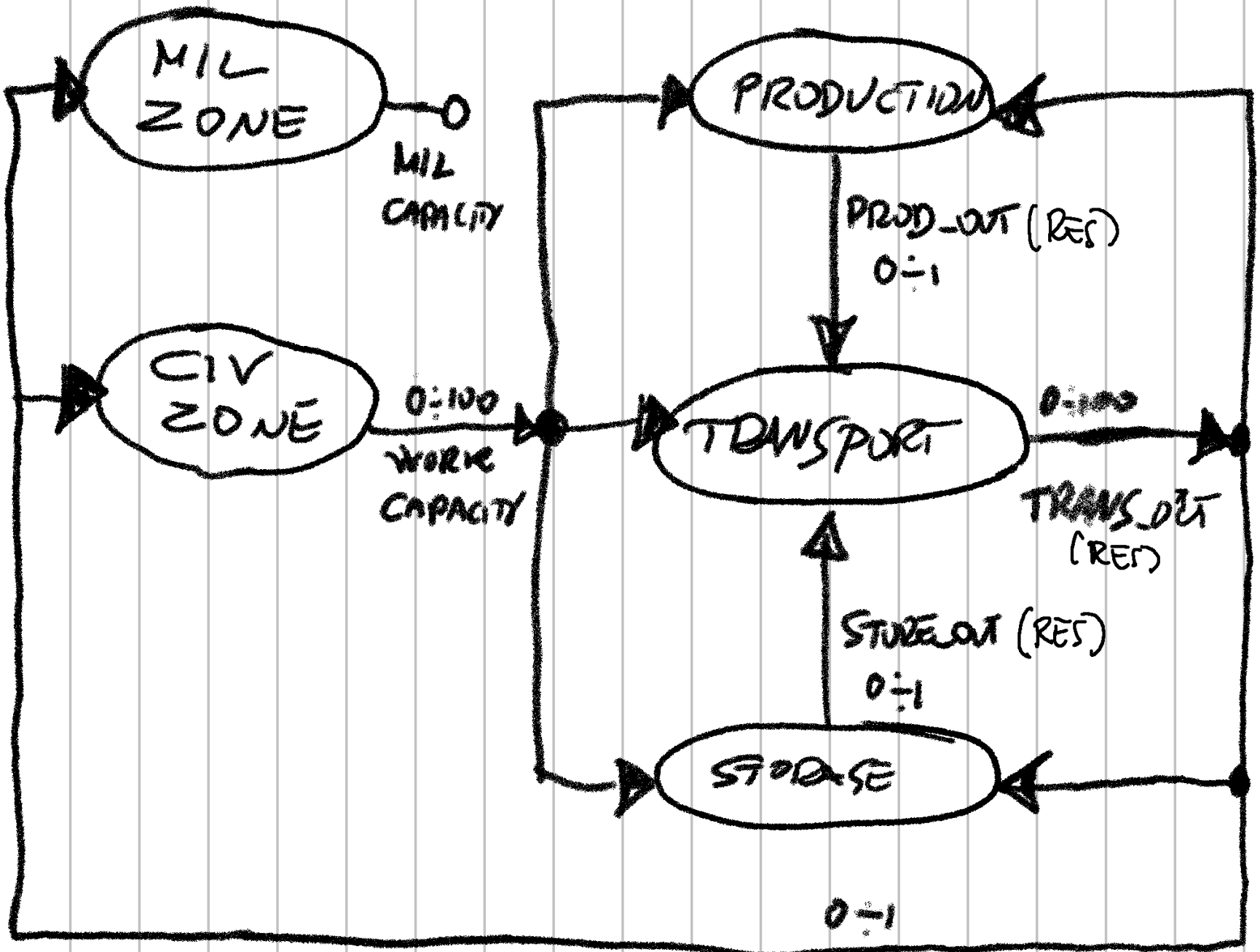


PROD_OUT = DAILY_PRODUCTION [GOODS/DAY]

WORK CAPACITY = f(POPULATION, EFFICIENCY)

EFFICIENCY = f(MORALE, TRANS_OUT)

