

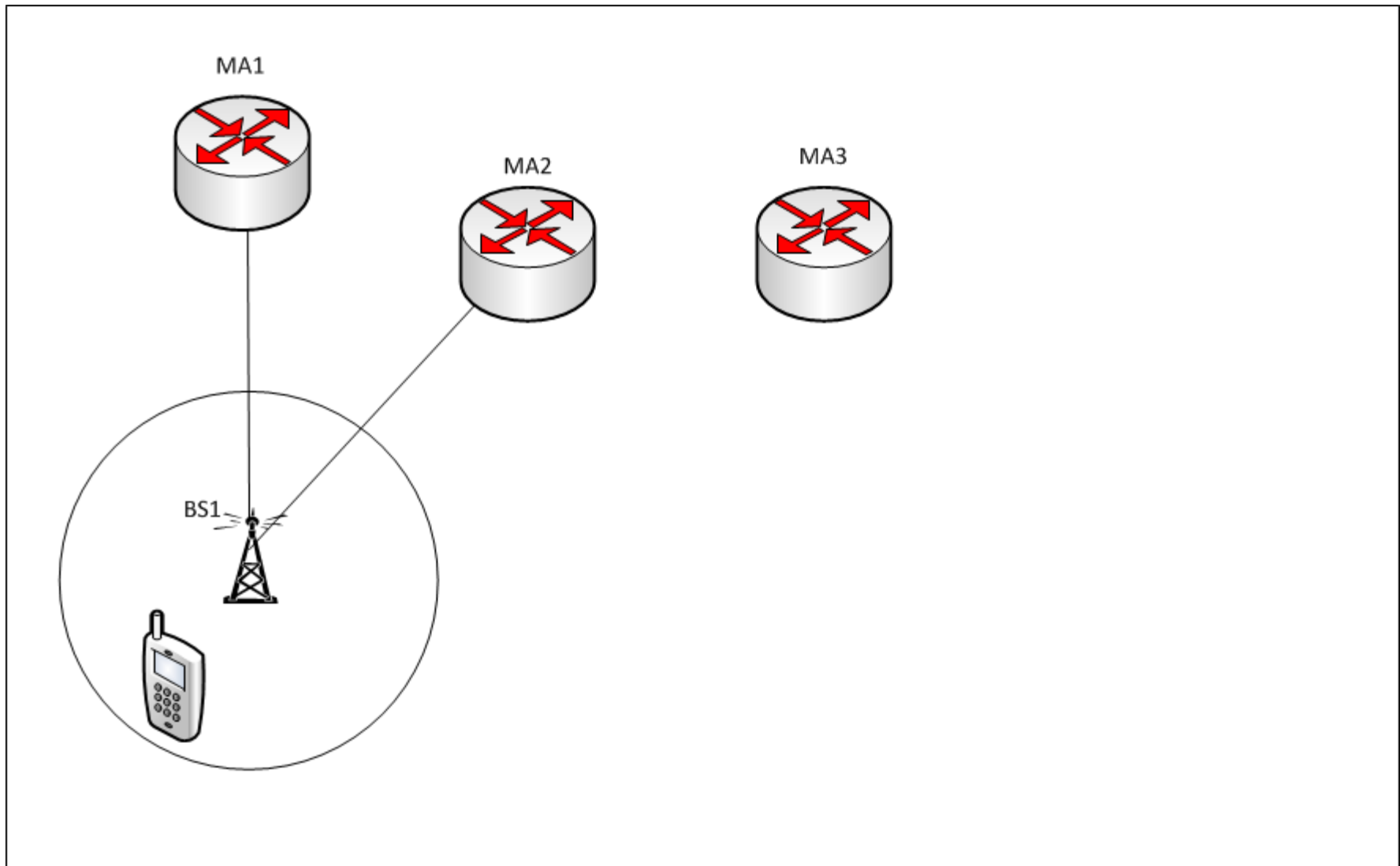


# Mobility Anchor Selection

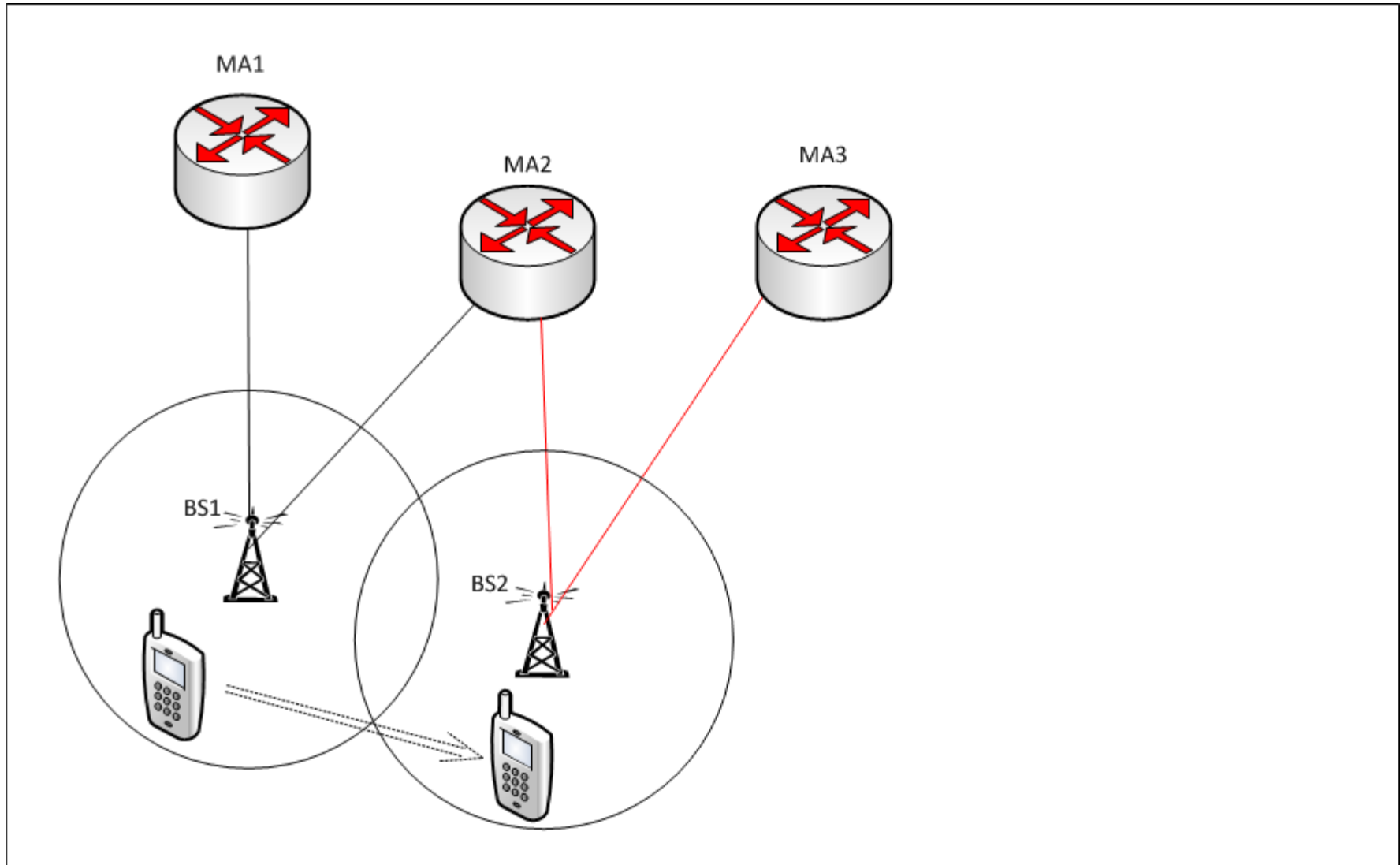
draft-aliahmad-dmm-anchor-selection

