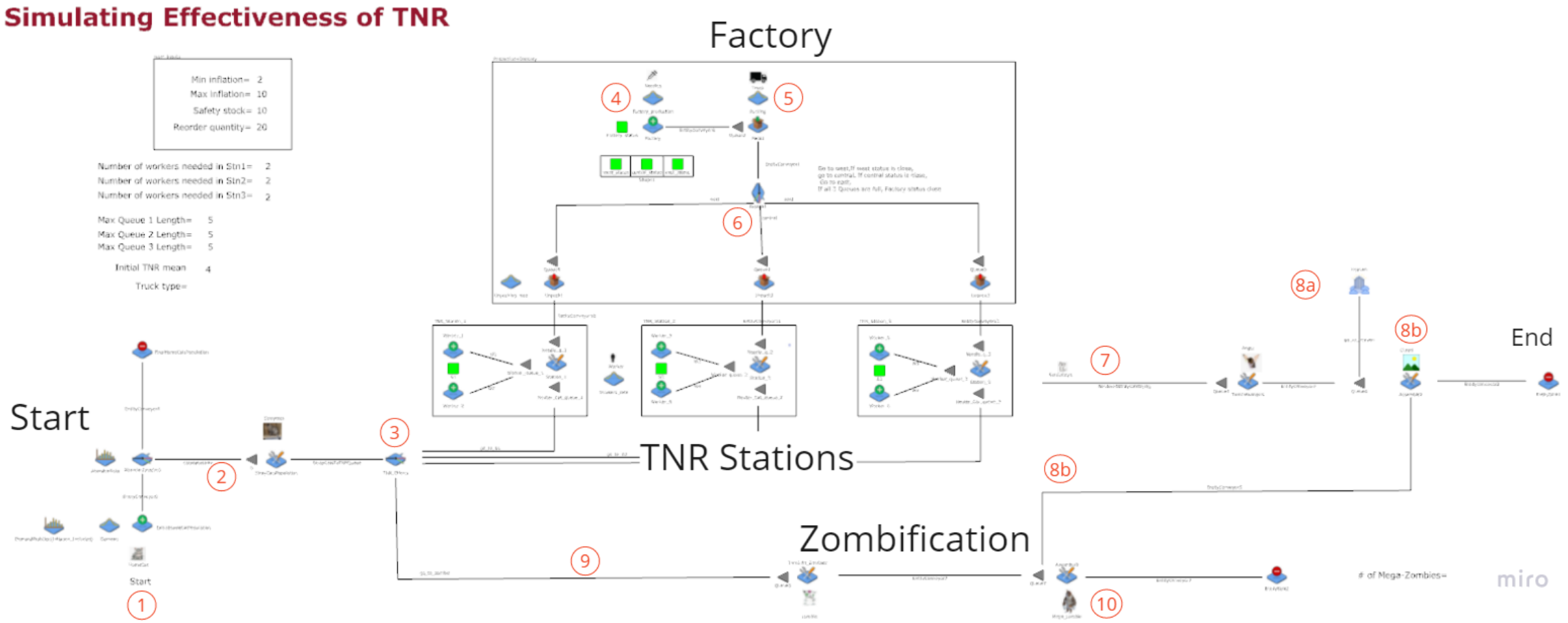
