RDOF Planning

Five steps to network deployment success

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Today’s speakers

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An opportunity for rural broadband

Significant investment

20.4B
Over 10 years

Due to the recent Global Crisis, broadband expectations have advanced years in months

Momentum, new sense of urgency to deliver high-speed, reliable broadband
RDOF timeline - what’s next?

Current Focus
- Network architecture
- Feasibility, modelling and estimates
- Network design

Moving Forward
- Secure funding - sources, desired amount, and confidence that it will satisfy delivery costs.
- Identifying the right delivery models and approaches
- Defining what success looks like
FCC’s key deployment criteria

- **RDOF funding will be awarded to the provider offering the highest or ‘best’ service tier at the lowest bid, weighted against service tiers and other conditions.**

- **Winning bidders to meet buildout milestones. Failure to meet these will result in escalating non-compliance penalties:**
  - 40% completion by end of year 3
  - 20% per year through year 6

- **Winning bidders must serve every home and business within the auctioned census block group.**

- **Because of the growth that fiber provides, the FCC is likely to look favorably upon FTTH or mixed technology deployments.**

- **RDOF Phase I, lowered the minimum support threshold to $40 per location (or $30.00 per Tribal location), In addition to 66,000 census block groups - double previous CAF auction - available for bids.**
Efficiency is key to deployment success

This new efficiency imperative makes it more important than ever to identify and seek efficiency drivers from planning to deployment.

- Gigabit-capable networks at the lowest possible bid
- Contractor adoption and retention
- Visibility and control enable efficiency
Five steps to network deployment success

1. Determining the **optimal build strategy** to meet obligations.
2. Determining the **delivery model and risk allocation**.
3. **Detailed project scoping** and prudent **budget**.
4. Setting **delivery obligations and milestones**.
5. Delivery confidence based on a **data-driven approach** to deployment.
## 1. Determining the optimal build strategy

### Pre-Bid | *Static based on many factors*

- **Scope and Scale**
- **Market Environment**
- **Contractor Capability, Capacity and Maturity**
- **Commercial and Risk Considerations**

### Delivery | *Dynamic and Flexible*

**Respond to changing priorities, the ability to:**

- Quickly redirect resources optimally without commercial restrictions
- Respond to internal and external delivery factors, including material and resource shortfalls
- Dynamically respond to changing strategic priorities, for example shortened overall timeframes.
## 2. Determining the delivery model and risk allocation

<table>
<thead>
<tr>
<th>MODEL</th>
<th>LIGHT TOUCH</th>
<th>MEDIUM TOUCH</th>
<th>HEAVY TOUCH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FULL OUTSOURCE</td>
<td>PARTIAL OUTSOURCE</td>
<td>INSOURCE</td>
</tr>
<tr>
<td>DESIGN + CONSTRUCT</td>
<td>EPC Design &amp; Construct</td>
<td>Design</td>
<td>EPC Construct</td>
</tr>
<tr>
<td>ENVIRONMENT</td>
<td>Single project, mature environment</td>
<td>Program, multi-stakeholder, maturing environment</td>
<td>Specialized or immature environment</td>
</tr>
<tr>
<td>MARKET CONDITION</td>
<td>Contracted resources available</td>
<td>Specific in-sourcing where appropriate</td>
<td>Constrained labor market / Skills shortage</td>
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**Contracted Risk:** Transparency around risk placement, invest up front and take downside risk
3. Detailed project scope and budget

<table>
<thead>
<tr>
<th></th>
<th>6% of project cost</th>
<th>14% of project cost</th>
<th>70% of project cost</th>
<th>10% of project cost</th>
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<tbody>
<tr>
<td><strong>Network Design</strong></td>
<td>Fundamental impact on overall project cost</td>
<td><strong>Project Management</strong></td>
<td>Key driver of efficient deployment results</td>
<td><strong>Contractor and Materials</strong></td>
</tr>
</tbody>
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The numbers here are indicative and intend to provide insight to areas of focus.
4. Setting delivery obligations and milestones

Ensure the commercial terms of the RFP or contract reflect and include everyone’s interests throughout the lifecycle for time, performance and commercial risk allocation.

- Delivery schedule
- Performance (speed + quality) & Risk
- Be prepared to go faster
To be successful in scoping and delivering your network, there is a significant reliance on confidence in the data. With a digital data-driven approach, the ability to capture and accurately track real-time progress without relying on project and construction manager reporting minimizes budget and delivery risk.

- **Design data is transformed into deliverable work.**
- **Accurate and real-time project data** streamlined from the field to the office.
- **Technology-enabled** task optimization to ensure resources are productive.
- A single, integrated view of progress for all stakeholders equals increased control and visibility.
Render’s unique Digital Network Construction approach

Transform fiber network rollouts with a flexible, digital solution

Convert network designs to sequenced tasks for field crews, build faster without manual, paper-based processes with accurate asset data at completion.

Design Construction Handover
The goal in the first three years was to cover 50% of the 30,000 members. This will been achieved in less than 18 months.
Render Case Study | Key outcomes

55% ahead of deployment schedule

84% faster OSP deployment vs planned

75% saving in forecasted admin & field supervisory spend
At Render, our experience spans global network architectures and delivery models that have shaped a best-in-class digital platform and approach.
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3. **Detailed project scoping** and prudent **budget**.

4. Setting **delivery obligations and milestones**.

5. Delivery confidence based on a **data-driven approach** to deployment.
Please submit your questions via the Chat window.
We’re here to help

Get In Touch

1. **RDOF Deployment Review**
   Complimentary digital deployment scope review and consultation to inform your RDOF bid estimate.

2. **Calculate the potential savings**
Render