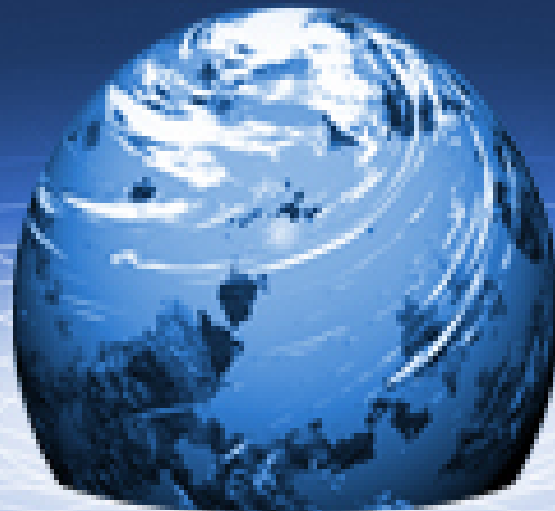




LOGISTICS SUPPORT SYSTEM
SISTEMA DE APOYO LOGÍSTICO



LSS: Logistics Support System
(Formerly known as SUMA: Supplies Management System)



Why/How the LSS was created?

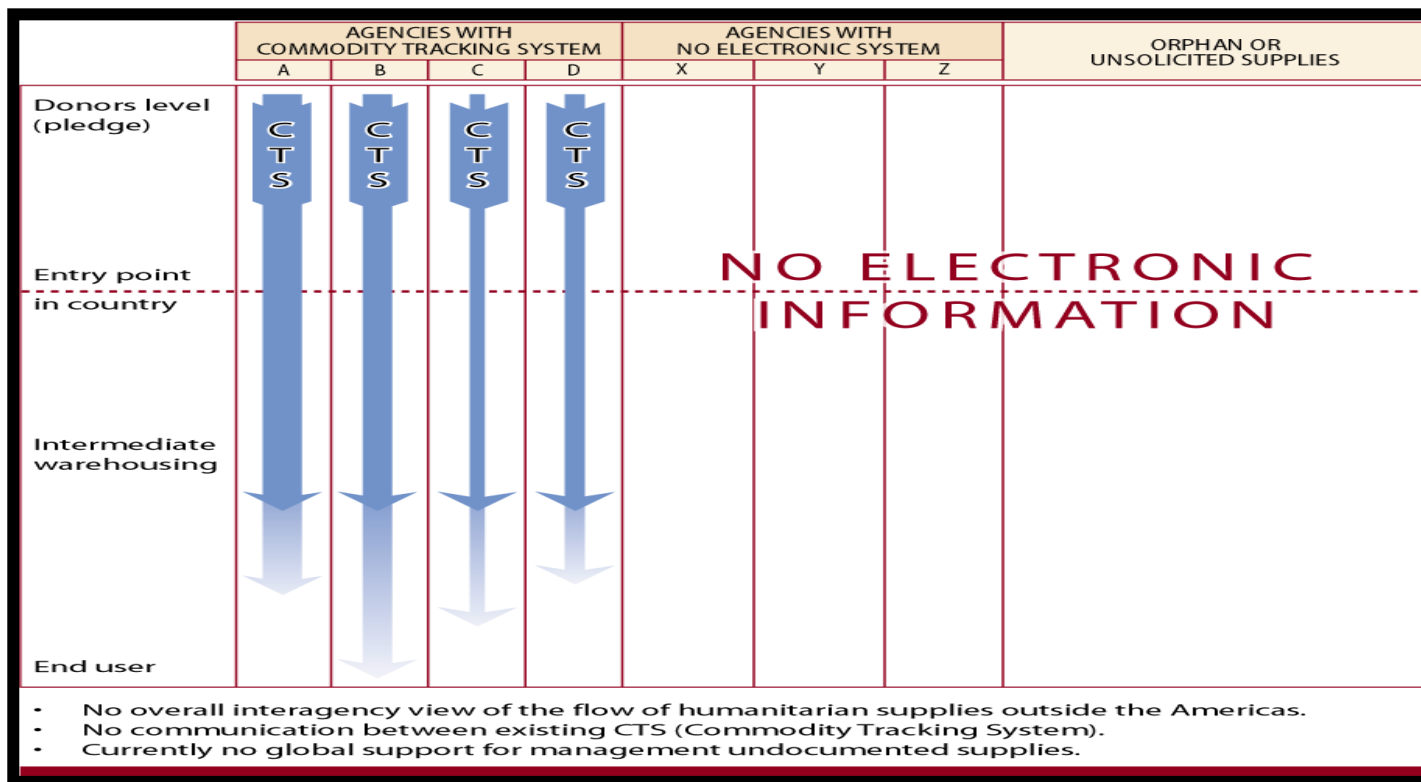


The mismanagement of the humanitarian assistance often leads to a “Secondary Disaster”

- Fast mobilization of the donor community
- Massive arrival of international assistance
- Arrival of inappropriate, unsolicited supplies
- Rapid saturation of access points (airports, borders, seaports...) with relief supplies
- Lack of reliable and updated information about consignment
- Lack of data regarding pledges and incoming supplies
- Duplication of requests



CTS (Commodities Tracking System)



Agencies, NGO's





The mismanagement of the humanitarian assistance often leads to a “Secondary Disaster”

There is still a lack of coordination at national and/or international level among all interested humanitarian partners.

**Emergency Management Authority
EMA ↔ UN System ↔ NGO**



Logistics Support Systems Workshops

Workshops promoted by WFP/WHO/OCHA/PAHO/UNICEF/UNHCR (2001/2002)

What a Logistics Support System should have?

- Over 50 logistics experts
 - UN agencies
 - NGO (I.e: ICRC, IFRC, MSF, OXFAM)
 - Countries (NEMA – Emergency Authority)
- SUMA Experience (Supply Management System WHO/PAHO)
- UNJLC Experience in collecting Stock and Pipeline Information
- WFP/UNIFEC - Review of existing classification and coding systems of humanitarian supplies.
- Emergency logistics managers of the countries
- UN Agencies (CTS) Commodity Tracking System
- NGO's (CTS) Commodity Tracking System

