Vendor: Motorola Solutions

Exam Code: MSC-235

Exam Name: Design and Deploy for MOTOTRBO Connect Plus Solutions BETA

Version: Demo

QUESTION 1
You are planning to add a new site to an existing Connect Plus network. What is the correct sequence in which to perform the logical steps below?
1. Program new frequency file into a number of testing subscriber units.
2. Test the system using testing subscriber units.
3. Configure the new Site Controller.
4. Physically install the RF equipment and IP-Backbone equipment.
5. Update multisite tables at all sites and verify multisite connectivity for the new site.
6. Distribute the new frequency file OTA to the network.
7. Create a new network frequency file.
8. Make any necessary changes based on testing results.

A. 3-2-5-7-1-4-6-8
B. 4-3-5-7-1-2-8-6
C. 4-5-3-2-1-8-7-6
D. 4-3-5-7-1-2-6-8

Correct Answer: D

QUESTION 2
A customer has the following requirement: when the radio user presses the programmed Emergency button on the subscriber, an emergency call will be started. This emergency call will be joined by all users on the same talkgroup at the same site, but it will not propagate to other sites, even if the same talkgroup is registered at other sites. Can this requirement be met in a Connect Plus system?

A. No
B. Yes, this can be implemented using Emergency Alerts
C. Yes, if Site All Call is used as the Emergency Revert Group
D. Yes, using a custom Option Board

Correct Answer: C

QUESTION 3
You are discussing link bandwidth capacity with a new multisite Connect Plus customer. You explain that certain items, when added to a system, may impact the amount of bandwidth required. Which of the following places the most additional demand on your network?

A. The number of repeater timeslots at the site which are reserved for multisite calls
B. Continuous use of the Network Manager Real Time Display
C. The update interval or cadence of GPS location updates
D. The number of sites that audio must be shared with

Correct Answer: D

QUESTION 4
You are designing a multisite Connect Plus system with 12 sites. There are 8 repeaters at each site. The customer wants to know how channel priority works. They are concerned about how the system handles multiple transmissions across sites for the same talkgroup call, such as when multiple subscribers at different sites key up simultaneously during hangtime. Which of the following is the BEST explanation to provide the customer?

A. The priority of the individual users determines whose transmissions are heard and whose attempts are preempted.
B. The Master site controller for the call determines which audio stream is distributed to all involved sites.
C. Site Controllers use the multisite Arbitration Time to delay audio and make it more likely that the same audio will be heard at all sites in a multisite call.
D. Repeaters use a configurable jitter buffer to ensure that the same audio is heard at all sites.

Correct Answer: C

QUESTION 5
NOTE: This is a scenario based item associated with an Oil Corporation. Please reference the information accessible from the "Oil Corporation Scenario" button at the bottom as part of responding to this item.

You have met with a new customer who may be interested in a Connect Plus system. Use the information in this scenario to answer the items that follow.

Prospective Customer:
Oil Exploration and Development Corporation

Environment:
Surface mining operation in wilderness area: cold winters, mild summers, with a flat topology.

Current System:
- MTR 2000 Repeaters
- Conventional Analog
- UHF
- 2 sites:
  - 12 channels at one site
  - 6 channels at second site

Limitations of Current System:
- Running out of capacity: they need more channels, but don't have the spectrum available
- Lacks modern capabilities like Automatic Vehicle Location and Text Messaging
- Lacks security: it is easy to eavesdrop on calls and steal repeater time on the current system

Customer Requirements:
- Coverage Area: 250 square miles (648 square kilometers)
- System needs to link two mining sites which are physically separated by 45 miles (72 kilometers)
- Ability to extend coverage to other sites as mining operation expands/migrates
- Eliminate system congestion to minimize busy channels
- Incorporate multiple wireline console positions at each mining site
- Incorporate sophisticated system usage monitoring ability (streaming airtime info, and more)
- Automatic Vehicle Location for all mobiles
- Text messaging ability between all subscribers
- Customer desires maximum availability/redundancy and fault tolerance
- 1500 subscribers: 500 mobiles, 1000 portables

You are putting together an equipment list for this customer that includes the site controller, subscribers, repeaters, and RF distribution equipment. Which requirement in the scenario would necessitate an XRT 9000 Gateway?

A. Automatic vehicle location for all mobiles
B. Sophisticated system usage monitoring
C. Text messaging ability between all subscribers
D. Coverage to link two mining sites which are physically separated by 45 miles (72 km)

Correct Answer: B

QUESTION 6
NOTE: This is a scenario based item associated with an Oil Corporation. Please reference the information

You have met with a new customer who may be interested in a Connect Plus system. Use the information in this scenario to answer the items that follow.

