33,600</td>
<td>37,800</td>
</tr>
<tr>
<td>TOTAL</td>
<td>91,920</td>
<td>120,834</td>
<td>128,058</td>
<td>137,424</td>
<td>147,420</td>
</tr>
</tbody>
</table>

**Revenue Highlights**
- X new subscribers
- X monthly revenue
- X% anticipated annual growth
Value proposition Summary – USAID programs are great customers

- Consistent requirements (similar service needs)
- Low risk organizations (we always pay)
- Reduced customer acquisition costs (we have already identified and packaged potential customers)
- Higher than average ARPU
- Potential for multi-year commitments
- Ability to pre-pay for services
- Trusted partner that can lead to additional subscribers