





Nevada Shared Radio System
Governing Board Project Status
November 12, 2020

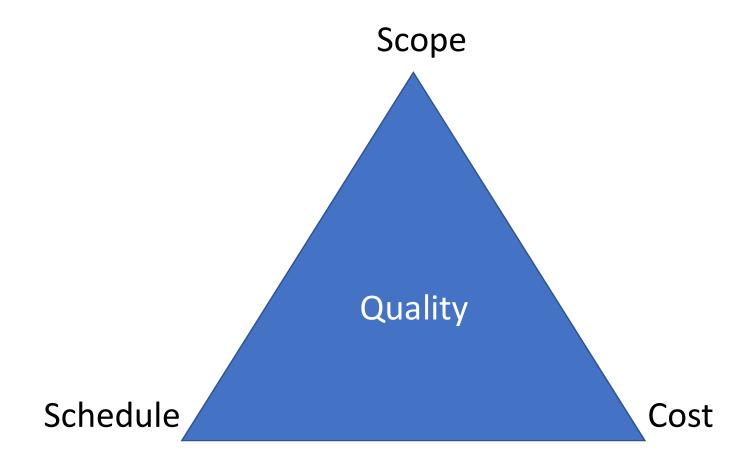






# Agenda Item #4 - Status

# PM Iron Triangle – Triple Constraint









### Agenda Item #4 - Status

### **Schedule**

Milestones	Contract Schedule	Current Schedule	Delta
System			
Contract signed	10/1/2018	10/1/2018	0
Region 0/1			
Detail Design Review approval	12/1/2019	9/29/2020	(303)
Factory acceptance approval	9/18/2019	7/6/2020	(292)
Installation complete	11/30/2020	7/6/2021	(218)
Regional Acceptance	5/21/2021	9/30/2021	(132)
Region 2			
Detail Design Review approval	6/1/2020	12/22/2020	(204)
Factory acceptance approval	1/28/2021	8/5/2021	(189)
Installation complete	11/26/2021	12/17/2021	(21)
Regional Acceptance	7/14/2022	5/19/2022	56
Region 3			
Detail Design Review approval	12/1/2020	4/8/2021	(128)
Factory acceptance approval	4/29/2022	9/29/2021	212
Installation complete	3/27/2023	9/26/2022	182
Regional Acceptance	10/23/2023	2/20/2023	245
System			
Final 30-Day Operational Test	11/22/2023	3/23/2023	244
Final System Acceptance	12/27/2023	4/21/2023	250

### **Project Financials (All Members)**

Total Contract Value: \$108,464,583

New Change Orders: \$151,514

Invoices Paid to Date: \$24,350,923

• Civils (Included above, on a Cost-plus basis):

• Budgeted: \$27,059,793

Committed: \$13,966,331

• Remaining: \$13,093,462

#### **Cost Control**

- Site remediations and civils are much higher than anticipated, running as high as \$160K for work at two sites compared to comparable work throughout the industry
- At this rate, L3Harris will deplete the funds set aside for site development mid-way through the project
- L3Harris is reviewing their supplier process
- L3Harris has double-billed Members for work on multiple occasions
- Actual costs and supporting documentation lags the completed work by months, risking Members funding







### Agenda Item #4 - Progress

#### **Region 0**

- Detail Design Review completed and approved
- Factory acceptance completed and approved
- Network Switching Center installed and commissioned
- Grounding remediation 11 of 11 complete
- Site installations 11 of 11 complete
- Site development 2 of 2 complete
- Regional acceptance is part of Region 1

### Region 1

- Detail Design Review completed and approved
- Factory acceptance completed and approved
- Grounding remediation 17 of 19 sites complete, 2 sites delayed
- Site installations 15 of 27 sites completed, balance planned for the new year
- Site development 2 sites, both near completion
- Regional acceptance scheduled for Sep 2021

### Region 2

- Site surveys nearing completion
- Design packages received mid-October, updates in progress
- Detail design review scheduled for mid-December
- Factory acceptance 2Q2021

#### Region 3

Project schedule under review

















- Primary causes for dissatisfaction are lateness of deliverables, erratic quality, and overall consistency
- Recent L3H communication announcing that a "key person"
   was moving off the project last of original proposed team

#### **Schedule Performance**



- The project schedule is unrealistic
- The project schedule went through 33 revisions in 2019, and 30+ revisions this year
- Dates and commitments are consistently missed requiring revised plans
- Late delivery and poor quality of required documentation causes site visits/implementations to be delayed







#### **Technical Performance**



- L3H team appears unaware of EDACS operational requirements during transition
- Addressing EDACS Migration Gateway issues
- New customer integration issues
- Terminal equipment limitations to support transition

#### **Staffing**



- Contractually, personnel are not allowed to move off the project except for leaving L3H
- In February 2019, 4-months after contract signing, L3H removed five of six "key persons" off the project, some staying with L3H in other positions/departments
- Contractual commitment to replace personnel within 30days, took up to 120 days
- Resource management is an ongoing challenge







Quality



- Poor quality documentation remains an ongoing issue
- L3H recently implemented a quality process improvement, however, work remains in this area to meet expectations
- Region 2 DDR had to be cancelled due to poor quality of design packages

Supplier(s)



- L3H subcontractor caused damage to the site owner's operational equipment, resulting in critical outages
- L3H subcontractors worked on the project without a NV license – immediately terminated
- L3H subcontractors conducted grounding remediation on the wrong buildings on two separate occasions, valued at over \$75,000 (credits issued following Members review)
- Non-conforming bids being passed through to Members







### **Site Civils / Construction**



- Site survey subcontractor delivered poorly written reports with inaccurate or missing data, resulting in numerous revisits to sites to collect the correct information
- Subcontractor workmanship has been sub-standard resulting in site revisits and increased time and costs for Members







## Agenda Item #5 Corrective Actions

### **Corrective Actions taken by both L3H and Members**

- Members and L3H increased communication at multiple levels for improved planning
- L3H assigned additional personnel to the project team
- L3H restructured internal organization to provide better project support
- L3H increased engagement to meet certified payroll requirements
- L3H and Members refined subcontractor vetting and approval process
- Members established bi-weekly reviews with L3H executive management
- L3H developed get well plans and Members monitored planned actions
- Members established a process to review and approve on-site activities