Appendix B

Checklist for Establishing a Transportation System

The following checklist covers key considerations for commanders to use when planning and executing Army transportation operations. Inherent to the list, is the abbreviated process that permits the DTS to function effectively during periods of national crisis or war. This checklist will assist commanders and their staff transportation planners and operators, at all levels of war, in establishing an effective transportation system to support the committed Army forces.

Section I highlights planning and execution considerations for senior transportation planners responsible for effectively mobilizing and deploying the force to an AO at the strategic level of war. Section II lists operational and tactical levels of war transportation considerations that must be addressed by transportation planners responsible for the reception, onward movement, and sustainment of the deploying force. Section III lists key considerations that should be addressed during the development and execution of a theater movement program.

SECTION I - Strategic Transportation

1. What is the CINC's/JTF commander's concept of operation and the J-4's concept of support?

2. Are these concepts transportation supportable? Is there sufficient transportation capability included in the proposed force structure or available through other means? What means will be used to resolve shortfalls or prioritize use?

3. Will the Army provide common-user transportation support to the other service components? What is the requirement? What will be the impact on support to Army forces?

4. Will the CINC establish a JMC? What is the JMC's scope of authority? Will the Army component have to provide staff augmentation or liaison to the JMC?

5. Is there multinational participation in the operation? Has the US been assigned lead nation logistics responsibilities? Will the Army provide common-user transportation support to other national forces? What is the scope of support? What are the control mechanisms? Who coordinates support and priorities? Is multinational movement control required?

6. Is there a transportation supportable TPFDD? What is the allocation of strategic lift in terms of quantity, type, and frequency?

7. Will the capacities of theater transportation meet or exceed the capacities of strategic lift? If not, how will backlogs be handled?

8. How and when are transportation units phased? Does this phasing support theater transportation requirements? Will sufficient transportation forces introduced early enough to open ports and provide onward movement based on the programmed arrival of forces?

9. If there are multinational forces, is there a combined TPFDD? What control mechanisms will deconflict force arrivals at the PODs?

10. Have the capabilities of all ports and LOCs been analyzed? What are the shortfalls? What can be done to increase throughput?

11. What unified commands will provide support (forces/capabilities)? What coordinating mechanisms need to be established for this support?

12. Who will control each LOC? Have responsibilities been assigned?

13. How will in-transit visibility be maintained? What systems are available? What additional support is required?

14. How will sustainment flow? What control mechanisms will be established to ensure the highest priority cargo moves if the system becomes saturated?

15. Have port operators been identified? Have they been provided solid workload estimates from which to plan operating capability?

16. Will prepositioned (Army Reserve) material be used? Has it been incorporated as part of the reception and onward movement plan?

17. What will be security and engineering requirements for transportation nodes? Are any improvements required? Have they been incorporated in staff planning? Has responsibility been assigned?

18. What are the funding guidelines? Is local contracting required?

SECTION II - Operational and Tactical Transportation

GENERAL

1. Is the CINC's/ASCC's strategic theater campaign plan and/or OPLAN provided to assist the implementer?

2. Are the necessary maps for implementing the plan listed available?

3. Is there a concise CINC/ASCC concept of support provided?

4. Does the plan describe how transportation support is to be provided?

5. Have the terrain and enemy intelligence been analyzed to determine the impact on transportation support?

6. What are the facility requirements to support the transportation system? Have these requirements been incorporated in engineer plans? Can any of the facility requirements be satisfied by HN facilities?

7. Is site preparation required?

8. Is there a combined TPFDL provided? Is it transportation supportable? Has it been properly analyzed to determine time-phasing for introduction of transportation elements?

9. Has HNS transportation availability and risk been considered?

10. Who is the contracting authority in theater?

11. Will units/sustainment flow through an ISB? Where are the ISBs? Who operates the ISBs?

12. Is there a requirement for area oriented depots to arrange for special assignment airlift mission to expedite cargo distribution to the AO?