Prospective Customer:
Oil Exploration and Development Corporation

Environment:
Surface mining operation in wilderness area: cold winters, mild summers, with a flat topology.

Current System:
- MTR 2000 Repeaters
- Conventional Analog
- UHF
- 2 sites:
  - 12 channels at one site
  - 6 channels at second site

Limitations of Current System:
- Running out of capacity: they need more channels, but don't have the spectrum available
- Lacks modern capabilities like Automatic Vehicle Location and Text Messaging
- Lacks security: it is easy to eavesdrop on calls and steal repeater time on the current system

Customer Requirements:
- Coverage Area: 250 square miles (648 square kilometers)
- System needs to link two mining sites which are physically separated by 45 miles (72 kilometers)
- Ability to extend coverage to other sites as mining operation expands/migrates
- Eliminate system congestion to minimize busy channels
- Incorporate multiple wireline console positions at each mining site
- Incorporate sophisticated system usage monitoring ability (streaming airtime info, and more)
- Automatic Vehicle Location for all mobiles
- Text messaging ability between all subscribers
- Customer desires maximum availability/redundancy and fault tolerance
- 1500 subscribers: 500 mobiles, 1000 portables

Given this scenario, which of these customer requirements would require that the customer purchase the XRT 9000 Gateway?

A. Wireline console positions, only
B. Automatic Vehicle Location, only
C. Text Messaging and Sophisticated system usage monitoring
D. Wireline console positions and Sophisticated system usage monitoring

Correct Answer: C

QUESTION 7
NOTE: This is a scenario based item associated with an Oil Corporation. Please reference the information accessible from the "Oil Corporation Scenario" button at the bottom as part of responding to this item.

You have met with a new customer who may be interested in a Connect Plus system. Use the information in this scenario to answer the items that follow.

Prospective Customer:
Oil Exploration and Development Corporation

Environment:
Surface mining operation in wilderness area: cold winters, mild summers, with a flat topology.

Current System:
- MTR 2000 Repeaters
- Conventional Analog
- UHF
- 2 sites:
  - 12 channels at one site
  - 6 channels at second site

Limitations of Current System:
- Running out of capacity: they need more channels, but don't have the spectrum available
- Lacks modern capabilities like Automatic Vehicle Location and Text Messaging
- Lacks security: it is easy to eavesdrop on calls and steal repeater time on the current system

Customer Requirements:
- Coverage Area: 250 square miles (648 square kilometers)
- System needs to link two mining sites which are physically separated by 45 miles (72 kilometers)
- Ability to extend coverage to other sites as mining operation expands/migrates
- Eliminate system congestion to minimize busy channels
- Incorporate multiple wireline console positions at each mining site
- Incorporate sophisticated system usage monitoring ability (streaming airtime info, and more)
- Automatic Vehicle Location for all mobiles
- Text messaging ability between all subscribers
- Customer desires maximum availability/redundancy and fault tolerance
- 1500 subscribers: 500 mobiles, 1000 portables

In addition to the information in the scenario, what more do you need to know about the customer's IP network to effectively propose a solution?

A. Type and characteristics of the available IP network links to be used between sites
B. Bandwidth, jitter and Packet loss of LAN at each site
C. Distance in meters between the Site Controller's switch and the switch for the repeaters
D. If T1/E1lines are to be used for the multisite links, then the Controller T1/E1protocol feature must be ordered

Correct Answer: A

QUESTION 8
NOTE: This is a scenario based item associated with an Oil Corporation. Please reference the information accessible from the "Oil Corporation Scenario" button at the bottom as part of responding to this item.

You have met with a new customer who may be interested in a Connect Plus system. Use the information in this scenario to answer the items that follow.

Prospective Customer:
Oil Exploration and Development Corporation

Environment:
Surface mining operation in wilderness area: cold winters, mild summers, with a flat topology.