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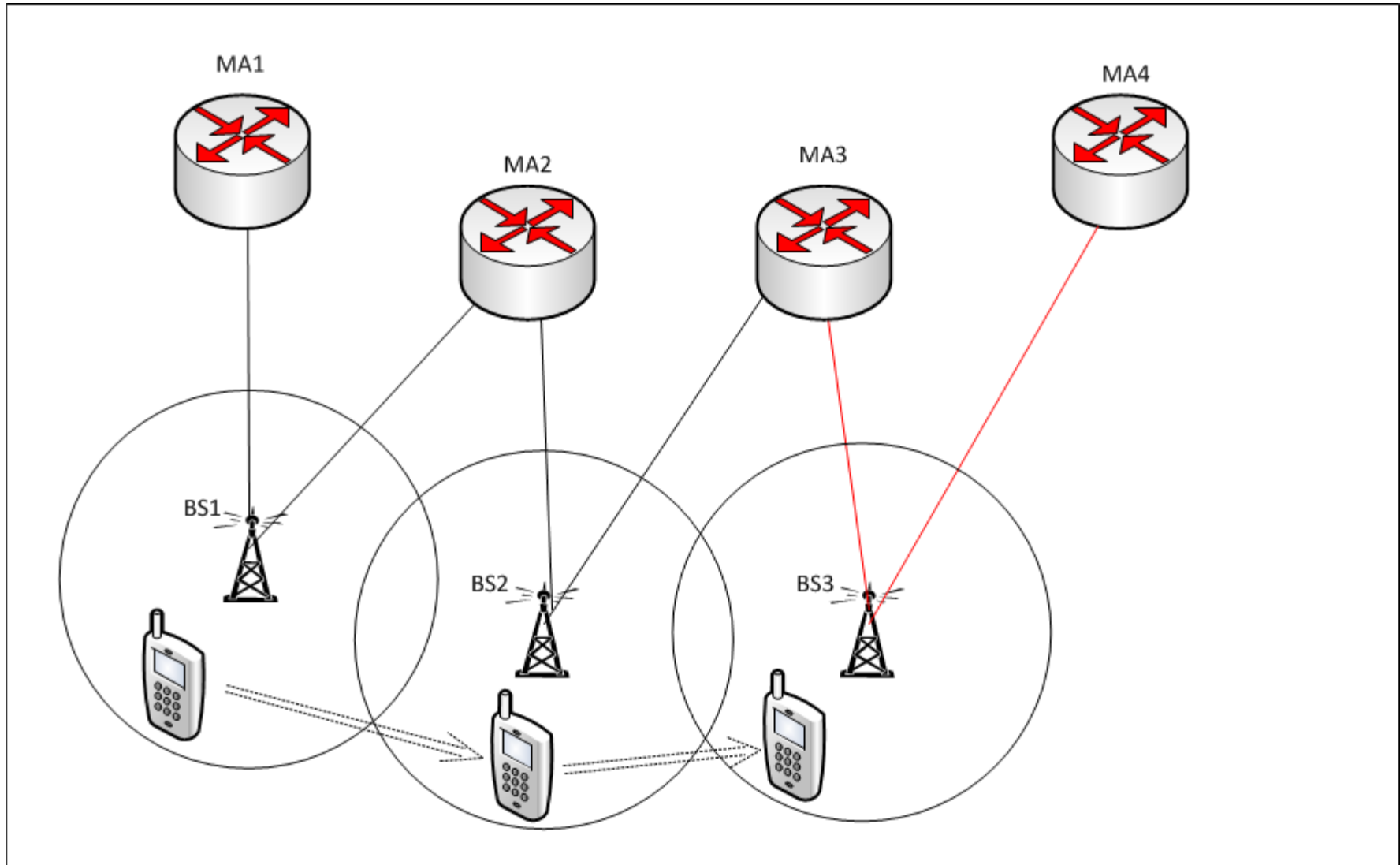
# Which is the best MA?