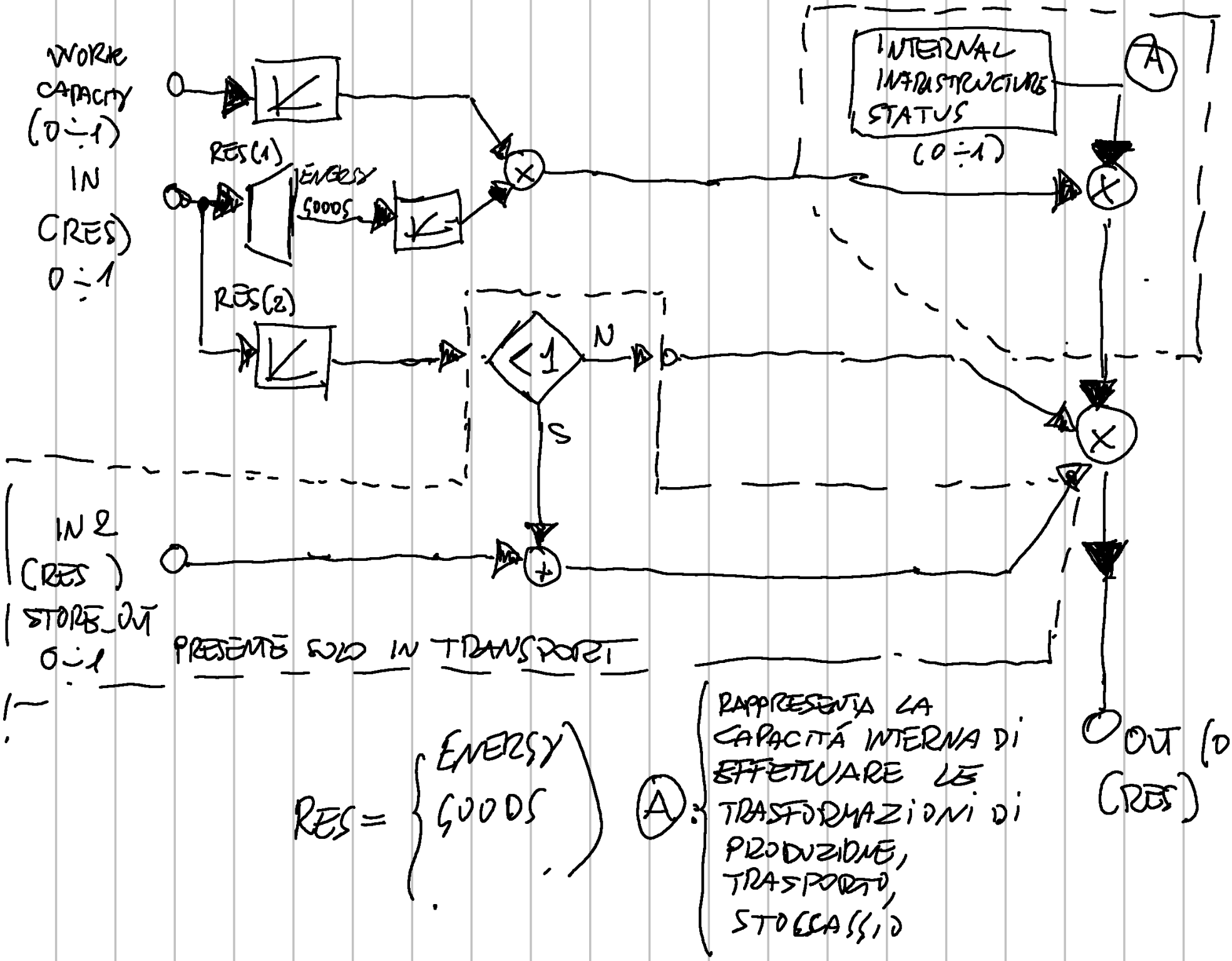
MORALE = f(RELATIONS, TRANS_OUT)

PROD_OUT
TRANS_OUT = { GOODS, ENERGY
STORE_OUT
(RES)

GOODS: RAW MATERIAL, MACHINERY, FOOD, WATER

ENERGY: { FUEL: PETROL, GAS, NUKE,
ELECTRIC: PRODUCTION, TRANSPORT LINE

MIL CAPACITY = f(ASSET NUMBERS, EFFICIENCY)



$$RES = \begin{cases} ENERGY \\ GOODS \end{cases}$$

(A): RAPPRESENTA LA CAPACITÁ INTERNA DI EFFETTUARE LE TRASFORMAZIONI DI PRODUZIONE, TRASPORTO, STOCCAGGIO

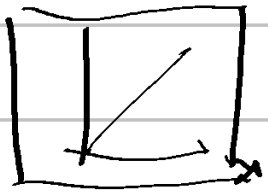
RES(1): Risorse necessarie per le attività interne (comuni)

RES(2): Risorse necessarie per le loro trasformazione (produzione, trasporto, stoccaggio)

Production: IN = TRANS_OUT, OUT = PROD_OUT
Storage: IN = //, OUT = STORE_OUT
Transport: { IN = //, IN2 = STORE_OUT } , OUT = TRANS_OUT