Current System:
- MTR 2000 Repeaters
- Conventional Analog
- UHF
- 2 sites:
  - 12 channels at one site
  - 6 channels at second site

Limitations of Current System:
- Running out of capacity: they need more channels, but don't have the spectrum available
- Lacks modern capabilities like Automatic Vehicle Location and Text Messaging
- Lacks security: it is easy to eavesdrop on calls and steal repeater time on the current system

Customer Requirements:
- Coverage Area: 250 square miles (648 square kilometers)
- System needs to link two mining sites which are physically separated by 45 miles (72 kilometers)
- Ability to extend coverage to other sites as mining operation expands/migrates
- Eliminate system congestion to minimize busy channels
- Incorporate multiple wireline console positions at each mining site
- Incorporate sophisticated system usage monitoring ability (streaming airtime info, and more)
- Automatic Vehicle Location for all mobiles
- Text messaging ability between all subscribers
- Customer desires maximum availability/redundancy and fault tolerance
- 1500 subscribers: 500 mobiles, 1000 portables

Which of the following are Connect Plus feature(s) and should be specified in order to meet the requirement for maximum availability/redundancy and fault tolerance?

A. Multiple Control Channel-Capable repeaters at every site
B. Redundant site controller at primary site
C. Redundantsite routers
D. Redundant site links

Correct Answer: C

QUESTION 9
NOTE: This is a scenario based item associated with an Oil Corporation. Please reference the information accessible from the "Oil Corporation Scenario" button at the bottom as part of responding to this item.

You have met with a new customer who may be interested in a Connect Plus system. Use the information in this scenario to answer the items that follow.

Prospective Customer:
Oil Exploration and Development Corporation

Environment:
Surface mining operation in wilderness area: cold winters, mild summers, with a flat topology.

Current System:
- MTR 2000 Repeaters
- Conventional Analog
- UHF
- 2 sites:
  - 12 channels at one site
  - 6 channels at second site

Limitations of Current System:
- Running out of capacity: they need more channels, but don't have the spectrum available
- Lacks modern capabilities like Automatic Vehicle Location and Text Messaging
- Lacks security: it is easy to eavesdrop on calls and steal repeater time on the current system

Customer Requirements:
- Coverage Area: 250 square miles (648 square kilometers)
- System needs to link two mining sites which are physically separated by 45 miles (72 kilometers)
- Ability to extend coverage to other sites as mining operation expands/migrates
- Eliminate system congestion to minimize busy channels
- Incorporate multiple wireline console positions at each mining site
- Incorporate sophisticated system usage monitoring ability (streaming airtime info, and more)
- Automatic Vehicle Location for all mobiles
- Text messaging ability between all subscribers
- Customer desires maximum availability/redundancy and fault tolerance
- 1500 subscribers: 500 mobiles, 1000 portables

In addition to the information in the scenario, which of the following would you also need to know about the customer's Automatic Vehicle Location requirements in determining the most effective design for their Connect Plus system?

A. Update rate per subscriber
B. Availability of a revert channel
C. Current repeater's licensing status for enhanced GPS
D. Whether or not the customer wants subscriber Latitude/Longitude display capability

Correct Answer: A

QUESTION 10
NOTE: This is a scenario based item associated with an Oil Corporation. Please reference the information accessible from the "Oil Corporation Scenario" button at the bottom as part of responding to this item.

You have met with a new customer who may be interested in a Connect Plus system. Use the information in this scenario to answer the items that follow.

Prospective Customer:
Oil Exploration and Development Corporation

Environment:
Surface mining operation in wilderness area: cold winters, mild summers, with a flat topology.

Current System:
- MTR 2000 Repeaters
- Conventional Analog
- UHF
- 2 sites:
  - 12 channels at one site
  - 6 channels at second site

Limitations of Current System:
- Running out of capacity: they need more channels, but don't have the spectrum available
- Lacks modern capabilities like Automatic Vehicle Location and Text Messaging
- Lacks security: it is easy to eavesdrop on calls and steal repeater time on the current system

Customer Requirements:
- Coverage Area: 250 square miles (648 square kilometers)
- System needs to link two mining sites which are physically separated by 45 miles (72 kilometers)
- Ability to extend coverage to other sites as mining operation expands/migrates
- Eliminate system congestion to minimize busy channels
- Incorporate multiple wireline console positions at each mining site
- Incorporate sophisticated system usage monitoring ability (streaming airtime info, and more)
- Automatic Vehicle Location for all mobiles
- Text messaging ability between all subscribers
- Customer desires maximum availability/redundancy and fault tolerance
- 1500 subscribers: 500 mobiles, 1000 portables

Which of the following is critical for calculating Connect Plus bandwidth requirements for the site links?

