# The Main Aims of Humanitarian, Business and Military Organizations and the Resulting Possible Synergies in Logistics

Thomas E. Fernandez, Nanthi Suthikarnnarunai

Abstract— The purpose of this conceptual paper is to find the differences and similarities between the different major fields of logistics, namely logistics in humanitarian assistance, in business, and in the military, and how this can be used to the advantage of humanitarian assistance. In this paper, the authors looked only at the main aims of the organization types and found that each has their specific strengths, as can be seen from their aims. This can lead to synergies in coordinated cooperation.

*Index Terms*— Logistics by type of organization, logistics efficiency, disaster logistics.

### I. INTRODUCTION

U<sup>P</sup> until the Indian Ocean tsunami in 2004 and hurricane Katrina in 2005, humanitarian assistance only concentrated on getting the relief goods to the victims. As disasters strike suddenly and relief goods must arrive urgently, there was no time to set up a careful supply chain plan, to evaluate and to implement.

The Indian Ocean tsunami in 2004 called many government and non-government organizations into action, and it clearly showed that the uncoordinated effort caused inefficiencies. Fritz noted in [1] that "breakdowns in the supply chain were particularly glaring." At one time, when another donor conference was requested, a European Ambassador said "We don't need another donor conference, we need a logistics conference" (as quoted in [2]). Some call the experiences of the 2004 tsunami the birth-date of Humanitarian Logistics as an academic field. Something had to be done [3].

The US Government has received much criticism for handling the relief efforts after Hurricane Katrina in 2005, especially since Walmart, a commercial organization, could provide supplies much faster than the government [4].

In order to make a sensible comparison of how logistics is performed by the three types of organizations, we first had to sort the different findings in the literature into different

Nanthi Suthikarnnarunai, Ph.D., is the director of the PhD in Logistics program at the University of the Thai Chamber of Commerce, Bangkok.

categories. Reference [3] had identified 10 characteristics of humanitarian logistics:

	Humanitarian logistics
The main aim	Alleviating the suffering of vulnerable people
Actor Structure	Stakeholder focus with no clear links to each other, dominance of NGOs and governmental actors
3-phase setup	Preparation immediate response, reconstruction
Basic features	Variability in supplies and suppliers, large- scale activities, irregular demand, and unusual contraints in large-scale emergencies
Supply chain philosophy	Supplies are "pushed" to the disaster location in the immediate response phase. Pull philosophy applied in reconstruction phase
Transportation and infrastructure	Infrastructure destabilized and lack of possibilities to assure quality of food and medical supplies
Time effects	Time delays may result in loss of lives
Bounded knowledge actions	The nature of most disasters demands an immediate response, hence supply chains need to be designed and deployed at one even though the knowledge of the situation is very limited
Supplier structure	Choice limited, sometimes even unwanted suppliers
Control aspects	Lack of control over operations due to emergency situation

Table 1: Characteristics of humanitarian logistics Source: [3]

The idea that humanitarian logistics is different from logistics of other types of organizations made us curious as to how the characteristics mentioned differ when we compare them across the organizations.

This paper expands on the characteristic "Main Aim": We expanded on the main aims of the NGOs and researched what main aims businesses and the military organizations have, and we kept the focus on logistics.

This paper aims to contribute to the improvement of humanitarian logistics by first looking at the main aims of

Manuscript received July 16, 2011; revised August 18, 2011.

Thomas E. Fernandez is a PhD cand. at the University of the Thai Chamber of Commerce, Bangkok. He specializes in Humanitarian Logistics. He is the corresponding author and can be reached at Thomas.UTCC@gmx.net.

Proceedings of the World Congress on Engineering and Computer Science 2011 Vol II WCECS 2011, October 19-21, 2011, San Francisco, USA

three different types of organizations, namely humanitarian, business and military organizations, and how this can lead to improved logistics in humanitarian disasters. It is the first paper in a series, each looking at another characteristic of humanitarian logistics and comparing them across the three types of organizations.

# II. METHODOLOY

Literature was searched across academic journals with the keywords "humanitarian logistics" and "disaster logistics". Business literature was taken mainly from university textbooks for MBA programs and the PhD in Logistics program the main author is studying in. The main author has also been providing logistics services to businesses since 1984, to NGOs since 2003 and to governments since 2008, and contributed his expertise to this paper. Military logistics was researched across the websites and publications of the US, Australian, German, and Thai national defense organizations, as well as the main author's experience in providing logistical support in humanitarian assistance.

### III. LITERATURE REVIEW

Reference [5] already brought the three types of logistics together as a triad. They define three aspects, namely volatility, unpredictability and asymmetry. They posit that even though it first seems that these aspects are fundamentally different for each type of logistics, they indeed complement each other:

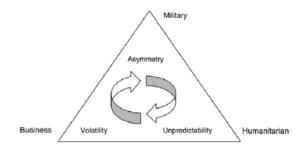


Fig. 1: Common critical variable for tri-axial logistics operations Source: [5]

Their paper focused on the asymmetry, volatility and unpredictability as a function of the logistics efforts of the three types of organizations.