<http://www.reliefweb.int/LSS/>





SUMA in Emergencies 1992-2005

- Indonesia, Banda Aceh 2004-2005
- Paraguay, 2004 (Icua Bolanos)
- Hurricane Mitch (Honduras/Salvador/Nicaragua) 1998
- Costa Rica, Floods, 2004, 2005
- Venezuela, Flood, 1999
- El Salvador, Earthquake, 2000
- Jamaica, Hurricane Luis, 2004
- Nicaragua, 1992 (Tsunami)
- Mexico, Colima Volcano, 2003
- Dominican Republic, Hurricane George ,1997
- East Timor, 1999
- Dominican Republic , Floods in Jimani, 2004
- Haiti, Humanitarian Crisis, 2004
- Argentina, Floods, 2004
- Colombia, Earthquake
- Costa Rica, Earthquake, 1993
- Mexico, Hurricane Pauline
- Peru, Nasca Earthquake, 1996
- Angola MoH, 2003
- Mexico, Floods in Chiapas, 1998
- Panama , Floods, 2005
- Bolivia, Earthquake, 1998



UNJLC - UN Joint Logistics Centre

- Promoted and implemented by WFP
- Reports to OCHA
- Posted to the WEB
- WHO seconded staff. Collaborating with UNJLC
- Provides a quick snapshot and bold figures of specific humanitarian supplies (less than 30 items)
- Compiles data from different agencies

Stock in position

Pipeline i.e. 1-3 months from region

In countries surrounding

By country (and location if data available)

By agency

Stock inside of country (By governorate / By city/location)