A. Determining the number of location updates each subscriber is programmed to transmit
B. Defining the quality of service desired
C. Determining the number of voice/data timeslots for each site
D. Including bandwidth for the backup controller(s)

Correct Answer: C

QUESTION 11
NOTE: This is a scenario based item associated with an Oil Corporation. Please reference the information accessible from the "Oil Corporation Scenario" button at the bottom as part of responding to this item.

You have met with a new customer who may be interested in a Connect Plus system. Use the information in this scenario to answer the items that follow.

Prospective Customer:
Oil Exploration and Development Corporation

Environment:
Surface mining operation in wilderness area: cold winters, mild summers, with a flat topology.

Current System:
- MTR 2000 Repeaters
- Conventional Analog
- UHF
- 2 sites:
  - 12 channels at one site
  - 6 channels at second site

Limitations of Current System:
- Running out of capacity: they need more channels, but don't have the spectrum available
- Lacks modern capabilities like Automatic Vehicle Location and Text Messaging
- Lacks security: it is easy to eavesdrop on calls and steal repeater time on the current system

Customer Requirements:
- Coverage Area: 250 square miles (648 square kilometers)
- System needs to link two mining sites which are physically separated by 45 miles (72 kilometers)
- Ability to extend coverage to other sites as mining operation expands/migrates
- Eliminate system congestion to minimize busy channels
- Incorporate multiple wireline console positions at each mining site
- Incorporate sophisticated system usage monitoring ability (streaming airtime info, and more)
- Automatic Vehicle Location for all mobiles
- Text messaging ability between all subscribers
- Customer desires maximum availability/redundancy and fault tolerance
- 1500 subscribers: 500 mobiles, 1000 portables

In addition to the information in the scenario, which of the following would you also need to know to determine the most effective design for their Connect Plus system?

A. Which channels they currently utilize the most
B. Number of registrations user will send per day
C. How many subscribers/talkgroups will be registered at the same time
D. The preferred site for each radio user

Correct Answer: C

QUESTION 12
Your customer has a large IP Site Connect system that they wish to migrate to a Connect Plus system.

The system was installed and configured about 2 years ago. They have approximately 800 portable MOTOTRBO subscriber radios that they would like to use in the new system. From the selections below, pick THREE things your customer should know about repurposing these subscribers for use with Connect Plus (select THREE)?

A. These subscribers may not be used with a new Connect Plus system.
B. Option boards must be purchased for and installed in each subscriber.

C. If necessary, Radio IDs must be changed to fall into the range of 1 through 64,351,454.
D. Subscriber's main board firmware will need to be updated.
E. If necessary, Radio IDs must be changed to fall into the range of 1 through 16,776,351.

Correct Answer: BDE

QUESTION 13
Your customer is a large utility company that will have three Connect Plus sites and a total of approximately 600 subscribers. They want to utilize Emergency Alert at one site, Emergency Voice at another site, and inhibit the use of the emergency feature for all users at another site.

Which of the following BEST describes the possibility of implementing this with a Connect Plus system?

A. Yes, this is possible. The radios must be site-restricted to the same sites as other radios that share their emergency programming.
B. Yes, this is possible. The subscribers will have to select a different default emergency revert group that corresponds to the site that they are operating in. They must switch to this group when they register at the new site.
C. Yes, this is possible. Each site should have a corresponding Connect Plus zone in the subscriber's option board codeplug.
D. No, this is not possible with a Connect Plus system.

Correct Answer: C

QUESTION 14
You are adding a new site to an existing Connect Plus system. The four existing sites are in a level, rural area with minimal to no coverage overlap. The new site will be in an urban area with many tall structures. Will adding this site require configuration changes to the subscriber radios, and, if so, what type of changes?

A. Yes. A new Connect Plus Option Board will need to be installed in the subscribers.
B. No. The changes will only be necessary at the network level, not the subscriber level.
C. Yes. A new version of the network frequency file must be created and distributed to the subscribers. In addition, the differing topology of the new site may require changes to the Roaming and Search settings in the subscribers.
D. Yes. A new version of the Connect Plus option board codeplug must be created and distributed to the subscribers. The differing topology of the new site may require additional changes to the power- level settings in the subscribers.

Correct Answer: D

QUESTION 15
A security-conscious client asks about the capabilities of a subscriber that is disabled from the network. All of the following are correct, EXCEPT:

A. Disabled subscribers cannot receive system text messages
B. Disabled subscribers cannot receive calls
C. Disabled subscribers cannot initiate calls
D. Disabled subscribers cannot respond to location updates

Correct Answer: D

QUESTION 16
Given the XRC multisite table screen shot shown in Exhibit B below, how many sites are in this Connect Plus network?