### IV. MAIN AIMS AND SYNERGIES

The main aim of Humanitarian Logistics is to alleviate suffering of vulnerable people [3] and to respond in a speedy manner to save lives [6]. The ICRC specifies their aim as "to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance" [7], CARE informs us that their mission is to "serve individuals and families in the poorest communities in the world" [8], and Oxfam seeks to "influence the powerful to ensure that poor people can improve their lives and livelihoods and have a say in decisions that affect them" [9], to give just three examples for illustration.

The main aim of a business may be profit, as mentioned in [4], but modern teachings prefer to focus on customer satisfaction [10] or market share [11] as their goals. While Corporate Social Responsibility or CSR can lead to companies' activities in humanitarian assistance, CSR falls under the category of Marketing [11], or is a measure to avoid actions that could harm the company [10]. CSR is therefore not a company's main goal.

DHL is one of the big logistics companies in the world. They do not publish their overall mission on their website, but their main website shows a link to "Investor Relations" as the second-highest link [12], even though they also have a Disaster Response Team [13]. Kuehne+Nagel, another major logistics company, advises in their Mission Statement that "Dedication, integration and innovation are at the heart of our business philosophy" [14]. Kuehne+Nagel also provide emergency and relief logistics [15].

The main goal of the modern military is to provide stability and security. The meanings of these words are political and cannot be further discussed within the scope of this paper. However, the philosophy of how these goals are achieved differs from country to country: It can be to "prepare land forces and employ the prepared forces to defend the nation" [16], to "protect resources, free trade, critical infrastructure and computers" [17], or to "provide the military forces needed to deter war and to protect the security of [the] country" [18].

On the other hand, military forces often take the job of providing humanitarian assistance in disaster situations, such as the Australian Defence Force during the flooding in Queensland in 2010 [19] or the Thai military during the floods in the Southern provinces in the same year [20]. The US military were among the first HROs to arrive in Haiti after the 2010 earthquake [21], [22]. In order to plan their relief mission, the US DoD flew an unmanned aircraft over Haiti to take pictures to assess the damage [23]. To show the capability of its unmanned aircraft, one contractor used a spy drone for surveillance to assess the infrastructure [24].

The German military just signed an MOU about mutual support with GIZ, a German HRO [25]. The new mission of the German Navy is to: "Contribute to Collective Defence, Crisis Management and Conflict Prevention, Multinational Partnership and Cooperation, and Disaster Relief and Participation in non-Art. 5 Crisis Response Operations" [26].

The Royal Thai Army also conducts Humanitarian Disaster Relief Operations [20].

This trend of military organizations adding Disaster Relief to their main portfolio seems to suggest a shift in the players in humanitarian relief, and therefore also in humanitarian logistics. Proceedings of the World Congress on Engineering and Computer Science 2011 Vol II WCECS 2011, October 19-21, 2011, San Francisco, USA

# V. CONCLUSIONS AND RECOMMENDATIONS

While the NGOs focus on helping people and providing disaster relief, the companies can provide logistics services that they have become experts in. Since companies are profit-oriented, they will always look for ways to increase efficiency while reducing cost.

The military organizations, while mostly in charge of safety, have access to resources useful in Disaster Relief, especially during peace times. These resources can be used to support logistics operations in humanitarian disasters situations. These resources include technology, as we have seen on the example of the unmanned aerial vehicle for first assessment of the damage and the state of the infrastructure in Haiti, and manpower, as we have seen during the Queensland floods. The military also has a long history of logistics, with an expertise that is useful in sudden-onset disasters. Unlike businesses, they are not restricted financially; this is an advantage as well as a disadvantage. The advantage is of course that more resources can mean more help, more manpower. The disadvantage is that efficiency may not be a main concern.

The obvious conclusion is that the three types of organizations all have their strengths and weaknesses when it comes to logistics, which we conclude from only looking at the Main Aims of the organizations. Further research into the other Characteristics of organizations is needed to recommend detailed areas where and how these organizations should work together in logistics, and where and how to separate their logistics-related tasks, when providing relief for the same disaster.

