

INITIAL OBSERVATIONS FROM NAFITH SYSTEM EVALUATION

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The National Freight Information and Transportation Hub (NAFITH) is an infrastructure system for maintaining countrywide freight transportation information that tracks and manages the data and documentation required for international trade and transportation. The first stage of the system was introduced in January 2006, primarily to control entry and flow of trucks to the Aqaba Special Economic Zone (ASEZ) to pick up and deliver goods from and to the port(s) of Aqaba—for general cargo, fuels and containers.

Introduction of the NAFITH system coincided with deregulation of a long-established practice of queueing by trucks for the opportunity to carry loads from the port area. That deregulation is part of a broader initiative to deregulate and modernize the truck logistics sector. While the evaluators did not have the opportunity to visit the area in person before introduction of the NAFITH, all stakeholders interviewed subsequently confirmed the following facts about the “before” situation:

1. Long waiting times by trucks, limiting the number of revenue trips that could be completed in a given week by a given truck;
2. Frequent mismatch between truck equipment and requirements of the load to be picked up, because “first come, first served” did not necessarily ensure the quality and equipment suitability of the truck for the requirements of the load;
3. Opportunity for manipulation of the queue ranking;
4. Quasi-chaotic conditions resulting from inadequate management of the queueing process;
5. Often severe congestion and environmental degradation of ASEZ area due to large volumes of idle trucks waiting for their turn in proximity of the port area;
6. Artificially inflated transport prices supported by long queueing times as the primary allocative mechanism.

Among the immediate visible impacts of introduction of NAFITH is the control and near-elimination of the sometimes chaotic congestion and encroaching spillover patterns in the ASEZ area itself. The evaluators’ visit revealed orderly processing of truck entry, movement through the area and subsequent exit. This was the case for all categories of truck transport: general cargo, fuels and containers, corresponding to the three functional port facilities respectively. Port management personnel at the general cargo facility and container port facility confirmed greater operational efficiency in the truck loading and unloading processes, with considerable improvement in the rate of availability of qualified and properly certified equipment and drivers, facilitating orderly load pick up and delivery.

The primary and most visible impacts to date have been on the truck movement and operational aspects of the process, contributing considerably to the taming of congestion patterns and its environmentally detrimental consequences. Compared to the before

situation, the evaluation report provides estimates of the associated reduction in congestion and environmental cost for the ASEZ area.

Another directly visible impact has been on the operational efficiency of trucking operations, and associated logistics processes of the truck transporters, of shippers (i.e. load owners) and their agents, as well as loading and unloading operations at the container and general cargo port terminals. By all accounts, the NAFITH system has allowed trucks greater control over time—arrivals can be timed to coincide, within a certain window, with the availability of the loads for pick up or delivery, eliminating the need for queueing to access loads with uncertain availability. When properly utilized by the truck owners/operators and trucking companies, this increases the productivity in terms of loads carried per week by a factor that has been reported to be in the range of 2 to 3. While availability of hard evidence on queueing from the “before” situation may not meet statistical reliability standards, observation of the current situation coupled with local expert judgment suggests that these productivity levels are possible and attainable by the more efficiently organized players in the trucking industry.

In terms of post terminal operations, the benefits to date have been primarily with the loading and unloading processes of the trucks, rather than of the ships. The evaluators’ opinion, coupled with discussions with port management, suggests additional opportunity to improve the ship handling processes through greater coordination and synchronization with related truck movements.

It is also notable that the NAFITH system, as a major piece of information technology (IT) in service of greater efficiency in the delivery of government services, appears to have been readily adopted as user-friendly and effective by the vast majority of users—ranging from those who regulate to those who are regulated. This is especially remarkable given the relatively primitive levels of literacy and numeracy of the truck driving population, and the still-nascent adoption and penetration of advanced automation and IT. While minor glitches were reported, those have apparently been addressed and fixed in a very speedy manner, considerably increasing the confidence of the user community in the system. The ready availability, competence and responsiveness of the local technical staff are undoubtedly critical factors in this success.

While it may still be too early to evaluate the full impact of the NAFITH system on the structure, viability, competitiveness and performance of the Jordanian trucking sector, observations to date point to the likely direction along which the sector appears to be evolving. It appears to be well accepted that the Jordanian trucking sector before introduction of NAFITH suffered from oversupply of trucks and drivers; in a free competitive market, this would lead to price reductions for shippers, and consolidation of the industry in favor of the more efficient producers. With the regulation and queue allocation system in existence prior to the introduction of NAFITH, artificial price controls, coupled with the possibility to wait for some guaranteed load eventually, led to very long waiting times and inefficient operations, and precluded more efficient and better equipped fleets from competing to improve the overall level of service available to shippers, and the economic competitiveness and viability of the Jordanian trucking sector

and ultimately its competitiveness for international trade. The main pointers towards a better integrated and more competitive sector to date include the following: (1) drop in freight rates as a result of competition without the distortion of allocation by wasteful queueing; (2) emergence of trucking companies to allow individual truckers the opportunity to acquire and serve loads in the ASEZ region, through NAFITH; (3) scrappage or redeployment of obsolete equipment that does not meet safety and functionality standards. Further consolidation, resulting in a more efficient, professional and competitive trucking sector is likely to continue, though not necessarily at the detriment of the individual owner/operators, as the experience in more industrialized economies such as the US has shown.

Various actors/stakeholders offer differing perspectives on the system as it has been operating to date. Overall, virtually all key stakeholders are in agreement that the system represents an improvement over the “before” situation—that doing away with the queue system was long-overdue, finally enabled by the NAFITH system. Similarly, all stakeholders generally find that the sometimes chaotic consequences of the previous system have been considerably smoothed and largely eliminated. From the standpoint of local (ASEZ) stakeholders, unsightly and environmentally harmful environmental patterns, including encroachment by waiting trucks on the commercial and cultural sectors of the city, have been largely controlled, enhancing the perceived quality of life in that environmentally and touristically sensitive area. However, various actors/stakeholders also expressed views about how the system might evolve in the future to better meet the needs of their agencies or groups that they represent. Most of the differences amongst perspectives can be traced to different opinions about the locus of “control” afforded through the system—e.g. should it be the trucking companies who enter the authorization number when a load is cleared for pick up, or the customs clearing agent acting in concert with the port authorities? These matters would be left for consideration in future iterations of the system, and the value added that is contemplated from it.