A. 6

B. 5

C. 4

D. Not possible to tell from this screen.

Correct Answer: A

QUESTION 17

A customer wants to build a private IP network to link their 5-site Connect Plus system. Which of the following are the most important considerations and/or requirements (select TWO)?

A. Network jitter should not exceed 60 ms.

B. Repeaters require a static IP on the network.

C. Satellite links between sites are preferable to dial-up links.

D. A private DNS will also be required to enable Internet access over the network.

E. Max latency (delay) not to exceed 250 ms from any site to any other site.

Correct Answer: BD

QUESTION 18

You have been asked to estimate how many repeaters would be needed at a Connect Plus site that has the following:

How many repeaters would you estimate are needed?

Refer to the Digital Repeater Loading exhibit (from the System Planner) above.

A. 3 repeaters
B. 4 repeaters
C. 6 repeaters
D. 7 repeaters

Correct Answer: B

QUESTION 19
You are designing a Connect Plus system. What should you do to mitigate system failures (select TWO)?

A. Plan for and implement areas of overlapping coverage.
B. Configure at least one digital conventional zone into the subscriber's option board codeplug.
C. Configure digital conventional channels into the subscriber's frequency file.
D. Configure at least one digital conventional zone into the subscriber's main board codeplug.
E. Configure the repeaters for in-cabinet repeat if the link is lost to the site connect master.

Correct Answer: AD

QUESTION 20
You are designing a new Connect Plus system that will include a single 3rd-party location tracking (LRRP) server. The server is located outside the Local Area Network of the site to which it directs its LRRP requests. How do you ensure that the location updates are returned to the correct IP address and UDP port to reach this LRRP server?

A. Enable Override and configure the LRRP IP Message Forward parameters on the non-critical pane of the site configuration window.
B. Disable Override and use the LRRP configuration utility in the critical pane of the site configuration window.
C. Forwarding won't be necessary unless the LRRP server is not subscribing to Presence Notification.
D. Override port forwarding in the site router to direct the traffic to the proper IP address and UDP port.

Correct Answer: A

QUESTION 21
You are designing the fleetmap for a Connect Plus customer. Which of the following should be put into the user database entry in the Network Manager for each subscriber?

A. Preferred site
B. Radio Model Number Index
C. Default emergency revert group setting
D. Talkgroups in the contact list and their selector positions

Correct Answer: C

QUESTION 22
You are designing a 10-site Connect Plus system with widely separated sites. You must use public IP links between the sites, which will be supplied by an Internet Service Provider (ISP). What are the advantages of implementing a Virtual Private Network (VPN) for this system (select TWO)?

A. Allows elimination of the otherwise mandatory site firewalls.
B. Allows the site controllers to utilize any repeater at any site.
C. Provides more flexibility when configuring the site interfaces with location tracking and text messaging servers.
D. Requires slightly less bandwidth on the inter-site links.
E. Setting up the multisite tables in the Network Manager is more straightforward.

Correct Answer: CE

QUESTION 23
There is a group call for a talkgroup with registered members at two sites. The Controllers at the sites coordinate together to begin a multisite talkgroup call. What will happen if the initiating subscriber's site has resources for the call, but the other site has no resources because all timeslots are in use?

A. The initiating subscriber goes into the busy queue until resources are available at both sites.
B. The call goes on the air at the site with resources and is busied at the other site until resources are available.
C. The call is busied at both sites until resources are available.
D. If the initiating subscriber has sufficient priority, a timeslot will be freed at the busy site using TX interrupt.

Correct Answer: D

QUESTION 24
All of the following require Surge Protection Devices (SPD) installed EXCEPT:

A. RFcables
B. Telephone cables
C. AC power service conductors
D. Cables not exiting the building
E. External data or control cables from adjacent locations

Correct Answer: D

QUESTION 25
You are designing a Connect Plus system that has multiple sites with overlapping coverage and employs frequency reuse. Which of the following is the MOST important consideration regarding this type of topology?

A. Frequency reuse is not supported in Connect Plus.
B. RSSI settings in the repeaters may be adjusted to minimize the effect of interference from the overlapping sites.
C. Color codes may be necessary in the repeaters and also coordinated with the subscriber frequency files.
D. Color codes must be used to prevent RF interference in the overlap areas.
E. Color codes in the repeater codeplugs must match the color codes configured using MOTOTRBO CPS for the subscriber codeplugs.

