

## Bid 12-184, Addendum No. 1 December 14, 2012

### **Questions and Answers**

1. How is signal control envisioned? Will only MODOT and St. Charles be controlling signals or will all agencies control their own signals? Will every agency controlling signals require a separate software license to maintain distinct autonomy, or will licensing alternatives be considered?

#### **Signal Control Operations:**

The system will be configured such that each agency will have full control and management of the traffic controllers and ITS devices under their authority. All other users shall be able to view and monitor all devices on the system. The system administrator shall have the ability to assign command and control capability to any user in the system (including users from another agency). User rights, command and control are institutional issues managed by the Owner.

Please refer to requirement HBR 6 and SA 1.1.2.

Software Licensing:

The Job Special Provisions describe the requirement for licensing as:

All Vendor proprietary and/or developed software for this project shall be licensed to the County with the ability to be used by any agency in the county that owns or operates ITS devices connected to the system. There shall not be any restrictions that limit the County from operating the system or need to pay recurring costs (except for COTS). The Vendor's response shall include the proposed license agreement(s) and is subject to County approval. Restrictive licensing can be a cause for proposal rejection.

2. We understand that MoDOT currently maintains analog CCTV cameras (manufactured by Cohu Electronics) along Interstates 70 and 64, and along Routes 364, 370, and 94. MoDOT is expected to transition to IP-based cameras in the future. The Vendor will be required to integrate this IP based video as part of the system delivery and integration effort. Will the Vendor also be required to integrate the existing Analog Cohu cameras or will the new IP cameras entirely replace them?

The Job Special provisions describe the requirement for MoDOT CCTV integration as:

MoDOT currently maintains analog CCTV cameras (manufactured by Cohu Electronics) along Interstates 70 and 64, and along Routes 364, 370, and 94. MoDOT is expected to transition to IP-based cameras in the future. The Vendor will be required to integrate this IP based video as part of the system delivery and integration effort.

The Vendor is expected to integrate the IP video only.





- 3. Section 1.3.2, Detection, states, "The ATMS shall integrate traffic data through a direct interface to existing RTMS and Sensys detectors in the field. Data shall be used in the graphical displays and for operational support. Volume and speed data shall be stored in the database in 15-minute bins". How are the Sensys devices connected to the ATMS? VIA a local controller or in another manner?
  - Sensys data will be acquired through a connection to the Sensys "SNAP" server. Access will be made available as a part of the project implementation effort. Vendor is responsible for the interface protocol, polling and integration of the data into the ATMS platform.
- 4. Section 1.4, System Block Diagram, among other things states, "The ATMS laptop version shall be capable of signal controller interfacing, uploading, and downloading by direct connection to a signal controller via serial cable. Is an Ethernet cable acceptable?
  - No in order to perform a transfer by Ethernet cable, network settings in the user's laptop must be changed for each location, and access to change these settings may not be possible due to agency IT policy. A serial port does not need its settings to be changed from location to location.
- 5. Section 2.4, Hardware, states, "The servers shall be installed in existing 19" racks to be provided by MoDOT within the MoDOT TMC. Section 2.3 suggests the Vendor shall provide a 19" rack for equipment. Can the County clarify?
  - MoDOT will provide one 19" rack for server/networking hardware. At the MoDOT TMC, the rack labeled as "TMC Comp Rm RACK 18" can be used for the servers. The entire 6'-6" height of the rack is available if needed. The County/MoDOT will be responsible to deliver a power circuit to the Vendor's equipment rack. Power will be sized based on the power audit deliverable. Distribution of the power circuit and all rack mounting hardware, cabling, and power supply needs, plus any labor to install, shall be contractor provided.
- 6. Section 2.4, Hardware, states, "The system shall be sized to accommodate more than 50 workstations, 600 traffic signals, 100 lane control signals..." Can the County provide additional information on how the Lane Control Signals are used? How are they proposed to interface to the ATMS, via a local controller or in another manner?
  - Lane control signs will be managed through an NTCIP compliant, IP addressable interface to a controller.
- 7. Section 2.4, Hardware, states, "The proposal response shall include a hardware diagram and supporting budget estimate for all the equipment required for the project using an N+1 hardware based, hot failover design and a separate set of staging hardware to test enhancements/patches/upgrades". The term, "N+1" is used twice in this section. Can you clarify the term and that it only applies to the server set?
  - The N+1 hardware architecture only applies to the production environment, not the test environment. The term N+1 means that every component (N) has at least one independent backup component (+1). This is a commonly used high availability hardware design that applies to the computer equipment and networking gear.