13. Are the transportation support systems for direct support system and air LOC described?

14. Is coastal LOC required (Army freight ships, landing craft, lighterage)?

15. Are there coastal restrictions?

16. Is a LOTS operation required?

17. Have MHE requirements been addressed?

18. Are in-country highway, rail, air, and inland waterway mode requirements addressed?

19. What ports are available? What is access to or from the ports? What special port clearance requirements apply?

20. Is transportation movement priority provided?

21. What is the weather impact on ports, airfields, and highway nets?

22. What is the availability of Defense Intelligence Agency data or analysis regarding the country or area transportation infrastructure?

23. What are the transportation funding arrangements?

24. Are transportation account code requirements specified?

25. Are the SPOD/SPOE and APOD/APOE specified?

26. Has the use of foreign flag sea or airlift been addressed?

27. Is an intratheater, intertheater, and in-country movement system for personnel and cargo specified?

28. Are procedures for shipping supplies and equipment that arrive at the home station after units have deployed addressed?

29. Have medical evacuation requirements been included in the plan?

30. Is refrigerated transportation required?

31. What support is provided by the HN, allies, or other Services?

32. Is pipeline capability present? How much? Who is the operator?

33. Are retrograde procedures spelled out for excess and unserviceable items?

34. Are there provisions in the plan for maneuver/war damage resulting from transportation operations?

35. Are special Department of Agriculture and US Public Health Service cleaning requirements for retrograde equipment identified?

36. What are diplomatic and technical clearance requirements for movement through other countries?

RECEPTION AND ONWARD MOVEMENT

1. What elements are being airlifted?

2. What elements are being sealifted?

3. What is the time-phasing of initial transportation capability into the area of operation (for example, port opening packages and MCTs)?

4. How much transportation support is provided by the joint task force?

5. Does the joint force require any common-user transportation support from the Army?

6. Are movements of personnel, equipment, and supplies included? Have adequate provisions been made for defense during movements?

7. What is the concept of operation for petroleum support of transportation units?

8. Have arrangements been made for the transportation of ammunition within the theater?

9. What is the distribution requirement?

- Are unit and support locations identified?
- Has a distribution pattern been established?
- Are transportation units programmed to arrive at locations that support the distribution pattern?
- Are there tonnage estimates?
- Have these been balanced against unit requirements?
- Is there a plan to distribute pre-positioned material?

MOVEMENT CONTROL

1. What is the CINC's/ASCC's concept for movement control?

2. When do movement control elements arrive?

3. Has an individual component commander been given responsibility for theater movement control? Has it been coordinated with other component commanders?

4. Has each component been given the responsibility for its own movement control?

5. Have joint-use transportation requirements been established?

6. Has a JTB been established?

7. Has a JMC been established to ensure transportation requests are validated and theater common-user transportation resources are employed with maximum effectiveness?

8. What are the theater common-user transportation requirements and capabilities?

9. What HN transportation facilities and equipment are available?

10. Has JMC communications with JOPES been established to monitor and effect changes to the deployment of forces and supplies?

11. What automated transportation systems are available to support TAV and ITV?

12. Has a TAMCA been established?

13. Is there an MCC?

14. How many Movement Control organizations are assigned and where?

15. How many MCTs are assigned and where?

16. Has Army airlift been allocated for logistics purposes?

TERMINAL OPERATIONS

GENERAL

1. What terminal facilities are available, including ports, airfields, rail, and inland waterways? Have appropriate surveys been conducted?

2. For whom do terminal operators work?

3. Are tonnage forecasts available?

4. What type and number of terminal transfer units are required (rail, highway, port, and/or airfield)? What transportation units are required to support the operation? Who will operate each terminal?

5. Can ammunition be stored at each terminal? How much?

6. Who will provide air traffic control/ harbormaster duties at each POD?

7. Are there hazardous materials restrictions at any terminal?

8. What are the local customs requirements?

9. Is sufficient MHE available?

10. Is sufficient blocking, bracing, and packing material available?

11. Are sufficient facilities available for source mail?

FIXED PORTS

1. What fixed ports are available to support military marine terminal operations?

2. Is a port opening package required? What assets are required?

3. What is the draft of the port?

4. What type and quantities of MHE are available for use in support of military marine terminal operations?

5. How many berths and anchorages are available for use in support of military marine terminal operations?

6. What is the enemy's capability to interdict the ports?

7. What port security measures are currently in use?

8. What is the port's capability to handle containerized cargo and RO/RO cargo?

9. What routes access the ports? Are there any special port clearance requirements?

10. What inland waterways access the port?

11. What is the current throughput capability of the port?

12. What are the characteristics and capabilities of the port's warehouse facilities and storage area? What effect does weather and sea have on port operations?