Correct Answer: C

QUESTION 26
How many legs of a self-supporting tower should be bonded to the earth grounding system per R56 Communication Site standards?

A. 1
B. 2
C. 3
D. 4
E. All

Correct Answer: E

QUESTION 27
For the purposes of capacity planning and calculating repeater loading, which of the following would be considered high usage voice calling?

A. One call per user per half-hour

B. One talkgroup call and one private call per hour
C. Three calls per user per hour
D. Five calls per user per hour

Correct Answer: C

QUESTION 28
You have been asked to identify the site LAN Switch for a Connect Plus site which will include a redundant site controller. Which of the following is a critical consideration?

A. The switch must be programmed for Hairpinning before being placed in the network.
B. Routers and not switches are necessary for redundant sites in multisite networks.
C. Layer 3 switching is necessary for sites with redundant controllers.
D. The switch must be able to accept gratuitous ARP messages.

Correct Answer: D

QUESTION 29
The objective of grounding and bonding system components to a single point is to:

A. Prevent parasitic oscillations within the equipment.
B. Provide a connection point for only the RF Surge Protection Devices.
C. Provide a convenient location to connect the Internal Perimeter Ground Bus.
D. Minimize any difference of potential that may develop between individual components.

Correct Answer: D

QUESTION 30
Which of the following should be performed during a post contract site walk (select THREE)?

A. Verify the location of the nearest commercial utility/electrical service.
B. Choose the specific location of the facility.
C. Decide who will make adjustments to the Connect Plus equipment.
D. Discuss site layout and observe accessibility.

Correct Answer: ABD

QUESTION 31
Your Connect Plus system design will be for a single site topology. Does this simple topology always require a Router, and why?

A. Yes: to route audio between the site repeaters and the XRC 9000
B. No: routing is handled by the Layer 3 capability of the site switch
C. No: the site controller and repeaters communicate on the same LAN
D. Yes: to route audio to the co-located RDAC host

Correct Answer: C

QUESTION 32
The IP links that your customer is providing for their proposed Connect Plus system show an average delay between site 1 and site 10 of 100 milliseconds. This is the path with the most delay. Is this amount of delay acceptable for a Connect Plus site link, and, if it is, which controller setting(s) does this value (100 milliseconds) impact?

A. This amount of delay is acceptable and impacts the value entered for the multisite Ping Interval.
B. This amount of delay is not acceptable as it will cause audio dropouts.
C. This amount of delay is not acceptable as it will introduce echo into the received audio.

D. This amount of delay is acceptable and impacts the value entered for the multisite Arbitration Time field.

Correct Answer: D

QUESTION 33
You are designing a large, wide-area system to be implemented for a single customer. One set of 3 sites will comprise an in-building system at an oil-fired power-plant. Two near-shore drilling platforms will have one site each, and be separated by 2 miles (3.22 km). Another 5 sites will cover a hilly, rural area that is approximately 250 square miles (647.5 sq km). The customer wants connectivity between all of the sites. Can a single option board codeplug adequately provide for a subscriber radio that must operate between all of these sites, and if so, what is the most important consideration?

A. Because such widely spaced sites will require separate Network IDs, a single codeplug is not appropriate.
B. A single option board codeplug may be used, but the operator should send a new frequency file over the air to the subscriber when operating outside their preferred sites.
C. Because such widely spaced sites will require multiple Network Frequency Files, it is more feasible to load a tailored option board codeplug into the subscribers when they are going to travel from their home area to a very different system topology.
D. A single option board codeplug may be used. For best results, the subscriber's Roaming and Search settings must be set to match the local system's topology. A Connect Plus zone can be added to the Option Board codeplug for each of the three major topologies. The user can

Correct Answer: D

QUESTION 34
Your customer has specified non-display portable subscriber radios for their proposed multisite Connect Plus system. Why would a display radio be a better choice for this system type (select THREE)?

A. Connect Plus requires a display subscriber to operate in Connect Plus zones.
B. Display subscribers allow up to 16 Connect Plus zones, while non-display subscribers only allow two.
C. Non display subscribers are not able to display emergency alerts.
D. Non display subscribers cannot participate in emergency voice calls.
E. Non-display subscribers will not allow users or technicians to check frequency file version, firmware version or other data without reading the radio using CPS.

Correct Answer: BCE

QUESTION 35
When calculating the required bandwidth for a single site system, which of the following items is the most important?