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Section 2.8, Power, The Vendor shall provide 19" rack mount power distribution panels to support the provided equipment. See Question No. 5". Is is this a second rack to be supplied by the system integrator or will this rack also be supplied by MoDOT?

A 19" rack mount power distribution panel is similar to a power strip that the servers and vendor provided equipment plugs into. It is not a physical rack. A typical panel (for illustration purposes only) might look like the following.



9. Section 2.12, CCTV and Video Sharing Capability, states, "The Vendor shall supply an NTCIP CCTV based interface using NTCIP 1205 standards. Vendor shall support integration of up to 100 CCTV locations with the base system delivery". What brand cameras will be supplied/integrated into the system?

NTCIP standards make the interface vendor independent. Encoders/Decoders will be provided by the County.

10. What DMS devices will be supplied/integrated into the system?

NTCIP standards make the interface vendor independent.

11. What bluetooth devices will be supplied/integrated into the system?

The Job Special Provisions state:

The concurrent construction phase of the overall project will include the implementation of a series of Bluetooth detectors along approximately 10 arterial routes (less than 100 detectors) to collect travel time and origin-destination data. Field implementation, data collection, communication and data summary will be performed by others. The ATMS software vendor will be required to interface to the Bluetooth central server via a supplied API/SDK from the Bluetooth detector vendor.

The selection of the Bluetooth vendor will be shared once the vendor has been selected. The ATMS vendor will be supplied with and API/SDK and will need to connect to a County supplied Bluetooth central server co-located with the ATMS hardware.

12. Section 2.15, Traffic Information System Application, states, "As an optional service, the County is requesting that the ATMS Vendor provide a description and price for the development and implementation of a web and mobile phone application (app) to share the system's traffic information to the motoring public. The County desires the website and Smartphone app to support the following features..." Presentation of specific costs for the development of a website and an app can vary

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wildly based on a number of factors including data availability, format, structure, as well as understanding the County's objectives, and needs. While we understand the need to practically balance functionality to cost, we respectfully request that the Vendor be allowed to present costs in general "ball-park" terms rather than specific detailed costs.

The County is seeking innovation relative to sharing traffic information with the citizens of St. Charles County. Optional services being sought are for creative solutions using tools such as web sites, mobile apps, social media, locational based services, predictive operations, etc. to deliver, alert, advise and inform the motoring public as to current and future traffic conditions and information.

The County is requesting a written proposal that defines the service the Vendor can deliver for the stated price. The Vendor should clearly define the assumptions, functions, features, data, hardware, communications requirements and expectations of the County needed to support the Vendor's offered price. Vendors shall clearly state if the service is off-the-shelf, under development or will be developed for this project.

13. Sections 2 and 3, of the "Proposal Submission Details", on page JSP-27 stipulate that the Vendor must indicate the percentage and dollar value assigned to any sub consultants and DBEs respectively. Responding in this manner as required will make this information clearly referenced as an integral part of the Technical Proposal. As the Bid Proposal Forms are to be submitted in a separate sealed envelope, it is assumed that it is the intent that pricing details be kept separate and apart from the technical proposal. However, providing both the percentage and dollar value as part of the technical Proposal will allow the evaluators to easily reverse engineer the total Vendor price. Is this your intention?

No, please include this information in the cost section and not the technical response.

1. Page 3, Section 7.4: With the DBE percentage stated as being "0%" if no DBE is used and stated in the proposal are these forms still require to be submitted 3 business days after the bid opening?

No.

2. Page 3, Section 7.4: Where forms must be submitted three business days after bid opening... Please confirm if Monday after the bid opening is a "business day" or if it's a holiday (Christmas Eve) for the County. Fax and email are permitted per the DBE forms but no numbers or contacts were provided. Please provide the fax and email contacts where the forms can be sent, should a DBE be used.