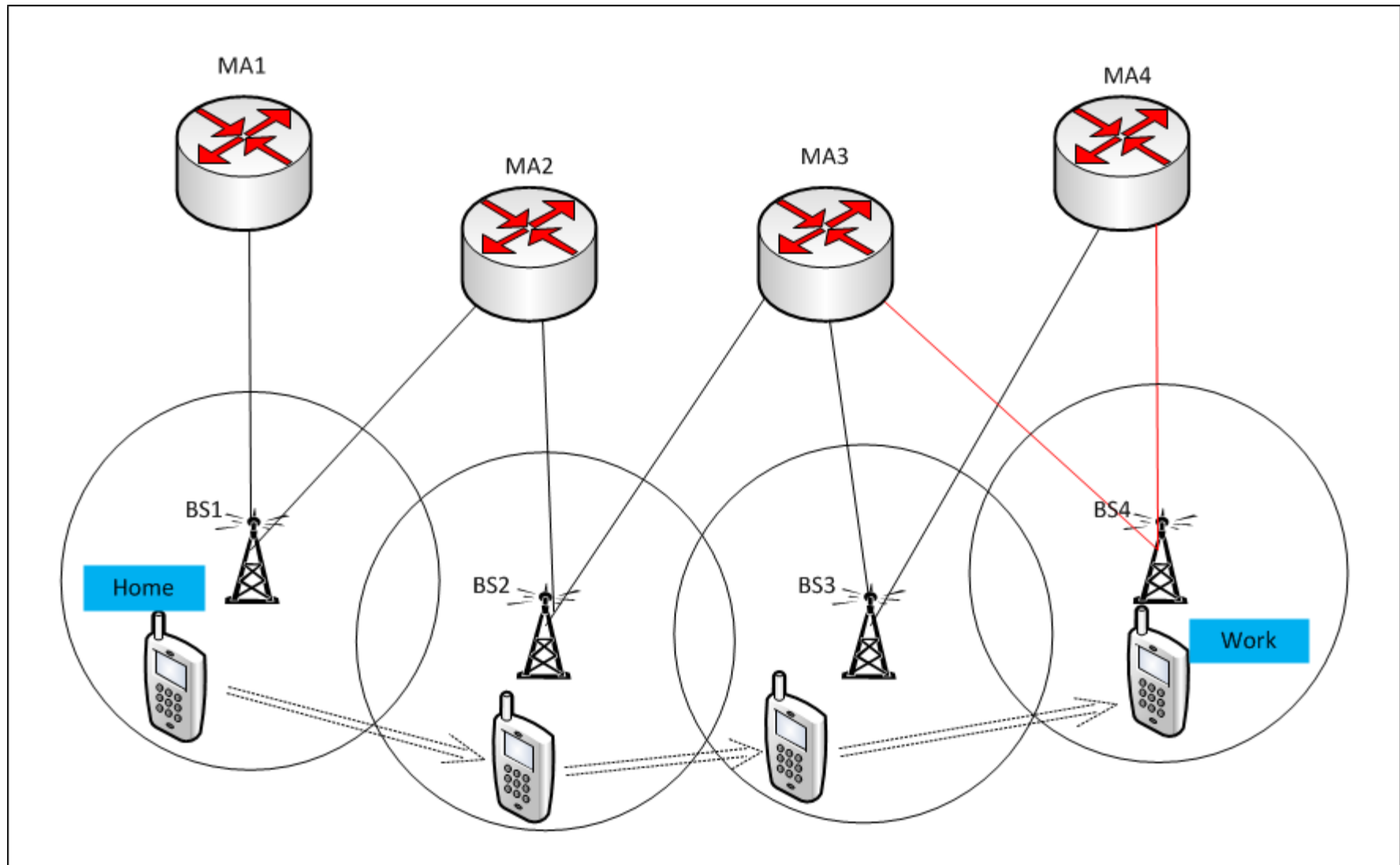
# And now?