WFP / UNICEF

CTS and Codification

Review of existing classification and coding systems of humanitarian supplies

UN Agencies

- WHO/PAHO
- UNWFP
- UNICEF
- UNHCR

Int. NGO's

- MSF
- ICRC
- IFRC
- OXFAM

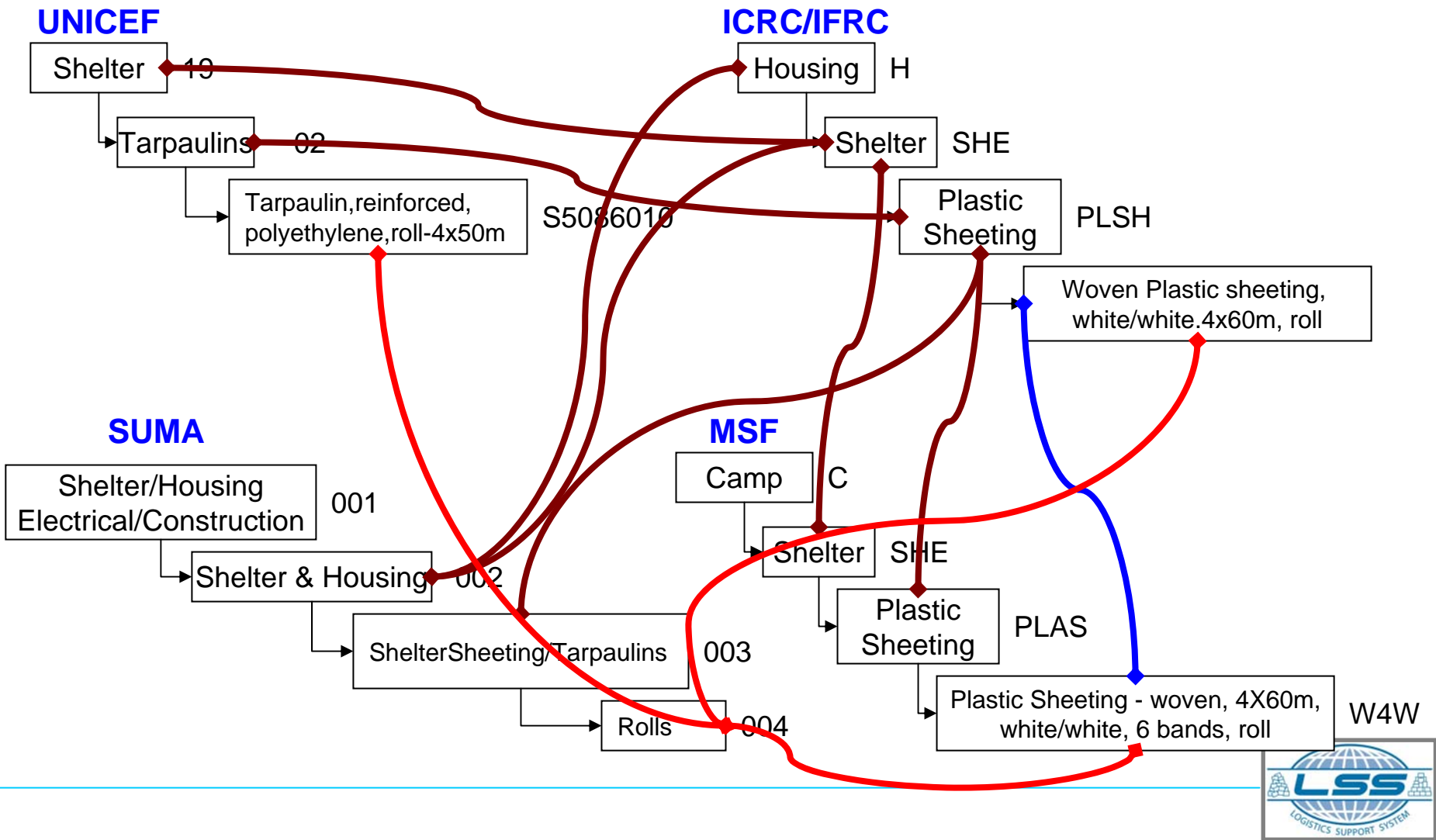
International Standards

- HS
- UNCCS
- UN/SPSC



Exercise: Commodity mapping

Commodity specification: Plastic Sheeting, reinforced, 4X60m, roll





Agreement between UN agencies

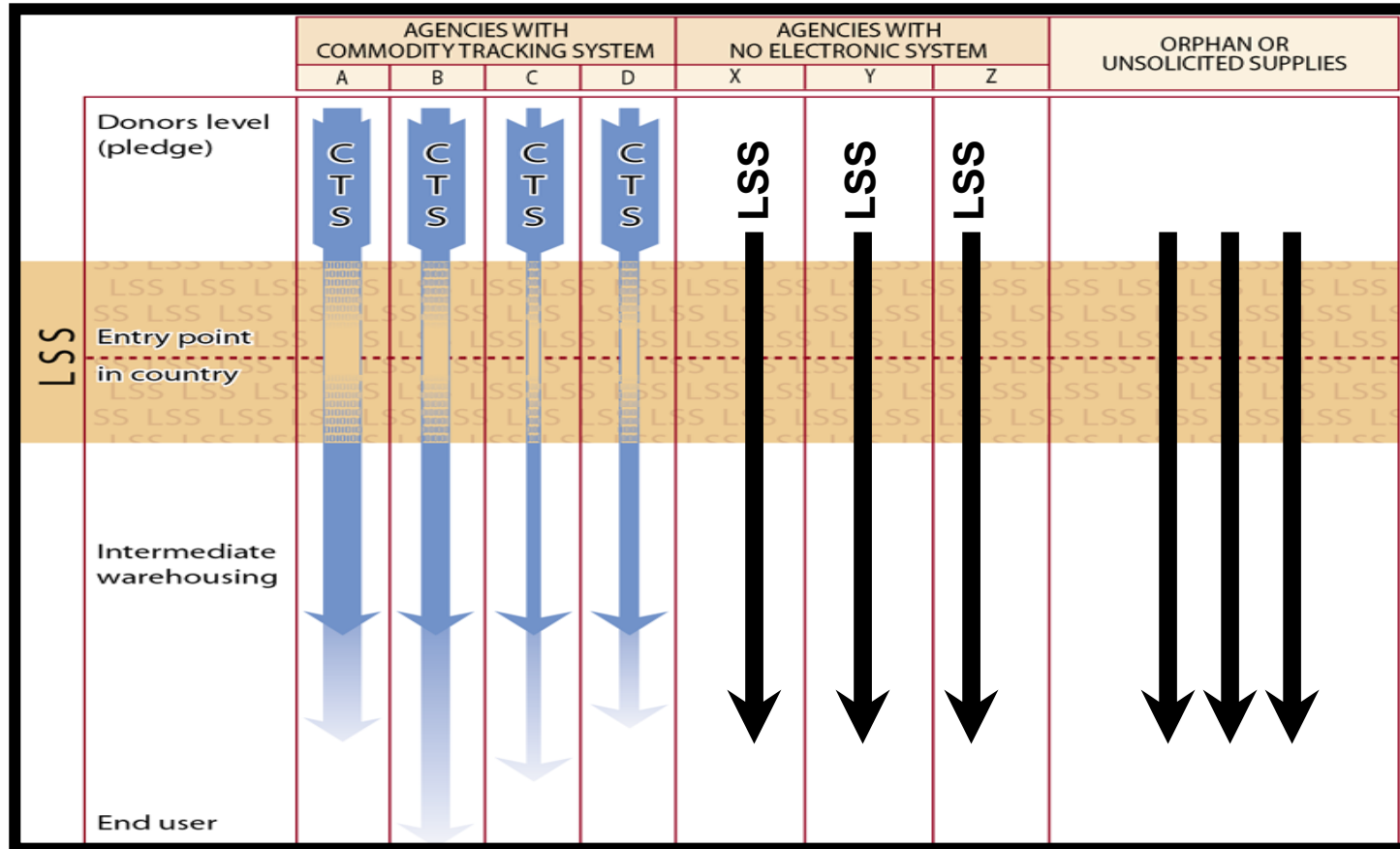
To develop an integrated system to improve coordination



In addition, FUNDESUMA and UNJLC have contributed in the design and development of the software and technical documentation.



Exchange of Information





LSS Main Objectives

- To consolidate and share information on a limited number of key commodities between all actors to facilitate inter-institutional coordination.
- To complement agency-specific commodity tracking systems
- To register incoming supplies in an affected country (including unsolicited supplies)
- To provide a tool for National Emergency Authorities (all disasters), NGO, UN Agencies, etc.
- To be useful in:
 - Major emergencies (OCHA - LEMA)
 - Small scale emergencies (LEMA – Local NGO - Project)
 - Non-emergency situation (Warehouse/Project)
- To minimize duplication and improve the response to actual needs of affected populations
- To strength national capacity in logistic management

The system IS NOT replacing any other system that Agencies, NGOs or other actors may have to manage their own supplies





Where are we now?

- Software (Windows and Web Version)
 - Finalized and tested
 - English / Spanish
- Training Material
 - Practices/Technical Documentation ready
 - English / Spanish
- WEB Site
 - Domain -> www.lssweb.net
 - English / Spanish
- Final Distribution CD

English Site
Logistics Support System

Sirio en Español
Sistema de Apoyo Logístico

SOCIOS ONU	UN PARTNERS
World Health Organization	Organización Mundial de la Salud
Pan American Health Organization	Organización Panamericana de la Salud
United Nations World Food Programme	United Nations World Food Programme
OCHA	OCHA
unicef	unicef
UNHCR The UN Refugee Agency	UNHCR ACNUR

It can compile and report on data that is directly entered in its own databases as well as on information that is collected from other tracking systems.

Muchas agencias humanitarias cuentan ya con sus sistemas propios de seguimiento de suministros. LSS complementa estos sistemas.

- May 2007 - French / Portuguese version (System Labels, DB, CD, Manuals, Web)
- Used in emergency situation (Guatemala, Pakistan, Colombia, Lebanon)
- Adopted for Non-Emergency situations (NGO, PDA, Projects/Programs)
- New languages : Request for Persian/Arabic



