CLAIMS

1. A method for wireless communication, comprising:
receiving, by a radio access network (RAN) device, an indication of a first traffic flow ~~to be served by a wireless communication system;~~
~~determining time offset information~~ for ~~transmissions of the traffic flow based at least in part on the indication;~~a new flow session between an edge server and
a user equipment (UE) via the RAN device; and transmitting, by the RAN device to the edge sever, time offset information in response to the indication, the time offset information determined prior to establishing the new flow session and based on arrival times of data packets of one or more second traffic flows and without reference to a common clock, the time offset information configured to facilitate non-overlapping data packet arrival within the RAN.

2. The method of claim 1, wherein ~~the time offset is based on a common clock shared between nodes communicating the traffic flow, and wherein the time offset information comprises~~ a time offset value ~~relative to the common clock for scheduling traffic transmission~~ of the ~~traffic flow.~~

~~3. The method of claim 2, wherein the indication of the traffic flow comprises an indication of a new flow session establishment, and wherein the determining~~ time offset information ~~determines the time offset value of~~is determined for the one or more second traffic flows prior to establishing the new flow session.

3. The method of claim 1, further comprising the time offset information ~~for the traffic flow prior to establishing the new flow session.~~

~~4. The method of claim 1~~, wherein ~~the~~ determining the time offset information ~~determines~~ includes determining a plurality of time offset values for scheduling traffic transmission of the first traffic flow, and wherein the transmitting the time offset information ~~transmits~~comprises transmitting the plurality of time offset values to an application entity in ~~the~~a wireless communication system.

~~5.~~ 4. The method of claim 1, wherein transmitting the time offset information further comprises~~:~~
signaling the time offset information to at least one application entity in ~~the~~a wireless communication system.

~~6.~~ 5. The method of claim ~~5~~4, wherein the at least one application entity includes an Application Function (AF) on ~~an~~the edge server.

~~7.~~ 6. The method of claim ~~6~~5, wherein the time offset information comprises a time offset for scheduling traffic originating from or destined to the edge server.

~~8.~~ 7. The method of claim ~~6~~5, further comprising~~:~~
~~———~~ transmitting the time offset information between ~~a Radio Access Network (RAN)~~the RAN and the AF in new fields of existing messages, new messages, or in reinterpreted fields of existing messages, wherein the time offset information is transmitted between the AF and a Policy Control Function (PCF), a Session Management Function (SMF) and the PCF, an Access and Mobility Management Function (AMF) and the SMF, or ~~a Radio Access Network (RAN)~~the RAN and the AMF.

~~9.~~ 8. The method of claim ~~8~~7, further comprising~~:~~
~~———~~ transmitting the time offset information in a notification message on a 3GPP interface between the AF and the PCF.

~~10.~~ 9. The method of claim ~~8~~7, further comprising~~:~~
~~———~~ transmitting the time offset information in a notification message on a 3GPP interface between the RAN and the AMF.

~~11.~~ 10. The method of claim ~~5~~4, wherein the at least one application entity includes an application on ~~a user device~~the UE.

~~12.~~ 11. The method of claim ~~11~~10, further comprising~~:~~
~~———~~ transmitting the time offset information to the application on the ~~user device~~UE via an operating system on the ~~user~~UE.

12. The method of claim 1, wherein the indication of the first traffic flow was provided to the RAN device by an entity other than the edge server, the UE, and the RAN device.

13. The method of claim 1, further comprising determining, by the RAN device, the time offset information.

14. The method of claim 1, wherein the arrival times of the data packets of the one or more second traffic flows comprise arrival times of the data packets of the one or more second traffic flows between the UE and the edge server.

15. The method of claim 1, further comprising initiating, by the RAN and with the edge server, a negotiation session whereby at least one time offset value of multiple time offset values corresponding to the time offset information is selected.

16. The method of claim 1, wherein the time offset information comprises multiple time offset values, the method further comprising initiating, by the RAN and with the edge server, a negotiation session whereby at least one time offset value of the multiple time offset values is selected.

17. The method of claim 1, wherein the time offset information comprises multiple time offset values.

18. The method of claim 17, further comprising initiating, by the RAN and with the edge server, a negotiation session whereby at least one time offset value of the multiple time offset values is selected.

19. The method of claim 1, wherein the time offset information is encoded by reinterpretation of existing fields in existing messages.

20. The method of claim 1, wherein the time offset information is included in a notification message.

~~13.~~ 21. An apparatus configured for wireless communication, comprising:

~~means~~ means for receiving an indication of a ~~traffic flow to be served by a wireless communication system;~~

~~means for determining time offset information for transmissions of the traffic flow based at least in part on the indication; and~~

new flow session for a first traffic flow between an edge server and a user equipment (UE) via the apparatus; means for transmitting ~~the~~, by the apparatus to the edge sever, time offset information in response to the indication~~.~~

~~14. The apparatus of claim 13, wherein the time offset is based on~~ , the time offset information determined prior to establishing the new flow session and based on arrival times of data packets of one or more second traffic flows and without reference to a common clock ~~shared between nodes communicating the traffic flow, and wherein~~, the time offset information ~~comprises a time offset value relative~~configured to ~~the common clock for scheduling traffic transmission of the traffic flow.~~facilitate non-overlapping data packet arrival within a radio access network (RAN).