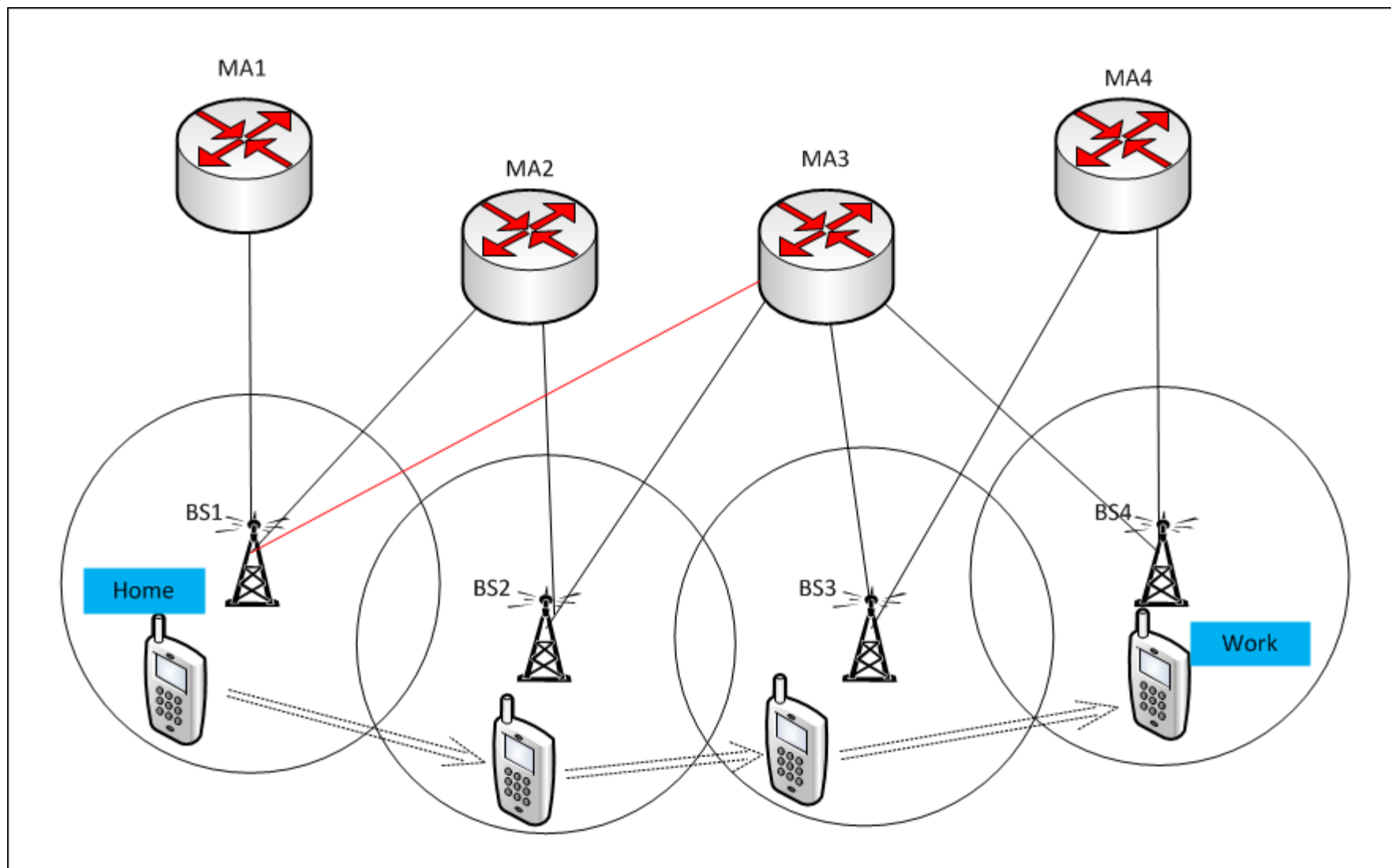
# And after the next handoff?