Not applicable – deadline has been moved. See below for detail. Forms can be sent to Fax Number 636-949-7307 attn: Carole Asher, or via email to Casher@sccmo.org.

3. Page 4, Section 9.4: Where on the bid forms should addenda be listed and dated per this section? Page 10, mentions stapling addenda to the bid in the "appropriate part of the bid".

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Please attach at back of bid (last page).

4. Page 4, Section 8.4: States that the contract price will be "...subject to adjustment according to final measured, used, or delivered quantities...". However, JSP-31 says "The project will be performed for a fixed price". Is the contract unit price or fixed price and which section/statement governs?

The intent is that this is fixed price contract. Section 8.4 should be struck from the instructions.

- 5. Page 4, Section 10: States "These Contract Documents include a complete set of bidding and contract forms, which are for the convenience of the BIDDER and are not to be detached from the contract documents, filled out, or executed. Separate copies of the bidding forms are furnished for that purpose..." If the "blue sheets provide are assumed to be the separate copies of the bidding forms, they do not match the list of forms required to be filled out in this section. Specific examples are called out below.
  - a. Item C: There is no form for "List of Resources and References"; please verify if a formal form is required as called out by the section, or if the formatting is the submission is at the discretion of the BIDDER.

The formatting is at the discretion of the bidder.

b. Item D: A form with this exact title "Certification of Non-Segregation" was not located in the RFP; please verify or point to a location where that exact form can be obtained or if it exists under a different title.

This form is no longer required as part of the submission.

c. Item G: Audit Clause for Contracts is located in the contract documents on page 14; we are warned not to detach from the package per Page 4, Section 10. Is it allowed to copy the form and submit it, even though it wasn't provided as part of the separate "blue" sheets, without being seen as non-compliant?

This form may be copied and submitted.

d. Page 15: Has a form called "Affidavit of Work Authorization" (E-verify) but is not one of the forms listed in this section, should it be? Form was included in the separate blue sheets.

The E-verify information must be included with the bid.

e. Page 18: Has a form called "Signature and Identity of Bidder". This is not part of the separate blue sheets, nor is it listed as one of the forms required under Section 10. Please advise if this form is required as part of the submission.

This form is required.



6. General question on the "blue sheets". Do forms have to be submitted on the blue paper forms supplied to be considered compliant? Example would an executed Bid Bond not submitted on a blue sheet, would that be considered non-compliant?

Forms do not have to be submitted on blue sheets.

7. Page 10, general question: What forms should be included in the sealed envelope? It is all forms mentioned in Page 4, Section 10?

All required forms as shown on Page 4, Section 10 should be included in the submittal. **Please note that two sealed packages are required.** Any and all elements related to the cost of the proposal should be included in a sealed package clearly marked as Package 1 – Cost Proposal. All remaining items, including the Bidders references and Technical Proposal, should be included in a separate sealed package clearly marked as Package 2 – Technical Proposal. See also Question 13 on Page 4 of 14.

8. Bottom Page 11 and top of Page 12: The Bidder is asked to "...mark below to identify the type of Bid Guaranty" which then has two boxes where a check can be placed. Please verify that marking within the "Notice to Contractors" on this page is not necessary.

The type of Bid Bond does need to be marked and that page included in the bid.

9. Page 12, Section 11: Mentions an "Affidavit of Compliance" and only provides a web link to this form (actual form not provided in the Bid documents). There is an "Affidavit of Work Authorization" provided in the bid documents. The confusion comes on page 13, where the document mentions a generic "Affidavit" and there is confusion as to which of these documents are being referenced. Please verify if a completed "Affidavit of Compliance" form is the correct affidavit that is required at the time of the submission, if no form is currently on file with St Charles County.

An Affidavit of Compliance is the required form.

10. Page 17, Section 12: This section mentions a 10-hour OSHA training session for "...laborers, workmen, drivers, equipment operators, and craftsmen who have not previously completed such a program and are directly engaged in actual construction of the improvement...". As the goal of the RFP from page JSP-1 is to provide an "commercial-off-the-shelf (COTS) Advanced Arterial Traffic Management System (ATMS) software..." is this training required? If so please state the focus of the training and the topics that it will need to cover, and who on a software contract would be required to attend to be compliant with this requirement.