13. What contract civilian/HN marine terminal personnel and equipment assets are available to support military terminal operations?

14. What is the present level of use of the ports?

15. What capability do government/local civilian contractors have to repair damage to port facilities?

16. What is the ammunition handling capability?

17. What is the heavy lift capability?

LOTS OPERATIONS

1. What shorelines are conducive for LOTS operations?

2. What types of roads access the shorelines?

3. What types of railroads access the shorelines?

4. What civilian contract or HN personnel and equipment assets are available to assist in LOTS operations?

5. What are the predominant weather conditions in the AO?

6. How much engineering support will be required to properly execute a LOTS?

7. What type of LOTS equipment will be required (for example, landing craft; cranes; barges; and so on)?

AIR TERMINALS

1. What airfields can be used? What are their capabilities?

2. Have A/DACG and/or ATMCT requirements been satisfied?

3. Are prerigged projects available for on-call delivery? Are call forward procedures specified? Is airdrop resupply capability provided commensurate with the expected requirement?

4. What are the personnel and cargo reception capabilities of the airfield?

5. What is the current use of the airfield?

6. What are the characteristics and capabilities of the roads that access the airfield?

7. What contract civilian/HN personnel and equipment assets are available to assist in A/DACG operations?

8. What airfield facilities are available for military use during operations?

9. What impact does weather have on airfield operations?

10. What engineer assets are available to upgrade and maintain airfields?

11. Have AMC channel airlift requirements been specified?

12. Has support been planned for US Air Force mobile aeromedical staging facilities?

13. Has a coordinating HQ been designated for all logistical airlift support?

CONTAINER TERMINALS

1. What is the container policy? How far forward are the containers going to go? Is there container handling equipment at all destinations?

2. What civilian contract or HN personnel and equipment assets are available to assist intermodal operations?

3. What is the capability of units and ports to handle container shipments?

4. Can containers be used with carrier delivery direct to the supply support activity?

5. Will other than 20-foot and 40-foot containers be used?

MODE OPERATIONS

HIGHWAY

1. What truck units will support the area of operation?

2. From where do they plan to support?

3. What are their capabilities?

4. Have requirements been balanced against their capabilities?

5. Are truck unit types matched against terrain capabilities?

6. Is the highway net described? What are its capabilities and limitations?

7. What routes are available to support military operations?

8. What are the characteristics and capabilities of the routes available to support military operations?

9. What are the convoy restrictions?

10. What are the dimensions of tunnels along the routes?

11. What are the dimensions and classifications of bridges along the routes?

12. What capability does the government have to repair damaged segments of routes?

13. What engineer assets are available to maintain or upgrade routes?

14. What segments of the routes are heavily used by the civilian populace?

15. What are the most likely routes fleeing refugees might use?

16. What is the best source for additional information on the routes?

RAIL

1. Is there a rail system available?

2. What rail lines are available to support military operations? Who coordinates, who guards, and who pays?

3. What is the condition of the rail lines? What are their schedules and capabilities?

4. What is the gauge of the tracks?

5. What effect does the weather have on rail operations?

6. What rail assets are available to support military operations?

7. Are loading ramps available at rail yards and terminals?

8. What is the location and lifting capacity of railway cranes in the AO?

9. What is the enemy's ability to interdict the rail lines?

10. What capabilities do the government or local civilian contractors have to repair damaged track, bridges, and tunnels?

11. What are the characteristics and capabilities of the rail terminals and marshaling yard?

12. What is the present level of use of the rail lines?

13. What is the description (model number, wheel arrangement, horsepower, weight, tractive effort, and type coupler) of typical line-haul locomotives and switch engines currently in service in the AO?