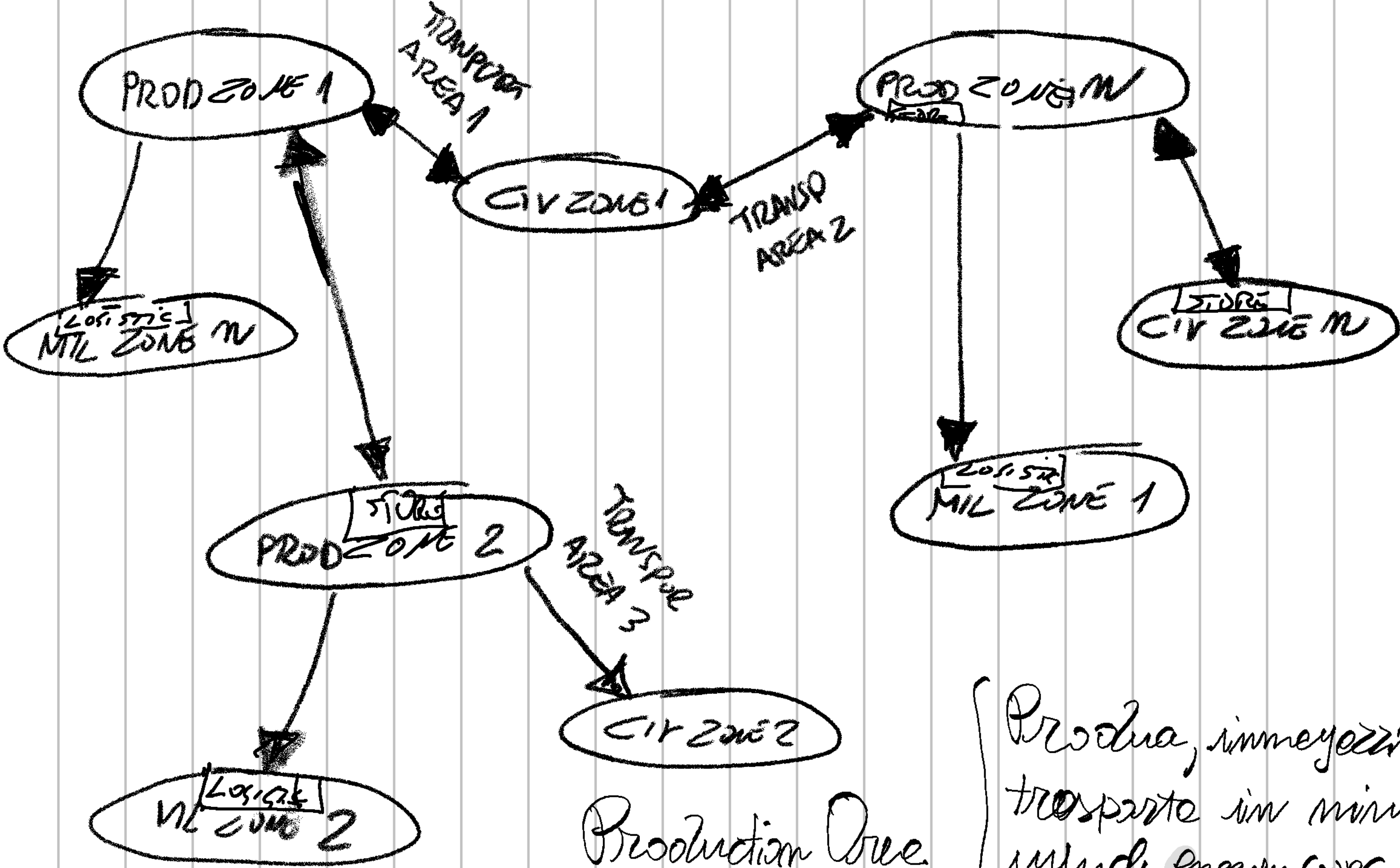
TRANS_OUT
PROD_OUT : { GOODS, ENERGY }
STORE_OUT

MIN
FULL



OUT = f(IN, MIN, FULL)