A. It is not necessary to compute bandwidth for single site systems.
B. Bandwidth must be at least 15 kbps per time slot at the site.
C. Whether the site requires RDAC traffic.
D. How many other single-site Connect Plus systems need to beable to receive audio from thissite.

Correct Answer: A

QUESTION 36
Which of the following is a requirement when implementing 3rd party text messaging in Connect Plus?

A. A dedicated text messaging control station radio
B. A dedicated text messaging application server attached to the IP network
C. Mobiles and portables equipped with a "text enabled" option board
D. An additional frequency for text messages

Correct Answer: B

QUESTION 37
You've designed a multisite system and fleetmapping is almost complete. You are planning group scan lists for the subscriber radios. Why may some calls for talkgroups on a subscriber's selectable group scan list be missed in a multisite system?

A. Higher-priority scan list talkgroup calls are joined first.
B. Scanning is disabled if an Emergency call is present on the network.
C. Audio may not be routed to the site where the scanning subscriber is located.
D. Scanning privileges may be disabled at the network manager for the subscriber.

Correct Answer: C

QUESTION 38
A customer is comparing Connect Plus's security features with a competing system. Which two security advantages of Connect Plus should you emphasize to this customer (select TWO)?

A. AES encryption of all control channel traffic
B. User passcode on radio startup
C. Network Manager's user database limits access to "known" subscribers
D. Subscribers must be programmed with talkgroups that exist in the user database
E. Ability to inhibit and power-down the subscriber from the Network Manager

Correct Answer: CD

QUESTION 39
You are discussing security concerns with a potential Connect Plus customer and want to highlight the strengths of Connect Plus over a digital conventional radio system. From the following choices, which THREE security strengths should you highlight (select THREE)?

A. Validation of the subscriber's electronic serial number (ESN)
B. Ability to inhibit a radio remotely so that it appears totally inoperative
C. Encryption of all control channel traffic
D. Validation of radio IDs
E. Validation of Talkgroup IDs

Correct Answer: ADE

QUESTION 40
You have been asked to estimate how many repeaters would be needed at a Connect Plus site that has the following:

How many repeaters would you estimate are needed?
Refer to the Digital Repeater Loading exhibit (from the System Planner) below.

A. 4 repeaters
B. 5 repeaters
C. 6 repeaters
D. 12 repeaters

Correct Answer: C

QUESTION 41
You are designing a 3 site Connect Plus system with 12 repeaters per site, no site controller redundancy, and 3 control channel-capable repeaters at each site. The average number of subscribers active at a site may approach 300 at any given time of the day. If this customer experiences a site controller failure, what symptoms and subscriber behavior would you expect immediately after the failure occurs?

A. All calls in progress at the site will drop. Subscribers will automatically fall back to digital conventional, allowing users to utilize any of the site's repeaters.
B. All calls in progress at the site will drop. All subscribers will attempt to roam to one of the other sites.
C. Calls in progress will remain until one of the other control-channel capable repeaters assumes the site controller's role and then they will drop and register on the new controller.
D. Calls in progress will stay up until they complete normally. Subscribers on the control channel will attempt to roam to one of the other sites.

Correct Answer: B

QUESTION 42
You have been asked to compute the multisite bandwidth required for Site 1 in the following example system:

Based on the information above, what is the multisite bandwidth required for Site 1?

4.4 Multiple Digital Repeaters in Connect Plus Mode

4.4.1 Configuring Connect Plus Repeaters with MOTOTRBO CPS

The MOTOTRBO repeater is a required component of the Connect Plus trunking system, as it provides the RF path between the Connect Plus Controller and the Connect Plus SU.
Each XRC 9000 Controller can control up to 15 MOTOTRBO repeaters. The XRC 9000 and its connected repeaters must be in the same physical location, and connected to the same Ethernet switch. The XRC 9000 acts as the IP Site Connect Master and the connected repeaters are configured as IP Site Connect Peers.

Before the MOTOTRBO Repeater can operate in a Connect Plus system, it must be configured with MOTOTRBO CPS according to the guidelines provided below. These guidelines do not address every programmable repeater parameter, just the settings that are critical to Connect Plus operation,

Prior to configuring the repeater, use MOTOTRO CPS to read the repeater's codeplug. Then, from the MOTOTRBO CPS Main Menu select "View", and then select "Expert" from the drop-down View Menu. This will assure that the programmer sees all of the settings discussed in the tables below.