Only individuals in the work classes listed would have to attend the training. If the contractor does not have these individuals on the project, then they would not have to complete the OSHA training.

11. Page 17, Section 12: No deadline is established in this section on when OSHA training will need to be completed, however, damages are identified in the amount of \$2500 + \$100 per employee per

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calendar day for not meeting this deadline. If the OSHA requirement stands, please provide the deadline that the BIDDER will be required to meet to avoid these penalties.

Missouri statute requires the training to be complete within 60 days of beginning work on the project.

12. Page CA-1, Article 3: It's understood that the contract agreement here is for reference, but the statement of "shall commence clearing and grubbing operations upon receiving the written Notice to Proceed..." caused some initial puzzlement. The contract documents appear to be geared more toward a construction project and not software procurement. Currently hard to gauge potential risks and thus appropriate costs. Is this really the intended contract language that will be used; is this expected to change after a vendor is selected?

The County will consider striking items from their standard Agreement that are not applicable to this contract. Suggested modifications should be submitted in writing within one week of notice of award. Certain elements of the standard Agreement, such as Temporary Facilities (page GR-11), will not be required as they are not applicable to this project.

13. Page CA-5, Article 13: For the sake of understand the point when liquidated damage will be assigned, how is "completion" to be defined (i.e. finish acceptance testing, completion of operational 30-day test period, etc.)?

Completion is defined as completion of the 30-day observation period.

14. Page CA-5, Article 13: Would providing "optional" bid items, if directed by the COUNTY, be subject to the same 140 day limit as mandatory items. If so would they be subject to liquidated damages?

No, optional items will not be subject to liquidated damages.

15. Page GR-1, Section 4: This section states; "The Contractor and each subcontractor agree to furnish Saint Charles County with a Certificate of Insurance naming them as an Additional Insured on each of their respective policies...." The key phrase being "additional insured". In accordance with Section 107.13 of the Missouri Standard Specifications, contains the following statements:

107.13.2 Contractor's Liability Insurance with **Additional Insured** Parties.

#### 107.13.2.3 Subcontractor's Coverage.

If any part of the contract is subcontracted, each subcontractor, or the contractor on behalf of that subcontractor, shall obtain the same commercial general liability insurance and commercial automobile liability insurance coverage. The commercial general liability insurance shall name the same entities specified in Sec 107.13.2.3 as additional insureds, and shall have the same separation of insureds conditions.

#### 107.13.2.1 Commercial Liability Insurance.

The contractor shall carry commercial general liability insurance and commercial automobile

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liability insurance from a company authorized to issue insurance in Missouri. Each such policy shall name the Commission, and the Missouri Department of Transportation and its employees, as additional named-insureds...

Please clarify that the word "named" inserted between "additional" and "insureds" in 107.13.2.1 was not intended to require that the Commission and the Missouri Department of Transportation be included as "NAMED INSUREDS" but merely included as being named as "ADDITIONAL INSUREDS." This clarification is important because if, in fact, the Contractor must include them as "NAMED INSUREDS" this will necessitate procuring special policies which will be an additional project cost.

Please note that industry standard is to include them as "ADDITIONAL INSUREDS" and not "NAMED INSUREDS" so it is believed that there is merely a misplaced modifier in 107.13.2.1, but the clarification in important.

The intention is that they are additional insureds.

16. GR-3, Last Paragraph: "Within two weeks after signing the Contract...shall submit a complete list of shop drawings..." None of the listed shop drawings, in this section are applicable to the project. Are there dedicated shop drawings specific to this project envisioned by the County, which the Bidder should be made aware?

No shop drawings are envisioned for this project.

17. JSP-7, 8 Section 2: For a project procuring an "off the self" solution and within a 140 day timeframe (little over 4 months) the scope and detail of the Project Management plans (i.e. staffing plan, correspondence management plan, etc.) would seem to be more in place on a project of significantly longer duration and with more risk (when software is being developed). To comply with these requirements and to judge risk to the Bidder, what is the projected turnaround time for the County to review a submission and return comments? Also absent are requirements for kick off, progress, or coordination meetings and a Bid Item that would support general project management activities. Is this accurate; are there no required meetings to be held by the Bidder as part of this project? Are general project management activities to be distributed among all other bid items?