14. What are the capacities, dimensions (length), and age of typical rolling stock currently in service in the AO?

15. Is a track profile of the main line indicating the location, percent, and length of ruling grade available? Is a plan showing location and length of minimum radius curves together with any sections of multiple main line track available?

16. What are the location and length of passing tracks on the main line?

17. What is the current level of traffic (trains per day) using the main line in the AO?

18. What are the location, type, and capacity of rail yards in the AO?

19. What are the number and length of track in each yard?

20. What are the location; description (type, construction, length, clearances, and Cooper rating); and condition of rail bridges and tunnels on the main line?

21. What are the location, description, and condition of station facilities supporting the operation of the main line?

22. What are the location, storage capacity, and condition of locomotive fueling facilities in the AO?

23. What are the location, capacity, and condition of engine houses and car repair shop facilities in the AO?

24. What are the location and quality of water supply on the main line?

25. What communications and signals are in use for train operations?

26. What is the weight (pounds/yard) of main line rail?

27. What is the predominant type of cross tie used in the AO?

28. What are the location and availability of spare parts for motive power and rolling stock?

29. What type of wheel bearing is used on rolling stock?

INLAND WATERWAYS

1. What inland waterways are available?

2. What are the capabilities and limitations of the inland waterways?

3. What inland terminals are along the waterways?

4. What are the characteristics and capabilities of the inland terminals?

5. What is the present use of the inland waterways?

6. What is the enemy's capability to interdict the inland waterways?

7. What effect does the weather have on the inland waterways?

8. How accessible are the inland waterways to roads and rail lines?

9. What intercoastal shipping assets have been identified to support shipping bulk fuels, ammunition, and dry cargo? Are they available?

10. What intercoastal shipping routes are currently in use?

11. What is the enemy's ability to interdict intercoastal shipping?

SECTION III - The Movement Program

1. Has the distribution pattern been analyzed?

- What is the commander's concept of operation?
- How many incoming units?
- What types of incoming units?
- What is the location of in place units?
- What will be the location of arriving units?
- When will incoming units arrive?
- What is the throughput transportation requirement?
- What is the interzonal transportation requirement?

2. Has the transportation network been developed?

- What intelligence information is available?

- What engineer data is available regarding the transportation network?
- Has mission, enemy, terrain, troops, and time been evaluated?
- Have the locations of mode operators been assigned?
- Have the locations of terminals been assigned?
- Has the receiving, loading, and handling capabilities of shippers and receivers been determined?

3. Have the requirements for the transportation/distribution plan been determined?

- Have shipping forecasts been analyzed?
- Has the supply class, estimated weight, cube, and the RDD been analyzed?
- Is there special handling required?
- Have personnel movement requirements (for example, troops; civilians; patients; and prisoners of war) been assessed?.
- Are there any major subordinate command transportation requirements exceeding organic capability?

4. Have the mode operator capabilities been determined?

- What number, types, and equipment are available?
- Are HN transportation assets available?
- Are third country and US-contracted transportation assets available?
- What reception, material handling, and in-transit storage capability is available?
- Is there an intratheater US airlift/ airdrop capability?

5. Have requirements been balanced against capabilities?

- Have command relationships and geographic AOR been considered?
- Have workload requirements such as the following been considered?
  - Direct shipments.
  - Multistops.
  - Retrograde.
  - Intermodal shipments.
- Are there any transportation shortfalls?
- Where are the critical points in the system?
- Are MCTs assigned to the critical points?

- Has execution been adjusted in accordance with the CINC's priorities and transportation priority of shipments?

- Have adjustments been coordinated with appropriate shippers, receivers, material managers, and logistics staffs?
- Has the requirements schematic been completed?
- Has the mode schematic been completed?
- Have modes been allocated for each shipping requirement?

6. Has the movements program been coordinated and published?

- Has the movement program been fully coordinated with other command movement planners?
- Has the movement program been coordinated with operations, supply, MP, and engineer staffs?
- Has the movement program been approved by the appropriate authority?
- Does the movement program have the appropriate classification?
- Has the movement program been published and distributed to appropriate officials?