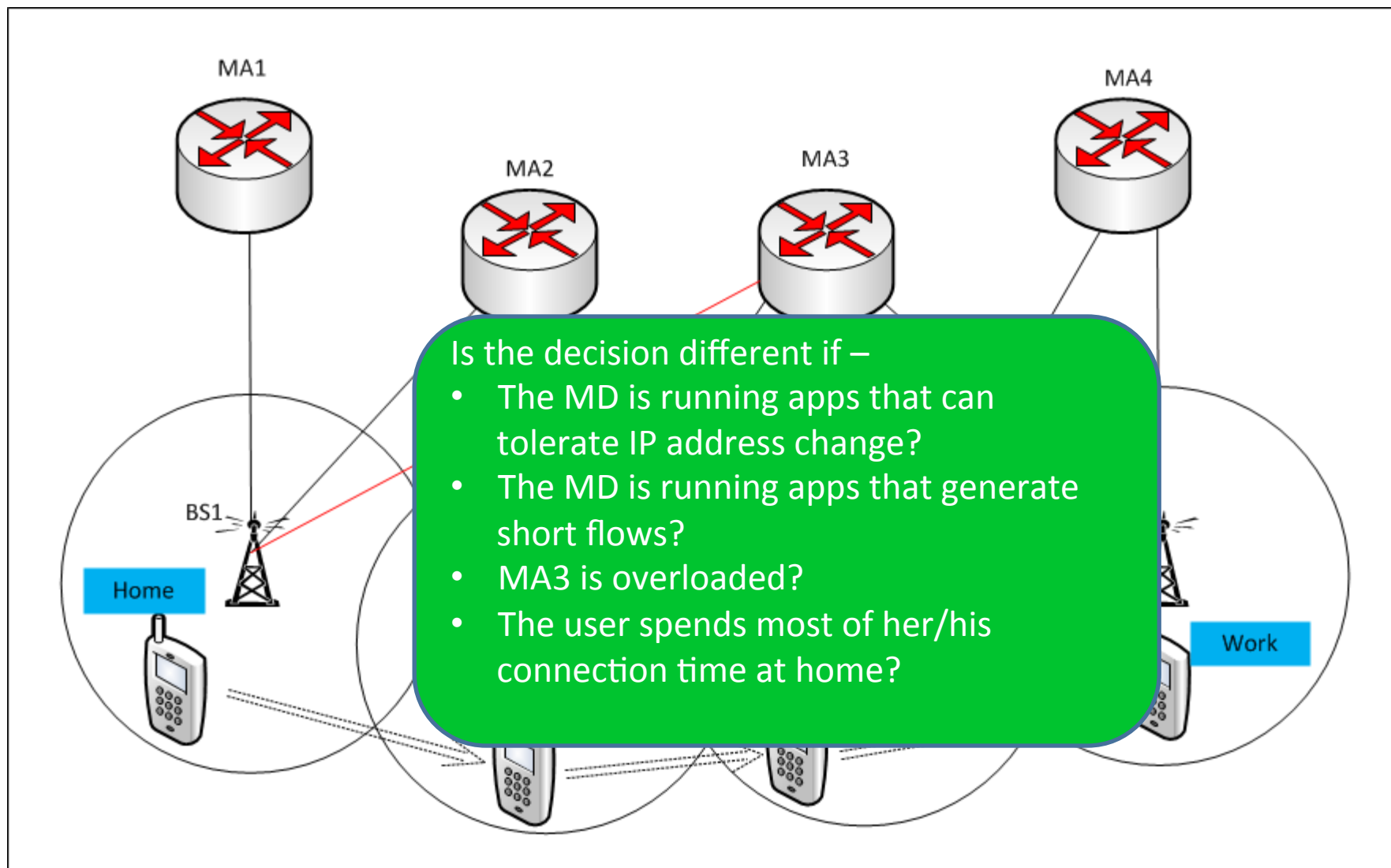
# And if this is the path from home to work ?