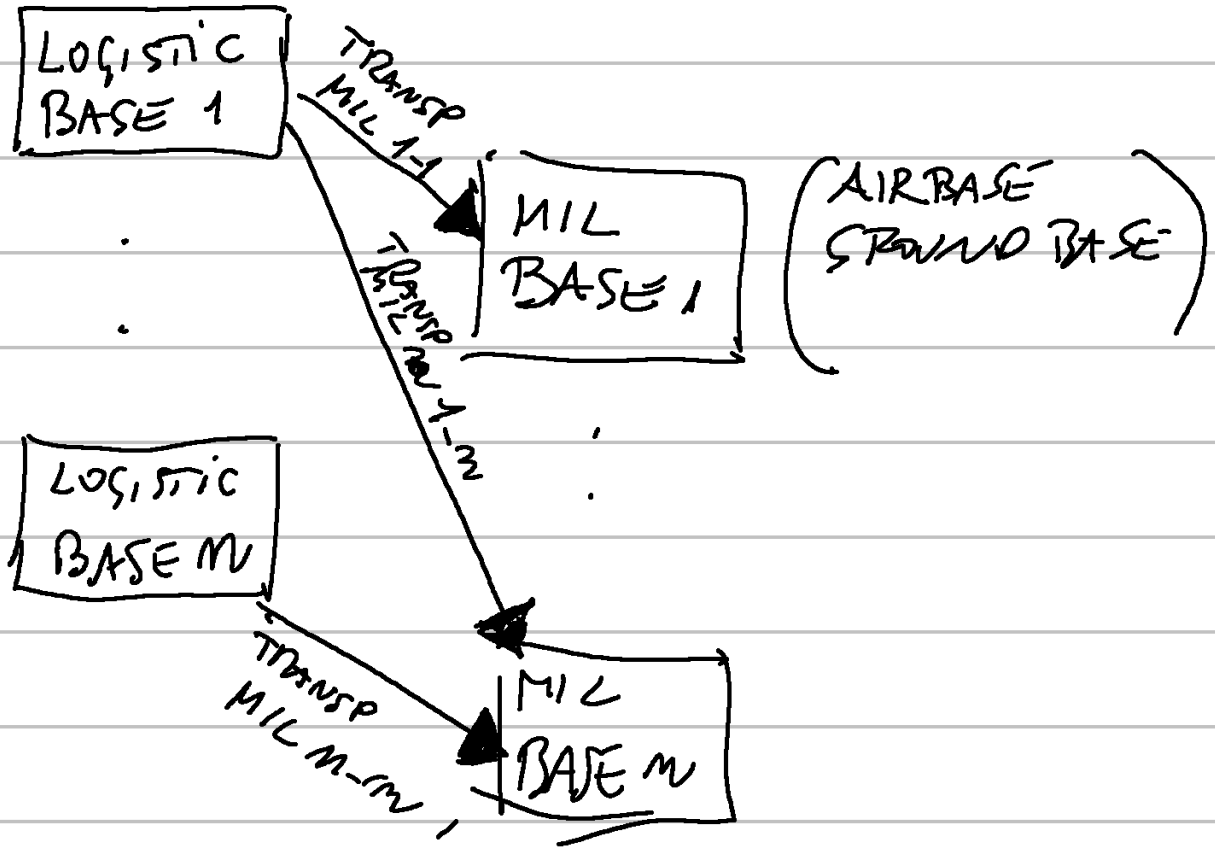
IN : 0 ÷ 1
OUT = 0 ÷ 1



Production Area
Storage Area :
Transport Area

{ Produce, immagazzina trasporta in minima quantità energy, goods.
È definita come un insieme di asset eterogenei (produz., storage, trasporto)

MIL ZONE:



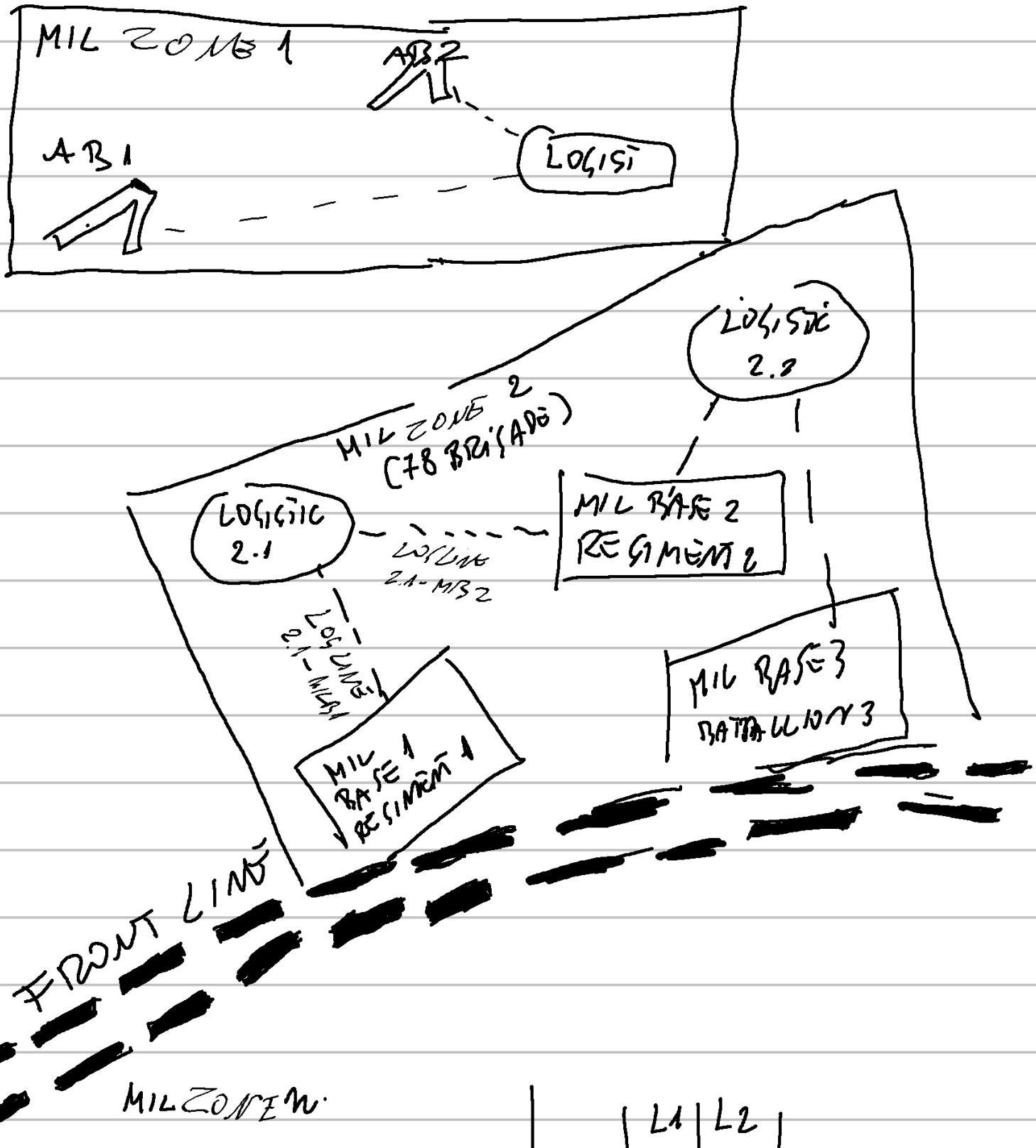
LOGISTIC BASE : { ASSET TYPE, QTY (GOODS, FUEL, AMMO ASSET)
TRANSPORT TYPE, QTY
RES :

MIL BASE : { ASSET TYPE : [MIL RESOURCE : { ASSET, AMMO, FUEL }]

TRANSPORT MIL : { INFRASTRUCTURE TYPE
QTY


CIV ZONE 1.1
PROD ZONE 1.1
CIV ZONE 1.1
PROD ZONE 1.2
CIV ZONE 1.3
PROD ZONE 3.1
CIV ZONE 3.1
REGION 3
REGION 1
REGION 2
MIL ZONE 1.2
MIL ZONE 2.1
MIL ZONE 2.1
MIL ZONE 2.2
CIV ZONE 2.1
MIL ZONE 2.2
MIL ZONE 1.1
FROM LINE
REGION 2
REGION 1
CIV ZONE
MIL ZONE 2.3
CIV ZONE 1.1
REGION 3
PROD ZONE 2.1
MIL ZONE 3.1
PROD ZONE 1.1
CIV ZONE 3.1
PROD ZONE 3.1

MIL ZONE



MILZONE N.