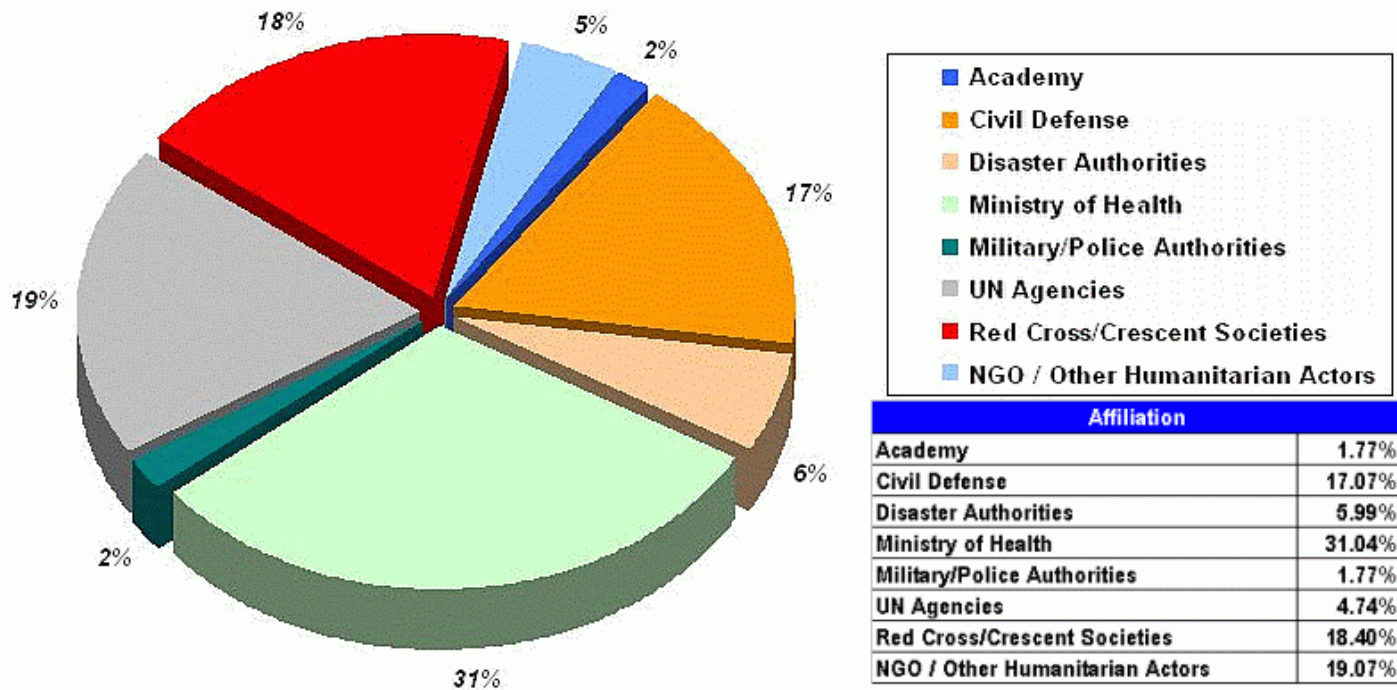


Training Sessions



Training Sessions (LSS Oct/2006)

- More than 500 people of 40 nationalities (Latin-American, English Caribbean, Asia and the Middle East)





WHO Regions (LSS Oct/2006)

[01] LSS Training->2006-10-18 Iran [MOHME, National Authorities & UN & RC & ICRC]
[02] LSS Training->2006-09-11 Filipinas [DOH, National Authorities & WHO-WPRO]
[03] LSS Training->2006-07-17 Colombia-San Andres [Departmental Authorities-San Andres]
[04] LSS Training->2006-07-12 Guatemala-Guatemala [National Authorities CONRED,MINSA,VM]
[05] LSS Training->2006-07-12 Colombia-Cali [Departmental Authorities -Valle del Cauca]
[06] LSS Training->2006-06-29 El Salvador-El Salvador [Civil Protection, World Vision, MoH]
[07] LSS Training->2006-06-28 Bahamas-Nassau [Department of Public Health]
[08] LSS Training->2006-06-26 El Salvador-El Salvador [Red Cross]
[09] LSS Training->2006-06-24 Colombia-Pasto [Departmental Authorities-Nariño]
[10] LSS Training->2006-06-24 Colombia-Manizales [Red Cross-DIPECHO 2006]
[11] LSS Training->2006-06-19 Mexico-Mexico D.F [Civil Protection]
[12] LSS Training->2006-05-19 Mexico-Gudalajara [Red Cross / DIF Jalisco]
[13] LSS Training->2006-05-17 Colombia-Bogota [Subregional LSS : COL-VEN-ECU]
[14] LSS Training->2006-05-15 Mexico-Mexico D.F. [Civil Protection]
[15] LSS Training->2006-05-12 Argentina-Buenos Aires [Subregional LSS : ARG-BRA-BOL-CHI-PAR]
[16] LSS Training->2006-05-03 Peru-Lima [MoH / INDECI]
[17] LSS Training->2006-04-11 St Kitts-Bassaterre [National Authorities]
[18] LSS Training->2006-03-14 Panama-Panama [Subregional LSS : PAN-COR-NIC-HON-GUT-MEX-ELS]
[19] LSS Training->2006-03-14 El Salvador-Cuidad del Salvador [World Vision ELS]
[20] LSS Training->2006-03-04 Costa Rica-Guanacaste [World Vision COR]
[21] LSS Training->2006-02-20 Jamaica-Kingston [Subregional LSS : English Caribbean Countries]
[22] LSS Training->2005-11-29 Maldives [National Authorities]
[23] LSS Training->2005-11-27 Maldives [National Authorities & Searo]

- AMRO
(Americas)
- SEARO
(South East Asia)
- WPRO
(Western Pacific)
- EMRO
(East Mediterranean)



2

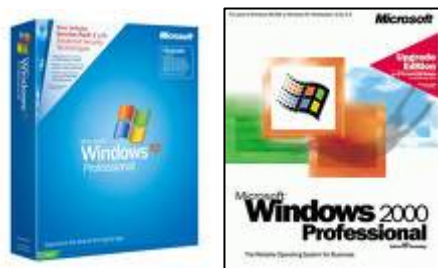
Components - Main
Functions - What LSS
does and doesn't?



LSS Components

- **LSS Windows Module**

Supports standalone, networked and enterprise configurations



The use of one of the two applications or a combination of both will depend on each emergency situation (availability of resources)

- **LSS Web Module**

Supports standalone, networked and enterprise configurations



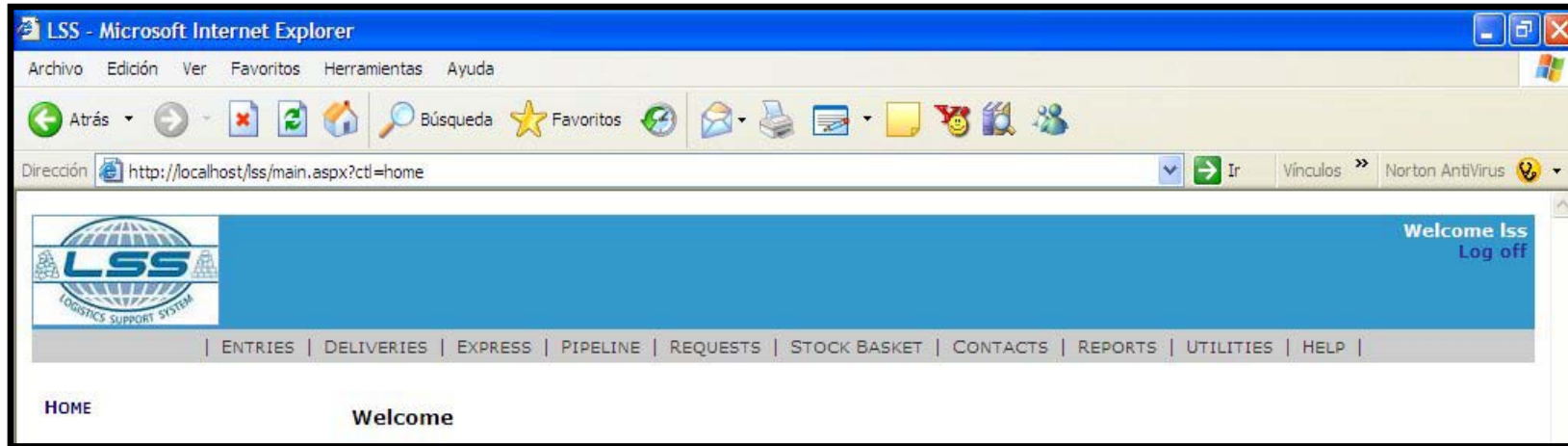


Modern and Adaptable

- Modern intuitive user interface
- Multi-user support
- Based on the highly adaptable Microsoft SQL Server database technology
 - SQL Server: Recommend to enterprise configuration
 - MSDE : Microsoft SQL Server 2000 Desktop Engine, royalty-free version of the SQL Server.
- Developed with Microsoft Visual Basic .Net and ASP.NET



LSS Windows/Web Module Functions



- Entries
- Deliveries
- Express
- Pipeline
- Request
- Report on selected items (Stock Basket)
- Interchange information between LSS Sites
- Import information from others systems. CTS (UN, NGO's)





About LSS Software

Main Functions

What LSS does and doesn't?





| ENTRIES | DELIVERIES |

- Registering International Donations in the Entry Point
- Warehouse Movements (In/Out)
- Normal Inventory System

Select the type of entry to create:

<input type="radio"/> Consignment	Items received for a specific recipient.
<input type="radio"/> Reenter	Items that are reentering this site.
<input type="radio"/> Donation	Items received without a specific recipient.
<input type="radio"/> Purchase	Items that are purchased for distribution.
<input type="radio"/> Other	Entries that do not fit the above categories.
<input type="radio"/> Transfer	Items received from another LSS site.

<input checked="" type="radio"/> Select a consignment to deliver (All the items of a consignment)
<input type="radio"/> Other (Includes partial consignments and all other types of entries from which items will be delivered)



| EXPRESS |

- No proper inventory system (In/Out)
- Units Change
- Allows registering detail distribution or goods

Express Entries
Express Deliveries

Items

Item Subcategory	Item Name	Delivery Quantity	Present
SLEEPING GEAR/BLA...	BLANKET	120	Units
PREPACKAGED MEA...	FAMILY PARCELS	100	Units
PREPACKAGED MEA...	FAMILY PARCELS - MEDIUM	50	Units
CLOTHING	CLOTHING SET FOR GIRLS	135	Packag
CLOTHING	CLOTHING SET FOR BOYS	100	Packag

Buttons: Add, Edit, Delete



| PIPELINE |

- Pipeline: (Arrived, Cancelled, In Route, Pledge)

LSS Pipeline Item Edit

Item
WHEEL CHAIR

Pipeline Status: Pledged
Quantity: 3,000.00
Presentation Unit: Units

Expected Date: 10 / 31 / 2006
Comments:

Consignor: ECHO
Consignee: Main Warehouse - RC - Societe
Mode of Transportation: Air

OK Cancel



| REQUESTS |

- Request: (Needs – National/Non National List)

LSS Editing a(n) Request

Close Save Print

Request Number: 000001
Request Type: Included on National List
Request Date: 10 / 9 / 2006

Request Status: Requested
Request Contact: Colombian Civil Defense
Request Destination: Colombian Civil Defense

Comments:
Attending at 01/Oct/2006 a estimated population of 20000 people in Caloto-Cauca.

Items

Category	Sub Category	Description	Quantity Request...	Presentation l
FOOD AND DRI...	CEREALS/GRAI...	RICE	20000.00	Kilograms
FOOD AND DRI...	WATER AND OT...	WATER	10000.00	Liters
PHARMACEUTI...	ANALGESICS/A...	ACETAMINOPH...	4000.00	Tablet Oral E

Add Edit Delete



| STOCK BASKET |

- Prepare list with a limited number of key commodities
- Items from different categories in the same list

Editing a(n) Stock Basket

Close Save

Name
List for the Health Sector

Description
Health / Pharmaceutical

Items in the basket

Item Category	Item Subcategory	Description	Presentation Unit
HEALTH (NON-...	BLOOD/MICRO/CHE...	BLOOD TYPE REAGE...	Kits
HEALTH (NON-...	PATIENT TRANSPOR...	BODY BAGS	Units
HEALTH (NON-...	SURGICAL SUPPLIE...	BONE KIT	Kits
HEALTH (NON-...	SURGICAL SUPPLIE...	BOWLS	Units
HEALTH (NON-...	MEDICAL SUPPLIES/...	BRACELET IDENTIFIC...	Units
PHARMACEUTI...	ANAESTHETICS	BUPIVACAINE	Ampoule Injection C
PHARMACEUTI...	ANAESTHETICS	BUPIVACAINE	Vial Injection 0.50 %
PHARMACEUTI...	ANAESTHETICS	BUPIVACAINE	Vial Injection 0.25 %
PHARMACEUTI...	TOPICAL USE	CALAMINE	Lotion Topical use h

Add Edit Delete



EXPORT

IMPORT DATA FROM ANOTHER LSS SITE

- XML Files (Extensible Markup Language)
 - XML is great for information exchange, and can easily be extended to include user-specified and industry-specified tags
 - World Wide Standard
- Allows interchange information between LSS sites
- No firewall (Only text information is exported)

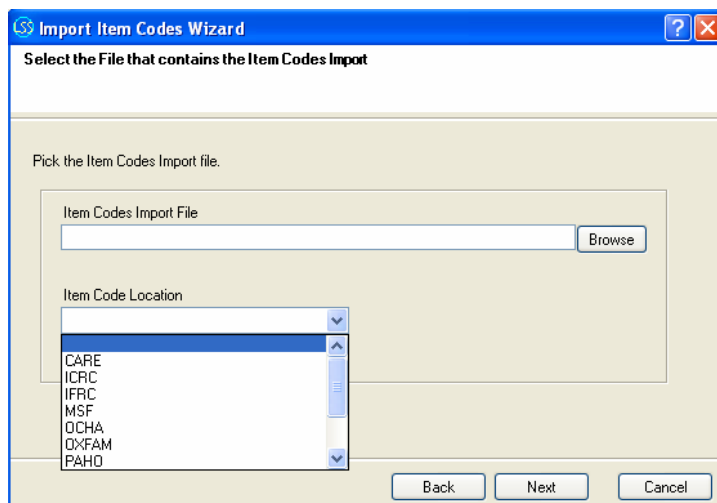
The screenshot shows a Windows-style dialog box titled "Export Wizard" with a blue header bar. Below the title bar, the text "Select the Entities to Export" is displayed. The main area of the dialog contains the instruction "Select the entities to include in this export:" followed by three checked checkboxes, each with a corresponding "Export to" text box and a "Browse" button. The first checked item is "Entries and Deliveries" with the path "C:\Program Files\LSS\EntriesAndDeliveries.xml". The second is "Requests" with the path "C:\Program Files\LSS\Requests.xml". The third is "Pipeline" with the path "C:\Program Files\LSS\Pipeline.xml". At the bottom of the dialog, there is an unchecked checkbox labeled "Compress to zip file" and three buttons: "Back", "Next", and "Cancel".





ITEM CODES IMPORT (NON-LSS SITE) STOCK IMPORT (NON-LSS SITE) PIPELINE IMPORT (NON-LSS SITE)

- Match table with any systems CTS, NGO
- Allows consolidate information of Stock / Pipeline (simples excel files CVS)



- Keys items (Code Item MSF → Specific Items in LSS)
- UNJLC Pakistan Earthquake (Compile stock and pipeline)



Not a tracking system

Is not a tracking system (like DHL or Fedex)

The system IS NOT replacing any other system that
Agencies, NGOs or other actors may have to
manage their own supplies

To strength national capacity in logistic management



Multi Language Capabilities



Supports Unlimited Number of Languages

Add as
many
languages
as you like

The screenshot shows the LSS Resource Editor window. The main window has a menu bar with options: File, Entries, Deliveries, Express, Pipeline, Requests, StockBasket, Contacts, Reports, Utilities, Admin, Window, Help. The Resource Editor window contains a table with the following data:

name	value	comment
AppTitle	LSS	AppTitle
login.Login	Log on	Login form
login.Cancel	Cancel	Login form
login.Caption	LSS Logon	Login form
login.UserName	User name	Login form
login.Password	Password	Login form
login.Help	Need help loggin...	Login form
login.Mailto	Contact the syst...	Login form
menu.Admin	Admin	Menu
menu.PipelineSt...	Pipeline Stock St.	Menu
Reports.Pipeline...	Pipeline Stock St.	Reports
Reports.Request...	Requests Status	Reports
menu.Deliveries	Deliveries	Menu
menu.Entries	Entries	Menu
menu.Express	Express	Menu
menu.Pipeline	Pipeline	Menu
menu.Reports	Reports	Menu
menu.Requests	Requests	Menu
menu.Utilities	Utilities	Menu
menu.File	File	Menu
menu.Window	Window	Menu

At the bottom of the table, it says "Record: 1 of 1648". Below the table are buttons for "Help", "Save", and "Close". The status bar at the bottom of the main window shows "User name: lss".



Leading Edge Architecture

- Technical architecture separates the presentation layer from the application's logic and data resources
 - Do not required changes in the source files
 - Two level of translation (Full or Presentation Layer)



Two options translation

- Full Translation
 - Presentation layer
 - On Line Help
 - CD
 - Include Database Translation (Categories, Subcategories, Items, Presentation Units, etc)



- Presentation Layer Translation
 - Does not include the translation of the Database.
 - Items name remain in original language





3

Field Testing and recent experiences using the LSS in disasters situation



Hurricane STAN GUT/ELS LSS Software

Field testing during an emergency

- Salvador:
 - Comalapa Airport (Points of Entry)
 - COEN (National Emergency Committee) Warehouses
 - MoH (Ministry of Health)
- Guatemala:
 - CONRED (National Emergency Committee)
 - Receiving all international aid (Planes)
 - Air distribution (Planes / Helicopters)
 - SOSEP (Ministry of Social Works)
 - Land Distribution
 - MoH (Ministry of Health)

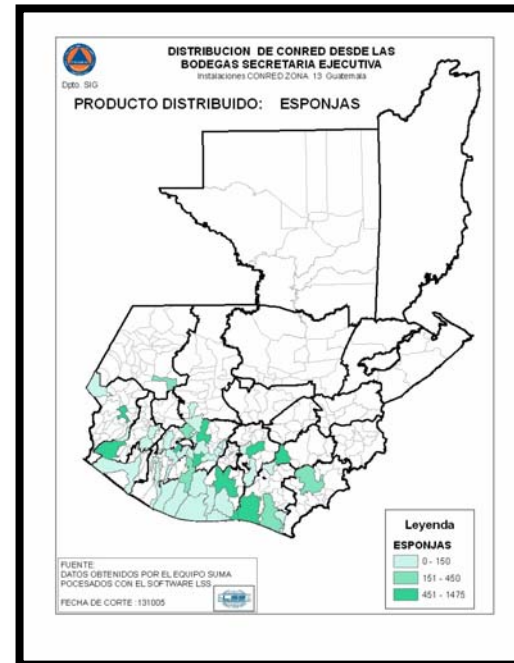
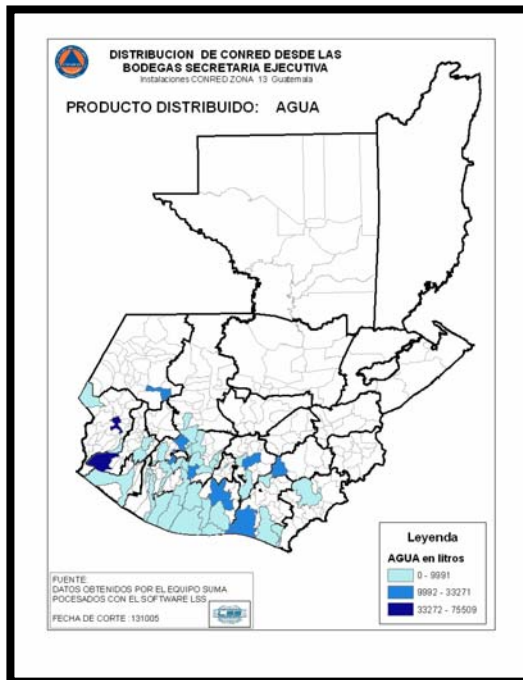


Oct 2005



Interface with GIS - Guatemala

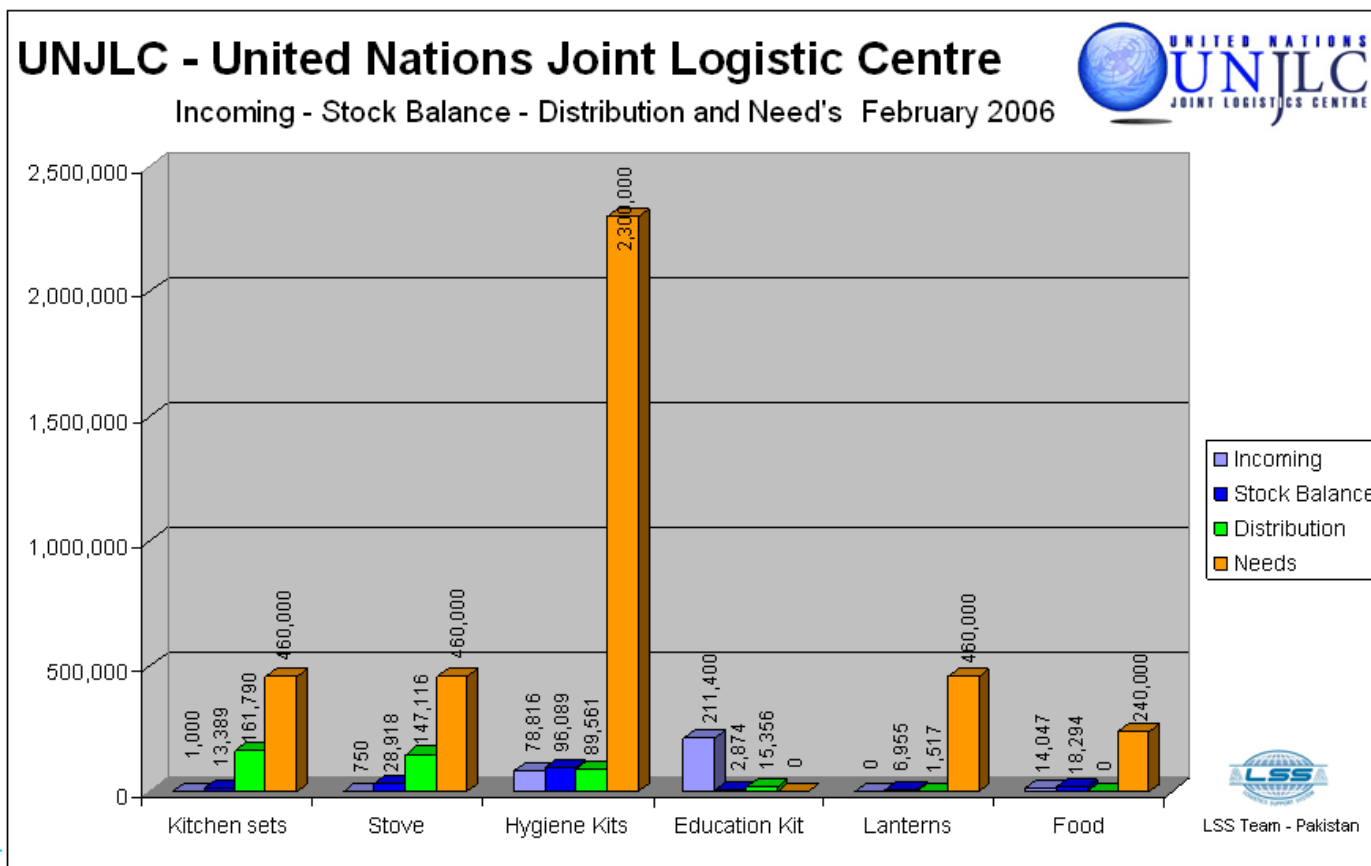
- Maps (Previous information of the Geographical Code is required)





Pakistan Earthquake

UNJLC – Stock / Pipeline Information





Disaster Assistance - Floods

LSS helps with the management of the donations in Soacha



Bogotá, May 21, 2006 (FUNDESUMA). Since the beginning of the emergency the OPS/Colombia promoted the use of the LSS/SUMA to help the municipal authorities of Soacha to control the reception and distribution of the humanitarian aid.

Additionally, on May 20th 2006, took place a "LSS fast training during emergency" in the Culture House with the participation of 20 students looking to extend the base group of people in capacity to operate the system.

Colombia and Suriname, May 2006

PAHO Assists Suriname in Flood Recovery Efforts

Washington, D.C., May 17, 2006 (PAHO)—The Pan American Health Organization (PAHO) is providing expert disaster assistance to help Suriname cope with severe flooding that has affected up to 20,000 people and left large areas of the country submerged.

Torrential rains that began falling on May 5 caused serious flooding in the country's interior, with as much as 30,000 square kilometers under water at one point, including some 157 thatched-roof villages. Thousands were forced to abandon their homes and their livelihoods.

"The situation has improved somewhat in the western part of the country," says PAHO Representative Stephen Simon. "But in the eastern areas, people are living on small islands that are now completely flooded. Many people have received food rations, but clean drinking water and good sanitation are priorities, as is continued food assistance, since most of the affected families have lost all their crops."

[More information](#)





Lebanon, August 2006

LSS is installed in Catarina warehouse



Beirut, September 4, 2006. Attending a request of the Ministry of Health of Lebanon, the LSS - Logistics Support System has been installed in a MOH warehouse located in Catarina. This warehouse manages sanitarian and medical supplies that are distributed to different dependencies. The LSS team began their work with a workshop to the administrative personnel in charge of registering the inputs and outputs of this location. The administrative personnel of this warehouse are collecting information of the actual stock based in the existing records,

looking forward to improve the stock control and optimize the information of the distribution.

LSS training to WHO/UNRWA

Beirut, August 29, 2006. The United Nations Relief and Works Agency for Palestine Refugees (UNRWA) has received training in LSS-Logistics Support System. The LSS international team in conjunction with the IT personnel of the WHO Representative in Lebanon has conducted a workshop to the administrative and logistics personnel of the UNRWA. On the following days some data testing will be conducted with the supplies that this agency manage in the daily base in order to consolidate the knowledge in the LSS methodology.