#### REFERENCES

- Fritz, L. (2007): Quoted in "Fritz Institute's Unique 'Certification in Humanitarian Logistics, Program Establishes a Standard of Expertise for Relief Workers Worldwide" [online] <u>http://www.fritzinstitute.org/prsrmPR-FI\_UniqueCHL.htm</u> Retrieved 25 June 2011.
- [2] Keskinocak, P. (2010): "Humanitarian Operations", [online] <u>http://www.scl.gatech.edu/research/humanitarian/GTHHL-</u> <u>Intro to Humanitarian Logistics.pdf</u>, accessed 08 May 2011.C. J. Kaufman, Rocky Mountain Research Lab., Boulder, CO, private communication, May 1995.
- [3] Kovács, G. and Spens, K. M. (2007): "Humanitarian logistics in disaster relief operations", International Journal of Physical Distribution & Logistics Management, Vol. 37 No. 2, pp. 99-114.
- [4] McLachlin, R., Larson, P.D. and Khan, S. (2009): "Not-for-profit supply chains in interrupted environments", Management Research News, Vol. 32 No. 11, pp. 1050-1064.
- [5] Carroll, A. and Neu, J. (2009): "Volatility, unpredictability and asymmetry - An organising framework for humanitarian logistics operations?", Management Research News Vol. 32 No. 11, pp. 1024-1037.
- [6] Tomasini, R. and Wassenhove, L. van (2009): "Humanitarian Logistics", Palgrave Macmillan, a division of St Martin's Press LLC, New York, NY.
- [7] ICRC International Committee of the Red Cross (n.d.): "The Mission", [online] <u>http://www.icrc.org</u> Retrieved 28 June 2011.
- [8] CARE (n.d.): "About CARE", [online] http://www.care.org/about/index.asp Retrieved 28 June 2011.
- [9] Oxfam (2011): "About us | Oxfam International", [online] http://www.oxfam.org/en/about Retrieved 28 June 2011.
- [10] Plunkett W.R., Attner, R.F. and Allen, G.S. (2008): "Management: Meeting and Exceeding Customer Expectations", Ninth Edition, Thomson Higher Education, Mason, OH.
- [11] Kotler, P. and Keller, K.L. (2006): "Marketing Management", 12e, Pearson Education, Upper Saddle River, New Jersey.

- [12] DHL (2011a): ""DHL | Global | English", [online] http://www.dhl.com/en.html Retrieved 28 June 2011
- [13] DHL (2011b): "Deutsche Post DHL | Disaster Response Teams", [online] <u>http://www.dp-dhl.com/en/responsibility/society/disaster\_response\_teams.html</u> Retrieved 28 June 2011.
- [14] Kuehne +Nagel (2011a): "Kuehne + Nagel: Mission Statement", [online] <u>http://www.kn-portal.com/about\_us/about\_us/mission\_statement/</u> Retrieved 28 June 2011.
- [15] Kuehne+Nagel (2011b): "Emergency & Relief Logistics", [online] <u>http://mswbdmz0300.kn-</u> logistics.com/docs/KNU\_Emergency\_Relief\_v1011151.pdf Retrieved
- 28 June 2011.
  [16] Royal Thai Army (n.d.): "mission | Royal Thai Army", [online] <u>http://www.rtaeng.rta-eng.org/information/mission-1</u> Retrieved 18 June 2011
- [17] Arbeitskreis Strukturreform (2011): "Die Neuausrichtung der Bundeswehr: Ein Überblick", [online] <u>http://www.bmvg.de</u> Retrieved 04 June 2011.
- [18] US DoD (n.d.): "About The Department of Defense (DOD)", [online] <u>http://www.defense.gov/about/</u> Retrieved 04 June 2011.
- [19] Weaver, M. and McKenzie, H. (2011): "The Clam after a Strom Defense at the frontline to rebuild and recover", Australian Government, Department of Defense, Defense Magazine, Issue 1, 2011, p. 20f.
- [20] Royal Thai Army (2011): "Royal Thai Army's Humanitarian Disaster Relief Operations", [online] <u>http://www.rtaeng.rtaeng.org/archives/472</u> Retrieved 29 June 2011.
- [21] Noblet, K. and Spiegel, P. (2010): "U.S. Troops Pour Into Haiti on Aid Mission", The Wall Street Journal, Issue Jan 19, 2010, 9:48pm, [online] <u>http://online.wsj.com/article/SB100014240527487038370045750135</u>

<u>http://online.wsj.com/article/SB100014240527487038370045750135</u> 62215656920.html, Retreived 25 June 2011.

- [22] Hines, N. and Whittell, G. (2010): "US military arrives to restore law to Haiti's ravaged capital", The Sunday Times, January 15 [online] <u>http://www.timesonline.co.uk/tol/news/world/us\_and\_americas/article\_6990048.ece</u> Retrieved 29 June 2011.
- [23] Petcoff, R.P. (2010): "Global Hawk collects reconnaissance data during Haiti relief efforts", Air Force Public Affairs, Jan 15, [online] <u>http://www.af.mil/news/story.asp?id=123185754</u> Retrieved 25 June 2011.
- [24] Graham, L. (2010):"EVERGREEN AND ELBIT ASSIST WITH UNIQUE TECHNOLOGY IN HAITIAN RELIEF", Press Release, Jan. 28, [online] <u>http://www.evergreenaviation.com/p\_releases/012810.html</u> Retrieved 25 June 2011.
- [25] Berg, A. (2011): "Vernetzte Sicherheit ganz praktisch", [online] http://www.bmvg.de/portal/poc/bmvg?uri=ci:bw.bmvg.journal.minist erium&de.conet.contentintegrator.portlet.current.id=01DB010000000 001|8HLCLU376DIBR Retreived 18 June 2011.
- [26] Schomburg, R. (2002): "Germany Navy: Operational Logistics", Naval Forces, Special Issue.