LOGISTIC	MIL BASE TRANS	
L1	M1 : BATTALL	T1: WAY 1
L2	M2 : REGIM.	T2: RAILWAY 1
⋮	⋮	T3: RIVER 2

	L1	L2
M1	T1	T3
M2	T3	T2
M3	T2	

TRANSPORT WAY (TW):

RAILWAY : STATION, BRIDGE

WAY : BRIDGE

RIVER : PORT

SEA : PORT

NOTA (uno storno è funzionalmente indipendente)

MIL BASE (MB): , BIZIATO HELIPAD : 2 o più STORNI

TYPE: AIRBASE (STORNO: 1 o più SLOTS VOLO)

BRIGADE
REGIMENT
BATTALION : 4 COMPANY { 3 OPERATIVE, 1 SERVICE (LOGISTIC)
HELIBASE
PORT

COMPANY: { OPERATIVE: 3÷2 ACTIVE + 3 STATIC
SERVIG: 3 STATIC
GOODS (MAPS OBJECT)
ENERGY : { FUEL, ELECTRIC (POWERED), FOOD

1 GRUPP VOLO = 2÷5 SQUADRIGLIE (CACCIA, BOMB, RECO, TRANS)

SQUADRIGLIA: CACCIA: 4
BOMB/RECO: 3

3
FIGHTER: 6 STATIC

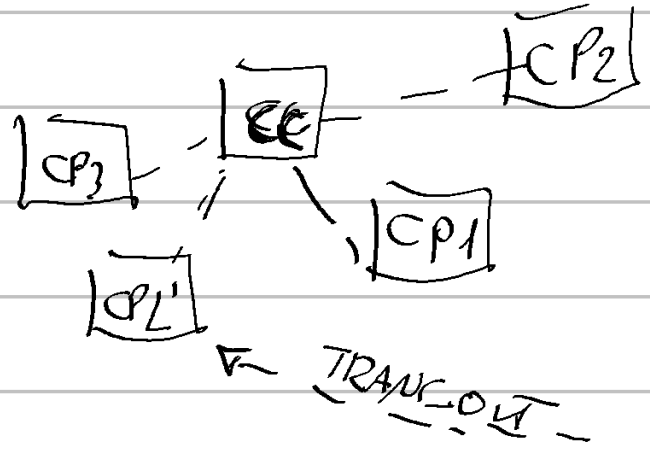
AIRBASE
HELIBASE
(STORM.
2 GRUPPI
VOLO

: { OPERATIVE: { GRUPPO I: { SQUAD FIGHTER/BOMB: 3
6 STATIC

GRUPPO II: { SQUAD BOMB: } 5 STATIC
" RECO : 3 STATIC
" TRANSP : 2 STATIC

ENERGY : { FUEL
ELECTRIC (PANNELLI)
FOOD

MIL BASE BATTALION/REGIMENT MODEL:



CC: COMBCONT
CPL: LOGISTIC
CPM: OPERATIVE

OPCB = OPERATIVE CAPACITY BATTALLION (0÷100)

CPS$_i$ = iCOMPANY STATUS
CCS = COMMAND & CONTROL STATUS
CPLS = LOGISTIC STATUS
(0÷100)

CPL += TRANS_OUT • CPLS
(<MAX_STORAGE) (0÷1) (0÷1)
NOTA TRANS_OUT = ENERGY • GOODS

CPL -= CONSUME(1 o f(ZONE WAR INTENSITY))