MOTOTROBO CPS General Settings screen
Settings critical to Connect Plus Operation

Setting	Notes and Additional Information
Radio ID	Each Repeater must be programmed with a unique Radio ID (1-15). Once a Radio ID is used, it cannot be repeated in the same Connect Plus site. However, because Connect Plus restricts all repeater Radio ID's to the same 15 numbers, they can be re-used at different sites. The Radio ID must match the frequency configuration for this repeater & site in the Connect Plus Network Frequency File.
SIT (Subscriber Inactivity Time)	For Connect Plus releases prior to R1.1, the repeater's Subscriber Inactivity Time is configured with MOTOTRBO CPS, and the System Administrator

MOTOTROBO CPS Network screen
Settings critical to Connect Plus Operation

Setting	Notes and Additional Information
CAI Network	Set to 12 (default setting)
CAI Group Network	Set to 225 (default setting)
Repeater Type	Set to "IP Site Connect Peer"
Beacon Duration	Set to "Disabled"
Master IP	Enter the IP Address of the XRC 9000 Controller
Master UDP Port	Each repeater in the site must be programmed with a unique number for "Master UDP Port". The number must fall between "First UDP Repeater Listen Report" (a programmable controller parameter) and "First Repeater Listen Port" +14
Ethernet IP	If DHCP is not used, enter the repeater's Ethernet IP in this field. This must be a unique IP address that is not used for any other device at this, or other sites.

MOTOTROBO Channel Screen
Settings critical to Connect Plus Operation

Setting	Notes and Additional Information
Color Code	Color Code must match the information for this Radio ID and frequency pair (for this site) in the Network Frequency File.
IP Site Connect	Must be set to "Slot 1 & Slot 2"
Messaging Delay	In conventional IP Site Connect, this sets the repeater's arbitration timer. In Connect Plus, arbitration is done by the XRC 9000 controller, which has a programmable parameter called "Arbitration Time". When the repeater is programmed for Connect Plus, leave the Messaging Delay at the default setting of "Normal".
RSSI Threshold	This threshold is used to measure the maximum interference signal that the repeater will tolerate. If the repeater detects an interfering signal at or above this threshold, it takes itself offline and reports its off-line condition to the XRC 9000 Controller. If the Control Channel repeater were to take itself off-line, site operations would be severely impacted. For this reason the interference threshold for the Control Channel repeater should be set quite high (in the range of -80 to -40 dBm). Connect Plus Control Channel frequency pairs require a Protected Service Area. Non-exclusive licenses such as FB2 or FB6 are not suitable for Connect Plus Control Channel operation.
RX Frequency & TX Frequency	Repeater frequencies must be different for each repeater in the site. The frequency information must match the information for this Radio ID and frequency pair (for this site) in the Network Frequency File.
Power Level	Should be set the same for all repeaters in the same site. This is because all repeaters in the same site must have the same coverage footprint.
TOT (Time out Timer)	Must not be set any shorter than the longest TOT in any Connect Plus SU.

Refer to the Multiple Digital Repeaters in Connect Plus Mode exhibit (from the System Planner) above.

A. 3790 Mbps
B. 5427 kbps
C. 5491 kbps
D. 3790 kbps

Correct Answer: C

QUESTION 43
There are six steps in the call processing sequence on a Connect Plus system.
1. Hangtime Timer expires
2. Call requestor is received and repeated on assigned voice channel
3. Subscribers tune to proper voice channel/timeslot in response to controller direction
4. Caller releases the PTT
5. Call request is sent over the control channel timeslot by pressing PTT
6. Controller locates members of talkgroup

Trying our product !

★ **100%** Guaranteed Success

★ **100%** Money Back Guarantee

★ **365 Days** Free Update

★ **Instant Download** After Purchase

★ **24x7** Customer Support

★ Average **99.9%** Success Rate

★ More than **69,000** Satisfied Customers Worldwide

★ Multi-Platform capabilities - **Windows, Mac, Android, iPhone, iPod, iPad, Kindle**

Need Help

Please provide as much detail as possible so we can best assist you.
To update a previously submitted ticket:

One Year Free Update
Free update is available within One Year after your purchase. After One Year, you will get 50% discounts for updating. And we are proud to boast a 24/7 efficient Customer Support system via Email.

Money Back Guarantee
To ensure that you are spending on quality products, we provide 100% money back guarantee for 30 days from the date of purchase.

Security & Privacy
We respect customer privacy. We use McAfee's security service to provide you with utmost security for your personal information & peace of mind.

Guarantee & Policy | Privacy & Policy | Terms & Conditions