# Capabilities

> ⚠️ **In Progress**
>
> Rather than a maturity model framework, we intend to document **capabilities** that systems can have for connections between health and supply chain.

- [ ] Product identification
    - [ ] Has a definition of a Commodity/Product
    - [ ] Differentiates between Commodity/Product and Items
    - [ ] Has a definition of a Lot/Batch
    - [ ] Defines Lot/Batch in terms of Items
    - [ ] Items may have GTIN
    - [ ] Items define which Commodity/Product systems they belong to
    - [ ] Items may belong to many Commodity/Product systems
    - [ ] Has a definition for Item serial #
    - [ ] Orderable Commodities/Products define just enough attributes in addition to the Commodity classification that give them use in two parties carrying out a re-supply request and fulfillment cycle.  This allows a store that needs more of a commodity, to order that commodity, and gives the fulfilling store choice in which items will be used to fulfill for that ordered commodity.

- [ ] Product Alignment
    - [ ] Master data follows standard definitions (e.g. GS1 GDD)
    - [ ] Classification of Item into Commodity/Product
    - [ ] Fulfills For and Fulfilled By relationships

- [ ] Inventory
    - [ ] Transactions / movements are part of a ledger (as credits / debits)
    - [ ] Stock events/movements may be recorded
        - [ ] By Location (Facility, Store room, Refrigerator, etc)
        - [ ] By source & destination Location
        - [ ] By Program - you know how many bandages you have accepted by the Malaria program as opposed to how many were accepted by the EPI program
        - [ ] By Commodity
        - [ ] By Item
            - [ ] By Lot
            - [ ] With Serial #
        - [ ] By expiration date (without knowing Lot)
        - [ ] By date the physical event occurred
        - [ ] By date-time of entering record into system
        - [ ] Define Stock Adjustment Reasons for an event occurring (e.g. stock was received, stock was lost due to cold chain failure, etc)
        - [ ] Stock Adjustment Reasons may be grouped into larger semantics (e.g. these 3 debit reasons together define Open Vial Wastage, and these other two define Closed Vial Wastage).
    - [ ] Stock on Hand may be reported:
        - [ ] By Commodity / Product
        - [ ] By Item
            - [ ] By Lot
        - [ ] In aggregate for Commodity with all Items
        - [ ] As of a date
        - [ ] As of a date as reported by the system on a historical date-time

- [ ] Location Alignment
    - [ ] Locations are nest-able (a storeroom within a building of a hospital)

- [ ] Locations may designate an Organization responsible
- [ ] Locations may be a part of one or more administrative areas (supervision structure, supply line, health catchment, geopolitical, etc)
- [ ] Location also identifiable by GS1's GLN (e.g. through OID)

- [ ] Resupply
  - [ ] Order / Purchase Order
  - [ ] Invoice
  - [ ] Shipping notice (e.g. ASN, GS1 Despatch Advice)
  - [ ] Receiving notice (e.g. POD, Receive Advice)
  - [ ] Shipment identifier (e.g. GS1 SSCC)
  - [ ] Transport identifier (e.g. GS1 )