#### **Budgeting for a FirstNet World**



INTERNATIONAL WIRELESS COMMUNICATIONS EXPO

## IWCE Session TH11 March 8, 2018



#### Introductions



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Neil Horden

- Chief Consultant

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 Kodiak: A Motorola Solutions Company

David Van Workum

- Application Development Engineer
- Keysight Technologies



#### Session Overview



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- Key issues and considerations when addressing our financial planning and budgeting for a FirstNet/LTE future
- Addressing infrastructure, network equipment, subscriber units, end user needs, technology, policy and governance
- Explore the business models and economics of migrating from LMR to LTE networks
- Our goal is a highly interactive session



## Participant Expectations



- What are your expectations from this session?
- Why are you here?
- What would you like to take away?
- What will be your related responsibility when you leave this room?
- How can we help you do your job?







#### Where We Are:



- Typical LMR procurement is a long term ownership model with both system and equipment being a Capital Expense
- For most agencies LTE will be a "Service Model" for the system treated as an Operational Expense
  - Either a relatively short term ownership for the subscriber equipment (CapEx or OpEx)
  - Or a lease (OpEx)







## CapEx vs. OpEx



#### Capital Expenditure (CapEx)

 An product or system with durable asset value beyond the current budget cycle

#### Operational Expense (OpEx)

A product or service with a value consumed (or mostly consumed) within the budget cycle





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#### WHY DOES THIS MATTER?



## Capital Expenditure (CapEx)



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- Capital Expenditure (CapEx)
  - An product or system with durable asset value beyond the current budget cycle
- CapEx is typically addressed as a "one time" expense
- Return from funding is anticipated to be "long term"
- Each cycle funded separately
  - Funding of one cycle does not assure funding of the next
- Funding sources change between cycles
- Next cycle is often not even considered



# **Operational Expense (OpEx)**



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#### Operational Expense (OpEx)

- A product or service with a value consumed (or mostly consumed) within the budget cycle
- OpEx is typically addressed as an ongoing expense
- Return form funding is typically exhausted during the funding cycle
- Continuing funding is expected cycle to cycle
  - Funding cycles are usually based off previous cycle
  - Funding is usually expected for the following cycle
  - Funding source may change over time
    - Typically similar between cycles



#### "System" Costs



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#### LMR - CapEx Model

- Higher Initial Cost
  - Long Term Return on Value in Equipment
- Lower Recurring Costs

#### LTE - OpEx Model

- Higher Recurring Costs
  - Ongoing Value Requires Ongoing Costs
- Lower Initial Costs



#### LMR "System" Costs



- Infrastructure procurement and deployment
  - 12 to 25 year cycle
- Infrastructure maintenance and operation
  - Ongoing
- Subscriber procurement and deployment
  - 5 to 15 year cycle
  - Subscriber replacement anticipated
    - Often not "budgeted"
- Subscriber maintenance and operation
  - Ongoing



## LTE "System" Costs



- Service/Usage (Infrastructure)
  - Service Agreement
  - Ongoing
- Interface procurement and deployment
  - May be long term
  - Interface maintenance and operation
- Subscriber procurement and deployment
  - 1 to 3 year cycle
  - Subscriber maintenance and operation
  - Subscriber replacement
    - Needs to be planned and budgeted





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#### WHAT TO DO



## Planning and Budgeting



- Evaluate your current budget and funding plans
- Look for opportunities to align future budgets and funding to anticipated needs
  - Capital and Operational
- Set reasonable expectations
  - Don't assume LTE will supplant LMR in the short term
  - Don't assume LTE will reduce costs





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#### Q&A - DISCUSSION



#### **Our Panel**



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# YOUR EXPECTATIONS REVISITED WCE



#### For More Information



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Thank You!!



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