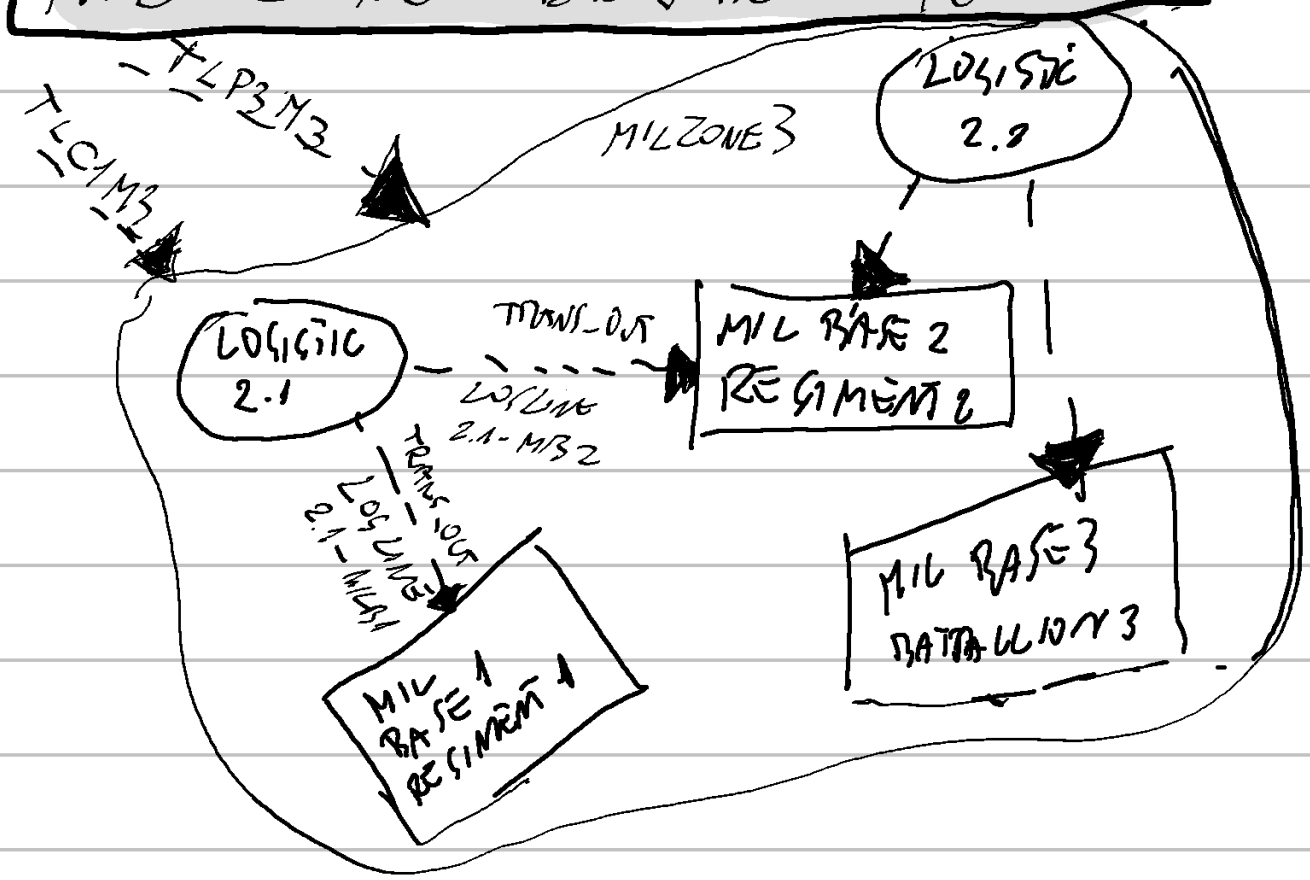
$$OPCB = \left(\sum_{i}^{N} \frac{CPS_i}{N} \right) \cdot CCS \cdot (1 \circ CPL)$$
(0÷1) (0÷1) (0÷1) (0÷10) (0÷1)

X REGIMENT:
CPS$_i$ = BATTALION STATUS
CCS = REGIMENT CC STATUS
CPLS = // LOGISTIC STATUS

STORAGE ≤ STORAGE MAX)
CPLS = STORAGE • CPLS_ASSET
STORAGE = (STORAGE − 1) + TRANSOUT
(consumo giornaliero) (0÷100)

Ottimizzato ogni minuto

MIL ZONE BRIGADE MODEL



OCBR = OPERATIVE CAPACITY BRIGADE

$$OCBR = \sum_{N}^{N\ (0\div1)} \frac{MB\ CAPACITY}{N}$$

(l'efficienza delle LogBase si riflette nella capacity delle MILBASE)

