

c) The codification for the STG is the next one:

(5)



- The system starts with the traffic light of the motorway green and the colour cycle is:  
Green → Yellow → Red → Green
- Therefore, there are 4 states:
  - AV → Motorway green and Road Red
  - CA → Road Yellow
  - CV → Road green and Motorway red
  - AA → Motorway yellow
- Finally, the STG, considering the functionality of the system, would be the next one:

