Autonomic Logistics and the Marine Air Ground Task Force (MAGTF)

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Autonomic Logistics - enables ground tactical equipment to independently transmit mission critical system data within the MAGTF.

• Command and Control
• Combat Service Support
• Materiel Life Cycle

Autonomic Logistics has been validation by the Marine Corps Combat Development Process and slated for development and implementation.

*Autonomic* – An involuntary action.
MAGTF has a greater degree of freedom of movement.
Operational Need

Minimum PHASE I:

- **Identity**
- **Location**
- **Fuel Levels**
- **Ammunition Levels**
- **System Health**
  - Is the system operational?
  - What is the discrepancy?
In the future data will be transferred from ground tactical equipment to supported applications automatically.

**Scope of Autonomic Logistics**

- **Generate Data**
- **Collect Data**
- **Prepare Data**
- **Transmit Data**
- **Receive Data**
- **Prepare Data**
- **Distribute Data**
- **Process Data**

**Real to Near-Real Time**

- Significantly reduces reporting burden.
- Data is timely and accurate.
- Data can be collection can be event driven and/or when required.
MAGTF Log C2 – Includes Autonomics

- Land-Based &/or Sea-Based Logistics
  - Globally Supported Logistics

**Tactical (Units)**
- Location of Units
- Warfighter Portals
- Autonomic Logistics Feed
- Company Locations
- Parts /Fuel/Ordnance Requirements
- Vehicle Condition
- Personnel Health

**Operational**
- Theater Distribution
- Fiscal Transactions
- JFRG / TC-AIMS II Integration
- Port Direction
- Theater Convoys

**Strategic**
- CINC/JTF Direction
- HQMC Manpower
- NAVSUP NAVAIR
- CLC2S
- Autonomic Logistics Outputs to MATCOM

**Data Pipe Expansion**
- Commercial Support
- DLA
- J4/JS - OSD

**Autonomic Logistics Outputs**
- Parts/Fuel/Ordnance Requirements
- Location of Units
- Personnel Health

**CLC2S**
- UOC’s
- Tactical (Units)
- Operational
- Strategic

**GCSS-MC Interface Terminals**
- CLC2S

**Supply Chain**
- LAND-BASED &/OR SEA-BASED LOGISTICS
- GLOBALLY SUPPORTED LOGISTICS
System Concept

- Capitalizes on existing technology and systems.
- Plug and play components

**Host System**
- ID
- Location
- Ammo
- Fuel
- Health
- Future

**AL Processor**
- Programmable: Can be upgraded as required.

**Communication Device**
- Programmable: Can be upgraded as required.
- Can be upgraded as required.
- Future

**Supported Applications**
- TCO
- SUL
- ATLASS
- GATOR
- Future
- AL ManSys
- EPLARS
- SINGARS
- SATCOM
- JTRS
- COMMERCIAL

**AL Processor**
- Programmable: Can be upgraded as required.

**Communication Device**
- Programmable: Can be upgraded as required.

- Future
Concept of Employment

• **Command and Control (C2)** – Basic system data is compiled to provide commanders real to near-real time assessments of operational readiness.

• **Combat Service Support (CSS)** – All system data is used to enhance CSS situational awareness, planning, and responsiveness.

• **Materiel Life Cycle (MLC)** – System health data enhances the ability to project and implement materiel life cycle support and to develop improvements to the host systems.
Future Capabilities

• Standardized onboard sensor systems.
• Cargo Identification – people and things
• Advanced Prognostics/Diagnostics
• Remote repair
• Expansion to Smaller Systems
“We must organize and operate in such a way that commanders have absolute confidence that required support will be provided when and where it is needed.”