$$MB\ CAPACITY\langle x\rangle\ (0\div1) = OPCB\ (\text{PAGINA PRECEDENTE})$$

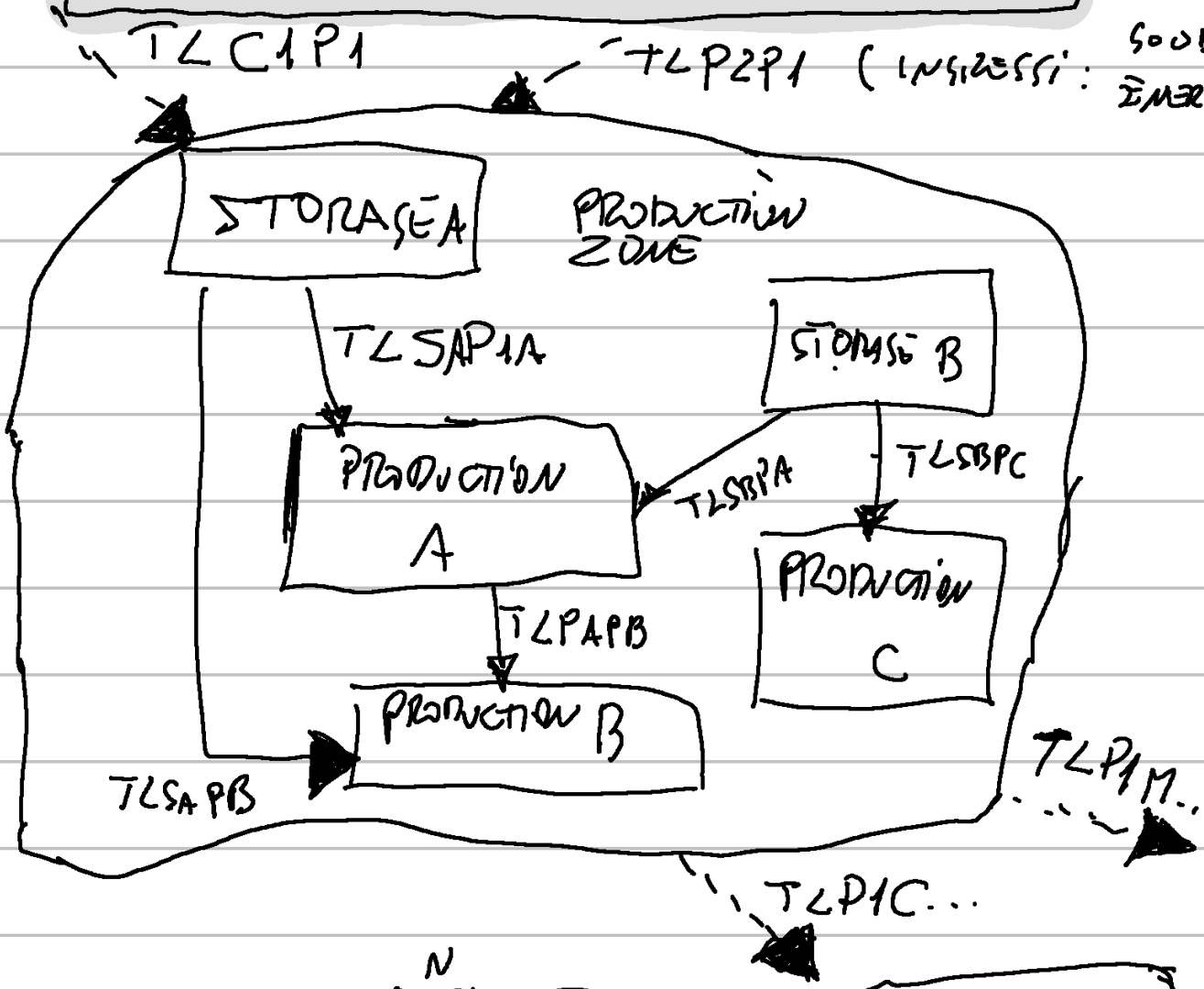
$$LOGISTIC\langle x\rangle\ (<MAX\_STORE) \mathrel{+}= \sum_{*} TL\langle x\rangle M3 \cdot COEFF\langle x\rangle \cdot LOGISTIC\ INTRINSIC\ STATUS\langle x\rangle$$

$$TRNS\_OUT\langle x\rangle = LOGLINK\langle x\rangle\ (STATUS) \cdot \left(1 \text{ o } LOGISTIC\langle x\rangle\ (0\div1)\right)$$

$$LOGISTIC\langle x\rangle -= CONSUME\langle x\rangle\ (=1)$$

(MAX-STORE = 10, CONSUME = 1 ⇒ AUTONOMIA NO CICLI) (OGNI CICLO CDA*2)

PRODUCTION ZONE MODEL



$$STORAGE\_N += \sum_i^N TL\langle x\rangle_i \cdot K_{i,N} \cdot \frac{INFRASTRUCTURE\ STORAGE\_N_i}{STATUS} \quad (<= STOR\_MAX)$$

$$PROD\_M: \ (0 \div 1) \begin{cases} STORAGE < 1: & \sum_i^N STORAGE_i \cdot TLS_i \cdot K_{i,N} \cdot INFRASTRUCTURE\ STATUS\_M_i \cdot PRODUCTION\ COEFFICIENT_i \\ STORAGE >= 1: & \sum_i^N TLS_i \cdot K_{i,N} \cdot INFRASTRUCTURE\ STATUS\_M_i \cdot PROD\ COEFF_i \end{cases}$$