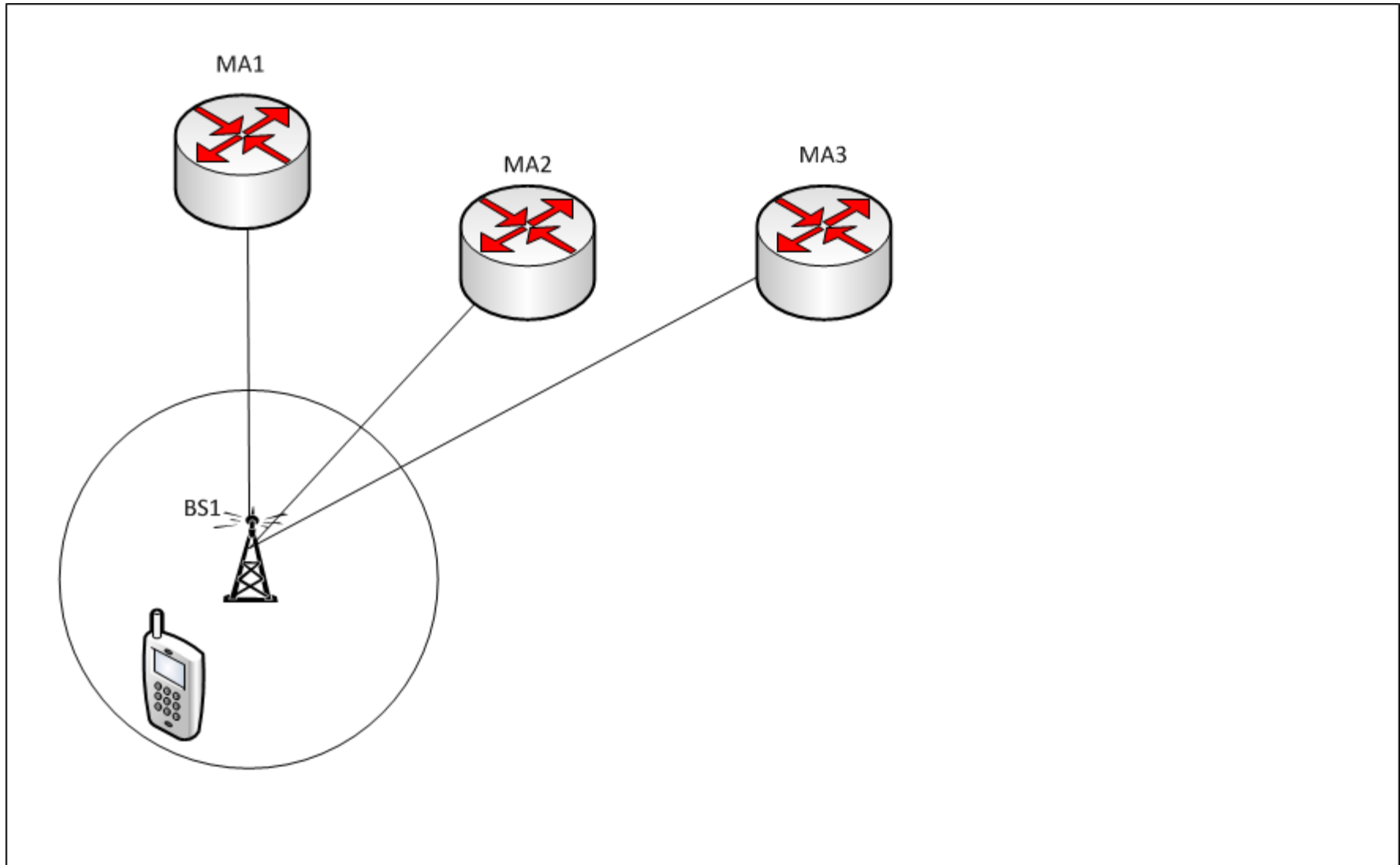
# And if BS 1 was also serviced by MA3?