County anticipates review and comment to be one week for submittals relative to the ATMS Project Management documents.

In the Project Management section 2.2.2, the JSP calls for a CMP. Its definition includes the development of the expected interaction with the County in terms of meeting and progress – see excerpt below. The cost of these activities is all inclusive in the bid price and not a separate payable item.

## Project Correspondence/Communications Management Plan (CMP)

The Vendor shall develop a CMP plan for County review and approval that includes elements such as:

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- Progress reports (accomplishments)
- Status reports
- Meeting agenda
- Recurring meeting frequency
- Meeting minutes
- Other projects dependencies communicated
- Contract changes
- 18. JSP-14, Second paragraph: This section talks about full redundancy and N+1 failover of the system, with test servers and full production servers, located at the MoDOT TMC. MoDOT already has such an environment in operation with capacity to add additional servers. As MoDOT is a valued partner in Gateway Green Light, would it be seen as non-compliant to provide a solution that integrates and leverages that existing infrastructure in the technical solution?

The N+1 hardware architecture only applies to the production environment, not the test environment. The term N+1 means that every component (N) has at least one independent backup component (+1). This is a commonly used high availability hardware design that applies to the computer equipment and networking gear. The solution provided shall be fully independent of the existing MoDOT equipment such that the County could remove the system/hardware from the MoDOT TMC to a new location and still maintain the N+1 architecture without buying new equipment.

19. JSP-14, Section 2.5: For Commercial Software, including potential licensing for server operating systems; who will be the license holder? This will also be a question on equipment procured, as the network switches, vpn, workstations, etc. will be transferred over to an agency's or County's hardware maintenance contracts, after project completion.

The County will be the ultimate license/hardware owner of all software licenses and maintenance agreements.

20. JSP-14, Section 2.8: For Power service to hook up a circuit to the UPS, a 50-foot estimate was made for the work. How is the circuit(s) to be paid, if quantities change; currently appears grouped with other items under "peripherals" in the bid form. A power audit is a deliverable called out in the Bid Forms. Exact circuits needed and length won't be determined until that audit is complete and could be subject to where the equipment if finally located within the MoDOT-TMC.

The County/MoDOT will be responsible to deliver a power circuit to the Vendor's equipment rack. Power will be sized based on the power audit deliverable. Distribution of the power circuit within the cabinet will be the responsibility of the Vendor.

21. JSP-20, First paragraph: Statement "The Vendor shall be responsible for any re-programming of existing ACTRA signal controllers that are migrated over to the new ATMS platform as part of this project..." Exactly how many controllers are anticipated for this task; which bid item on the form should this work be associated?

There are 210 signals (all MoDOT and City of St. Peters) that are currently on ACTRA.



The JSP defines payment for the ATMS software as a fixed price element with milestone payments as a percentage of the total fixed price bid. There is no specific bid item for signal controller programming. See JSP text below.

The project will be performed for a fixed price in accordance with the pricing section of this specification. The Vendor shall be paid based on successful completed and St. Charles County approved milestone elements as per the table below. Percentages are based on the total project cost excluding the annual maintenance costs.

MILESTONE	PAYMENT
	PERCENT
Project Management Plan	7%
System Architecture and Networking Plan (including IP addressing scheme and Network Gear Configuration)	5%
Power Audit Memorandum	2%
Hardware/Commercial Software Procurement	10%
Implementation Plan	5%
Training Plan	5%
Pre SAT SA Training	3%
Post Observation Period SA Training	3%
System Acceptance Test Plan	5%
On-Site System Delivery and Set Up (System Ready for Training)	20%
Successful Completion of System Acceptance Testing (including all ITS modules)	15%
Successful Operational Test Period Completion (30 days)	15%
System Documentation	5%

22. JSP-26, Section 3: Statement "...entire proposal on CD-ROM (or USB Flash Drive) in standard MS Office format." Would it be possible to submit the proposal as a PDF, since formatting of drawings, diagrams, or even pictures can be impacted by the version of Word accessing the file. There will also be executed forms submitted with the "exact copy of the entire proposal" that will not be Word documents but scanned images. Is submitting the electronic file(s) as a PDF format acceptable or will only Word be compliant?