STOR_MAX = 10

10 CICLO DAYS

$$STORAGE\_N -= CONSUME_i \quad (MIN\ 0)$$

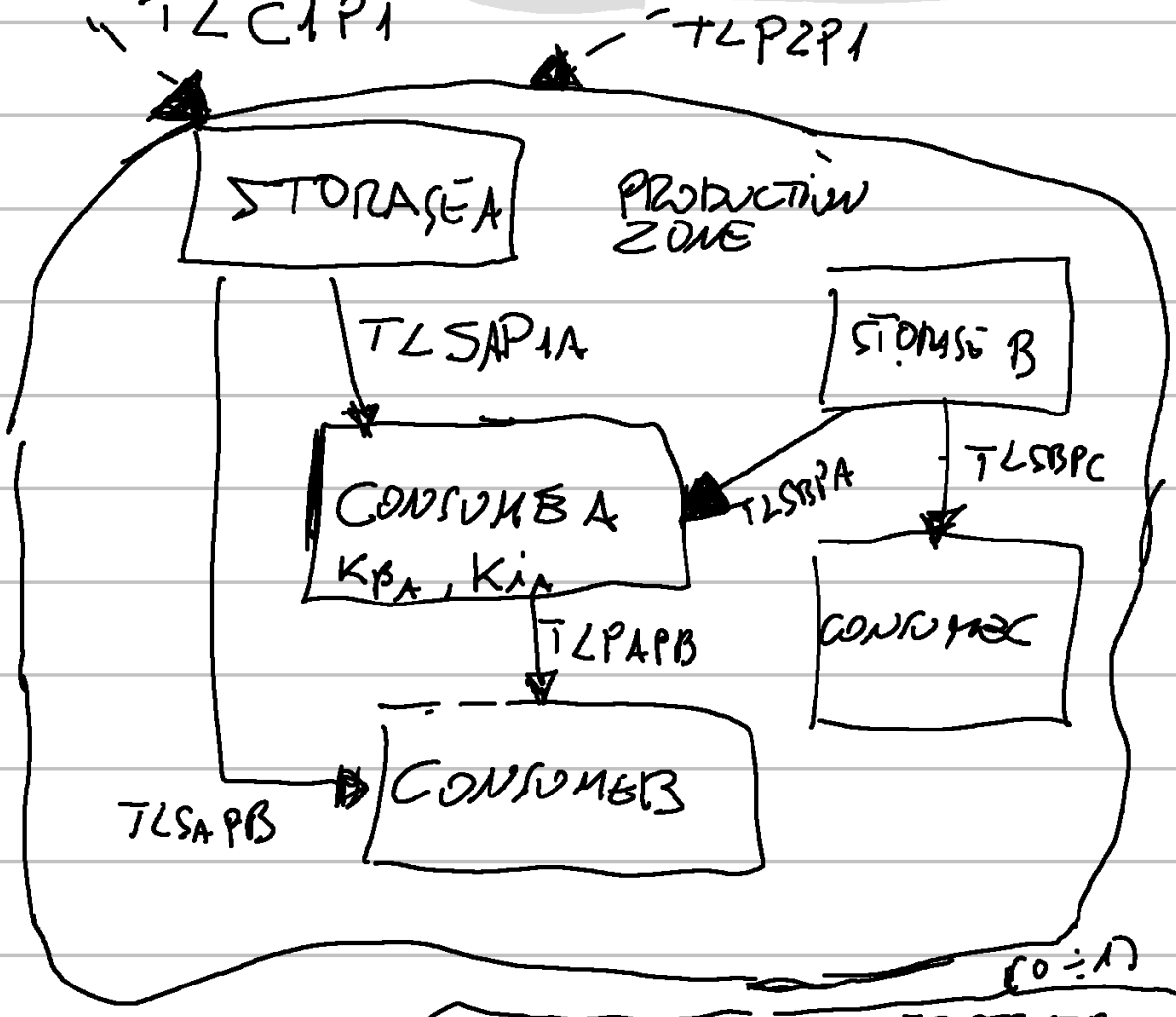
$$TOTAL\_PROD = \sum_i^N PRODUCTION\_N / N \quad (0 \div 1)$$

$$TLP\langle x\rangle = TOTAL\_PROD \cdot \frac{INFRASTRUCTURE\ TLP\langle x\rangle}{STATUS}$$

tutti i TLP(x) hanno 1 se TOTAL_PROD è OK

(USCITA GOODS ENERGY)

CITY ZONE MODEL



PARAMETRI:
POPULATION
INFRASTRUCTURE
MORALE

$$CONSUME\_M = \underset{(0 \div 1)}{POPULATION} \cdot 0.7 + \underset{(0 \div 1)}{INFRASTRUCTURE\ STATUS} \cdot 0.3$$

$$STORAGE\_M += \sum_{i}^{N} \underset{(0 \div 1)}{TL\langle x \rangle_i} \cdot \underset{STATUS}{INFRASTRUCTURE\ STORAGE\ M_i} \quad (< STOR\_MAX)$$

$$STORAGE\_M -= Consume\_M\ (=1)$$

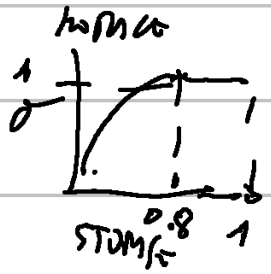
[SE STORE <= 10
CONSUME = 1 :
IMPLICA 10 CICLI DI AUTONOMIA]

$$TLP\langle x \rangle = TOTAL\_PROD \cdot K_x \cdot \underset{STATUS.}{INFRASTRUCTURE\ TLP\langle x \rangle}$$

STOR_MAX = 10 (10 cicli (DAY) prima di azzerarsi)

$$MORALE = \overline{TOTAL\_STORAGE} \cdot K_M \cdot \overline{STATUS\ INFRASTRUCTURE}$$

$$K_m = \begin{cases} (TOTAL\_STORAGE >= 1) & 1 \\ // & <= 0.5) \ 0.5 \\ & < 0.2) \ 0.1 \end{cases}$$



INITIAL STEPS

RESOURCES

STRATEGIC NODES ROUTES: FACTORY, BRIDGE, PORT, AIRBASE, POWER PLANT

WAR PRODUCTION: FACTORY NODE (?)

GROUND FORCES

STRATEGIC OBJECTIVES: PRIORITY OF STRATEGIC NODES & ROUTES

GROUND FORCES ROUTE PLANNING

TASKING ORDERS

FOLLOW ON:

ECONOMIC ASPECT

FACTORIES

WAREHOUSE

MATERIALS LOGISTIC THAT TRANSPORT RESOURCES