# And if BS 1 was also serviced by MA3?



# So, which is the best MA?





# Criteria for MA selection

So we can see that there are different aspects that influence the decision of assigning a MA to serve a MD:

- Network context
  - MA or Access Router or NW segment load
  - Influence on NW performance (delays, hops, bandwidth...)
  - NW layout
- Application context
  - Lifetime of flows generated by the apps
  - Sensitivity to IP address change
- Mobile device (or user) context
  - Mobility patterns of the MD (or its user)

# Comments from previous session

- Not enough use-cases / the streaming video app is not interesting
  - We provided several use cases and a list of apps that map to those use cases
  - We will be happy to receive more examples...
- Any examples of real networks that demonstrate DMA selection issues?
  - DMM does not exist yet.
  - There are statistics about mobility patterns and lengths of flows proving that there is a potential for optimization is MA selection once distributed MAs are deployed
- The solution is too complex
  - So should we ignore this topic?
  - Is it really complex? Aren't there solutions that trade-off between complexity and maximum optimization?

# List of use-cases

Application	Traffic type	Mobility nature	Type of client device	Relevant use-case scenario(s)	Comments
RT Gaming	Long flows with IP continuity req	Player could be either stationary or mobile (depending on the game)	Laptop, tablet, smart phone or game console	2, 5, 7	For game consoles, the device and traffic characteristics could be easily predicted
Audio/Video conferencing	Long flows with IP continuity req	Stationary or mobile	Smart phone, tablet or laptop	2, 5, 7	
Live streaming IPTV	Long flows with IP continuity req	Stationary or mobile	Large screen TV, laptop, tablet or smart phone	2, 5, 7	If a large screen TV – the client is stationary. Otherwise, the client is mobile
Waze	Long flows without IP continuity req	Mobile	Smart phone or dedicated car GPS (future)	1, 4	Scenario (4) is when the car is used mainly for short distance usages
Video report	Long flows; IP continuity may be req	Stationary or mobile	Mobile surveillance; HD camera	2, 5, 7	A typical location (Ski resort)
Video streaming in vehicles	Long flows with IP continuity req	Mobile	Car TV, tablet or smart phone	2, 5	If the car is mainly used in specific neighborhood a typical location is relevant
Camcoder download	Long flows with IP continuity req	Mobile	Camcoder	2, 5, 7	

# Next steps

- Feedback from the WG is needed on the draft
- Are there any additional use-case that come to mind?
- Plan to start working on solutions