Difficulties

Implementing the LSS in a
disaster situation



Difficulties

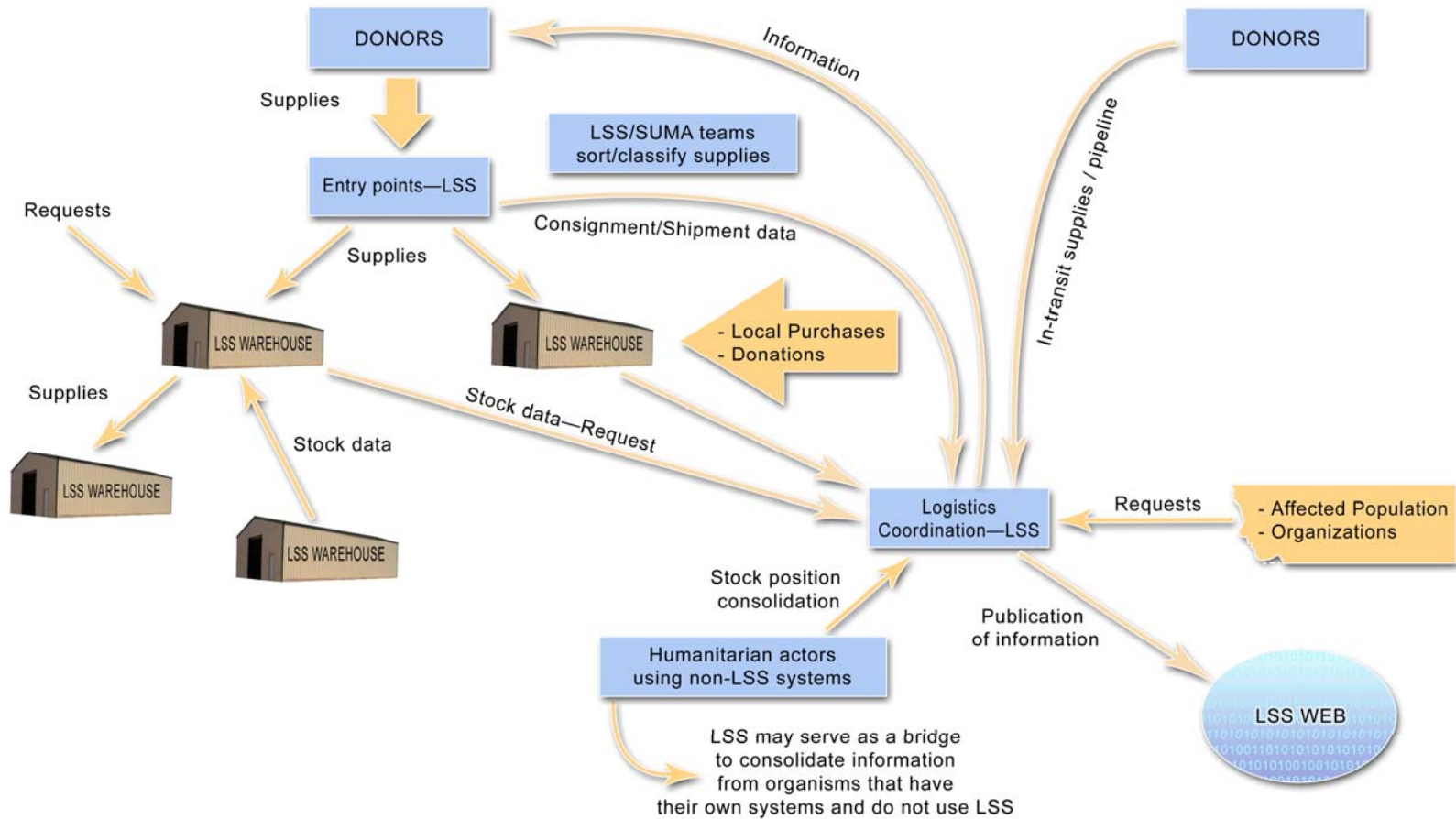
- Many actors and lack of compromise
- High personnel turnover
- Lack of IT equipment and IT staff to support the operation
- Lack of national support for the operation
- High political sensitivity
- Staff allocated to the distribution of supplies has other duties to attend during the emergency
- Large geographical area
- Supplies dispersed all over the affected country
- Many sources of information
- Lack of clear policy about how to manage supplies at the entry point



How can LSS be setup?



According with the users and the functions





In non emergency situations

- The system is not only used in disaster situations, but also for routine operations:

- Warehouses
- Hospitals
- Health districts
- NGO's
- Distribution Points





UN/NGO programs in the field

- Programs at the field (WHO / UN agencies / NGO)
- Projects dealing with stock in warehouses

LSS Item Picker

Editing a(n) Item

Close Save

Category
PHARMACEUTICAL

Sub Category
ANALGESICS/ANTIPYRETICS

Main Item
ACETAMINOPHEN/PARACETAMOL

Name
ACETAMINOPHEN/PARACETAMOL

Form: Syrup Route: Oral Strength: 125 mg/5 ml

Properties Levels Codes Special Instructions Advanced Comments

Location	Code
OXFAM	0102010022
IFRC	
MSF	
OCHA	
OXFAM	
PAHO	
SUMA	
WFP	
WHO	

1 of 1

- Allows to change
 - Categories / Subcategories / Items
- Assigned a specific values to:
 - Minimum / Reorder / Maximum
 - Specific Codes
 - Properties
 - Advanced (Coverage)
 - Comments
- Allows to compile information (Different codes for one specific item)



Next steps



Logistic Support System

- Definition of policies for the management of supplies at the point of entry when the disaster strikes at a National Level
- Promote the system as a tool for non-emergency situations for smaller agencies and national institutions (that can not afford the cost/HR required)
- Improve the coordination with other partners of the UN family and other major humanitarian actor (NGO's)
- Promote the system as a tool for agencies for complementing their CTS at a local level.
- Customization of the tools to different languages and users for non emergency use
 - Languages
 - Items / Codes / etc





In a emergency situation

- The National Emergency Authority should install and coordinate the personnel in the entry points and warehouses to collect the information of the donations that arrive, as well as requests and pledges.
- The National Emergency Authority require:
 - Trained staff assigned to that task.
 - Computers.
 - Support material
 - Specific supportive materials
 - LSS Software to manage the information on relief supplies
- Regional teams can be mobilized to assist the national teams in the implementation of the system (Presently mobilized by WHO)



Acknowledgments

The Logistics Support System (LSS) has been possible thanks to the active participation of the following agencies: WHO, PAHO, UNICEF, WFP, OCHA, and UNHCR. This recognition extends to the countries that have contributed their logistical experience in disaster management and the following organizations who participated with their time and personnel in the technical meetings and workshops on the logistical management of humanitarian supplies: CARE, World Economic Forum, MSF, OXFAM UK, FICR, HAP, AHA, Fritz Institute, All Russian Disaster Medicine Centers, World Bank, VOICE, Interaction, CICR, BIOFORCE, USD Defense Logistic Agency, Zacshta Center. Additionally, FUNDESUMA and UNJLC have contributed to the design and development of the software and technical documentation. The following development agencies have contributed with financial support: the Swedish international development cooperation agency (SIDA), the United Kingdom's Department for International Development (DFID), the Office for Foreign Disaster Assistance of the United States of America (OFDA/USAID), the Division of Humanitarian Assistance, Peace and Security of the Canadian International Development Agency (CIDA), the European Union Directorate General for Humanitarian Aid (ECHO) and the Ministry of Foreign Affairs of the Dutch Government.