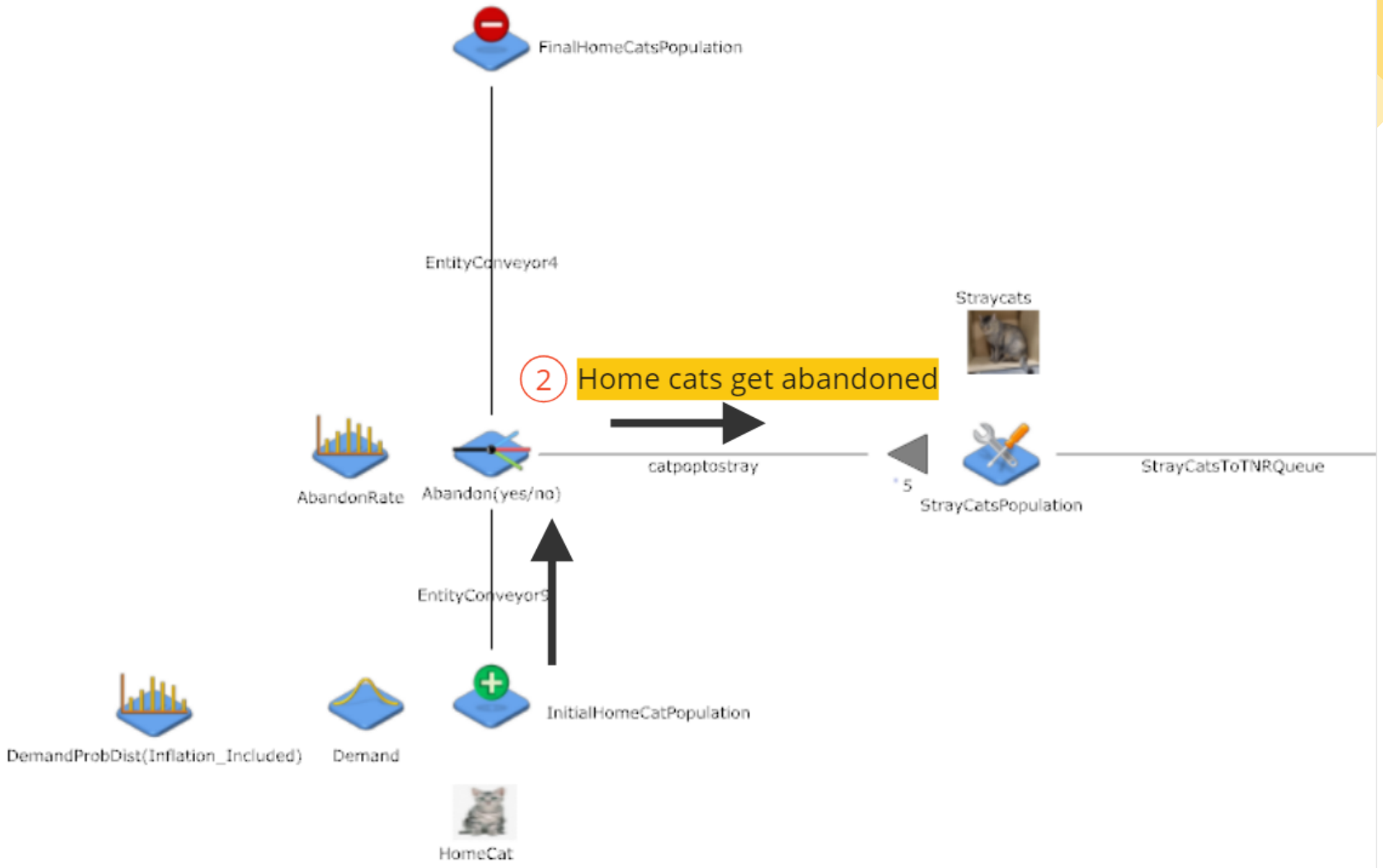
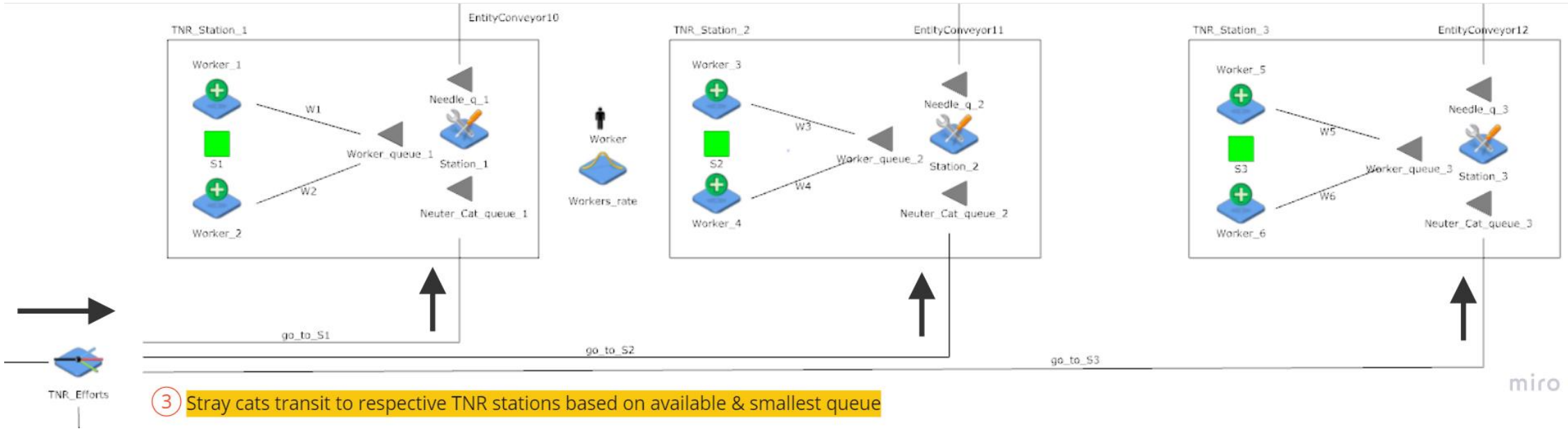
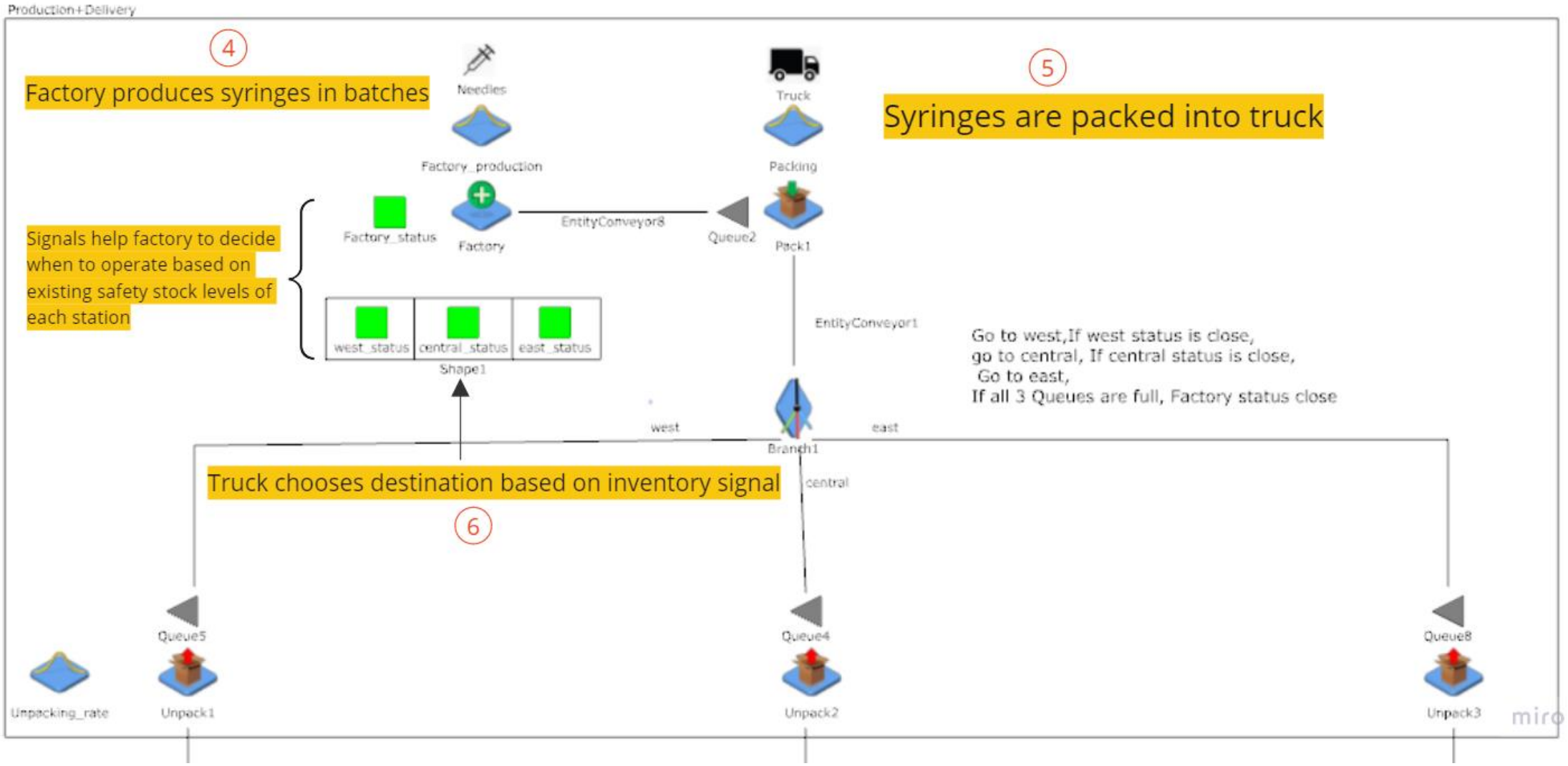
Overall

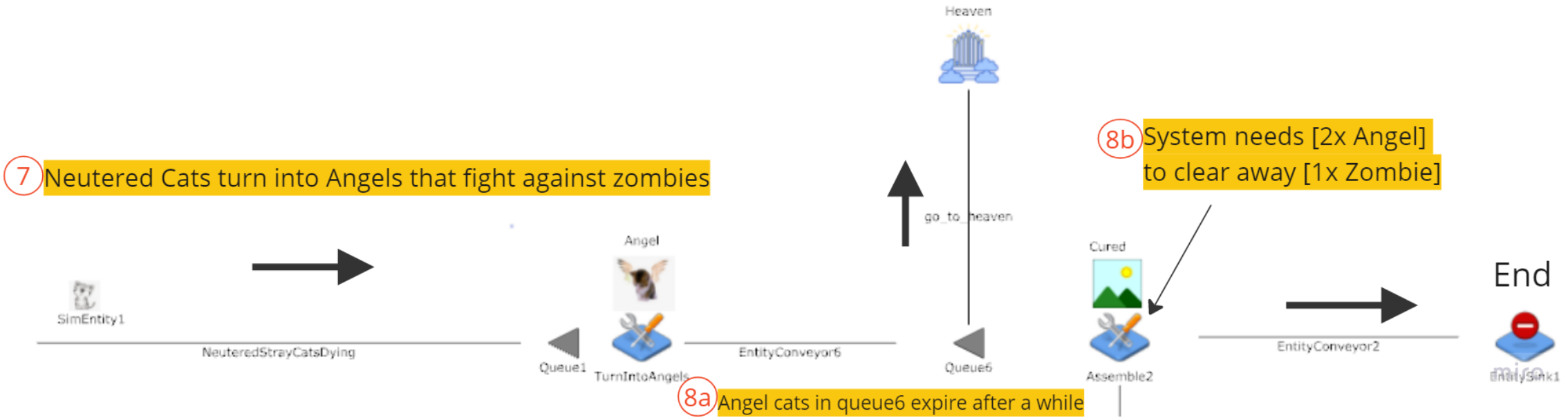

Simulating Effectiveness of TNR
Factory
Min inflation= 2
Max inflation= 10
Safety stock= 10
Reorder quantity= 20
Number of workers needed in Stn1= 2
Number of workers needed in Stn2= 2
Number of workers needed in Stn3= 2
Max Queue 1 Length= 5
Max Queue 2 Length= 5
Max Queue 3 Length= 5
Initial TNR mean 4
Truck type=
Start
TNR Stations
Zombification
End
Start
1
2
3
4
5
6
7
8a
8b
8b
9
10
# of Mega-Zombies=
miro

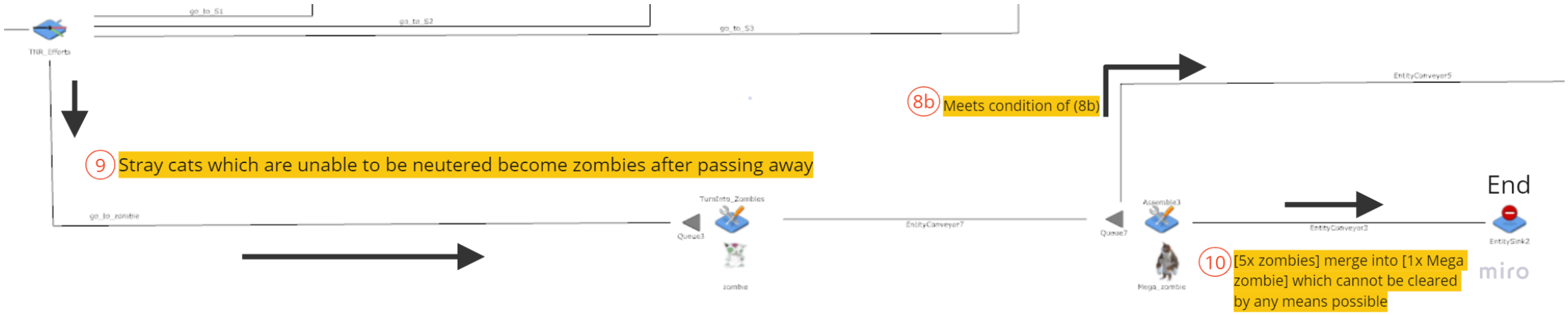

FinalHomeCatsPopulation
EntityConveyor4
Straycats
2 Home cats get abandoned
AbandonRate
Abandon(yes/no)
catpoptostray
5
StrayCatsPopulation
StrayCatsToTNRQueue
EntityConveyor3
DemandProbDist(Inflation_Included)
Demand
InitialHomeCatPopulation
HomeCat
Start
1 Home cats enter the system
miro



3 Stray cats transit to respective TNR stations based on available & smallest queue


Production+Delivery
4
Factory produces syringes in batches
Needles
Factory_production
Truck
Packing
5
Syringes are packed into truck
Signals help factory to decide when to operate based on existing safety stock levels of each station
Factory_status
Factory
EntityConveyor8
Queue2
Pack1
west_status
central_status
east_status
Shape1
EntityConveyor1
Go to west,If west status is close,
go to central, If central status is close,
Go to east,
If all 3 Queues are full, Factory status close
west
east
Branch1
central
Truck chooses destination based on inventory signal
6
Queue5
Queue4
Queue8
Unpacking_rate
Unpack1
Unpack2
Unpack3
miro


7 Neutered Cats turn into Angels that fight against zombies
Heaven
8b System needs [2x Angel]
to clear away [1x Zombie]
go_to_heaven
Angel
Cured
End
SimEntity1
NeuteredStrayCatsDying
Queue1
TurnIntoAngels
EntityConveyor6
Queue6
Assemble2
EntityConveyor2
8a Angel cats in queue6 expire after a while


go_to_S1
go_to_S2
go_to_S3
TNR_Efforts
8b Meets condition of (8b)
EntityConveyor5
9 Stray cats which are unable to be neutered become zombies after passing away
End
go_to_zombie
TurnInto_Zombies
Queue3
EntityConveyor7
Queue7
Assemble3
EntityConveyor3
EntitySink2
zombie
Mega_zombie
10 [5x zombies] merge into [1x Mega zombie] which cannot be cleared by any means possible
miro

End of simulation walkthrough