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The electronic version of the proposal is not expected to include "live" signatures. The County seeks a Word version for the proposal in order to reproduce and distribute (to the selection committee and stakeholders), search the contents, and be able to redact portions should that be necessary. PDF versions may be included with the submission but a Word version is also required.

23. General Question: Due to the holidays, numbers of forms to be executed, time to address questions and then process answers received; is the County open to a two week time extension for Bidders? Cost estimates could improve with the additional time to prepare.

Yes. Via this Addendum No. 1, the deadline is hereby extended to Thursday, January 10, 2013, at 10:00 a.m. local time.

#### SPECIFICATION CHANGE

In the Job Special Provisions (JSP) for the Advanced Traffic Management System (ATMS), the Vendor is required to provide a LAN Switch as per Figure 1. The switch is described as a Cisco ASA 5512, see figure below from the JSP.

St. Charles County Typical Communications Architecture

#### MoDOT - St. Peters Example Phase I - Cellular Network Actra Server LAN Switch Fiber Patch Panel Fiber Patch isco ASA 5512 LAN witch AN Switch Signal Signal Cellulai Typical St. Peters Signal Typical MoDOT Signa Cabinet (provided by Vendor) MoDOT TMC Signal LTE Core Switch Typical Cellular Signal Phase II - Private Cellular Network Fiber Patch Panel Patch Patch 0 Existing Firewall Cisco ASA 5512 Signal Cabinet Signal Cabinet Actra Serve (provided by I-94 & Mid Rivers Mall Drive

Figure 1 – Sample Network Block Diagram

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LAN Switch

Vendor)

St. Peters TMC



Addendum 1 modifies the LAN Switch requirement to change the Cisco ASA 5512 to a Cisco ASA 5525-X supporting a minimum of 3 Mbps throughput level. The change is driven by the need to support the full load of the field communications coming into the TMC. A description of the Cisco ASA 5525 is provided in the table below.

Item Name	Description
ASA5525-K9	ASA 5525-X with SW 8GE Data 1GE Mgmt AC 3DES/AES
CON-SNT-A25K9	SMARTNET 8X5XNBD ASA 5525-X with SW
SF-ASA-8.6-K8	ASA 5500 Series Software Ver. 8.6 for ASA 5512X5555X DES
CAB-AC	AC Power Cord (North America) C13 NEMA 5-15P 2.1m
ASA-VPN-CLNT-K9	Cisco VPN Client Software (Windows Solaris Linux Mac)
ASA5500-ENCR-K9	ASA 5500 Strong Encryption License (3DES/AES)
ASA-ANYCONN-CSD-K9	ASA 5500 AnyConnect Client + Cisco Security Desktop Software

All equipment shall be configured and installed by the ATMS vendor.

Vendors shall replace existing Architecture diagram with the following diagram. The replacement graphic is updated for the amended hardware requirement of a Cisco ASA 5525-X to replace the previously required Cisco ASA 5512.



# St. Charles County Typical Communications Architecture MoDOT – St. Peters Example Phase I – Cellular

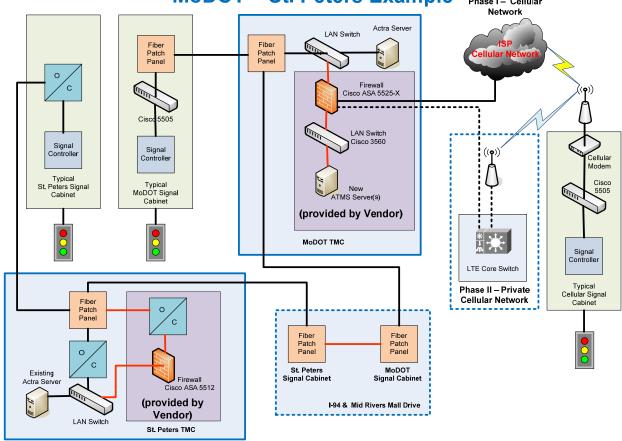


Figure 2 – Sample Network Block Diagram