~~15.~~ 22. The apparatus ~~of~~ claim ~~14~~21, wherein the ~~indication of the traffic flow comprises an indication of a new flow session establishment, and wherein the determining time offset information determines the~~a time offset value of the time offset information is determined for the one or more second traffic ~~flow~~flows prior to establishing the new flow session.

~~16.~~ 23. The apparatus of claim ~~13, wherein the~~21, further comprising means for determining the time offset information, the means for determining including means for determining ~~time offset information determines~~ a plurality of time offset values for scheduling traffic transmission of the first traffic flow, and wherein the means for transmitting the time offset information ~~transmits~~comprises transmitting the plurality of time offset values to an application entity in ~~the~~a wireless communication system.

~~17.~~ 24. The apparatus of claim ~~13~~21, wherein the means for transmitting the time offset information further comprises~~:~~

~~means~~ means for signaling the time offset information to at least one application entity in ~~the~~a wireless communication system~~.~~

~~18. The apparatus of claim 17~~, wherein the at least one application entity includes an Application Function (AF) on ~~an~~the edge server~~.~~

~~19. The apparatus of claim 18,~~, and wherein the time offset information comprises a time offset for scheduling traffic originating from or destined to the edge server.

25. The apparatus of claim 24, wherein the at least one application entity includes an application on the UE.

~~20.~~ 26. The apparatus of claim ~~18~~25, further comprising~~:~~
~~———~~ means for transmitting the time offset information ~~between a Radio Access Network (RAN) and the~~ to the application on the UE via an operating system on the UE.

27. The apparatus of claim 21, further comprising means for transmitting the time offset information between the RAN and an Application Function (AF) in new fields of existing messages, new messages, or in reinterpreted fields of existing messages, wherein the time offset information is transmitted between the AF and a Policy Control Function (PCF), a Session Management Function (SMF) and the PCF, an Access and Mobility Management Function (AMF) and the SMF, or ~~a Radio Access Network (RAN)~~the RAN and the AMF.

~~21.~~ 28. The apparatus of claim ~~20~~27, further comprising~~:~~
~~———~~ means for transmitting the time offset information in a notification message on a 3GPP interface between the AF and the PCF.

~~22.~~ 29. The apparatus of claim ~~20~~27, further comprising~~:~~
~~———~~ means for transmitting the time offset information in a notification message on a 3GPP interface between the RAN and the AMF.

~~23. The apparatus of claim 17, wherein the at least one application entity includes an application on a user device.~~

~~24. The apparatus of claim 23, further comprising:~~

~~———~~ ~~means for transmitting the time offset information to the application on the user device via an operating system on the user device.~~

~~25.~~ 30. A non-transitory computer-readable medium having program code recorded thereon, the program code comprising:
~~———~~ program code executable by a computer in a radio access network (RAN) device for causing the computer to receive an indication of a ~~traffic flow to be served by a wireless communication system;~~
~~———~~ ~~program code executable by a computer for causing the computer to determine time offset information for transmissions of the traffic flow based at least in part on the indication; and~~
~~———~~ ~~program code executable by a~~first flow session for a traffic flow between an edge server and a user equipment (UE) via the RAN device; and program code executable by the computer for causing the computer to transmit, to the edge server, time offset information in response to the indication, the time offset information determined prior to establishing the first flow session and based on arrival times of data packets of one or more second traffic flows and without reference to a common clock, the time offset information configured to facilitate non-overlapping data packet arrival within the RAN.

~~26.~~ 31. The non-transitory computer-readable medium of claim ~~25, wherein the time offset is based on a common clock shared between nodes communicating the traffic flow, and wherein the time offset information comprises~~ 30, wherein a time offset value ~~relative to the common clock for scheduling traffic transmission of the traffic~~of the time offset information is determined for the one or more second traffic flows prior to establishing the first flow session.

~~27.~~ 32. The non-transitory computer-readable medium of claim ~~26, wherein the indication of the traffic flow comprises an indication of a new flow session establishment, and wherein determining~~ 30, further comprising program code executable by the computer for causing the computer to determine the time offset information ~~determines the time offset value of~~, wherein, to determine the time offset information ~~for~~, the ~~traffic flow prior to establishing~~program code executable by the ~~new flow session.~~

~~28. The non-transitory~~ computer-~~readable medium of claim 25, wherein determining~~ for causing the computer to determine the time offset information ~~determines~~is further executable by the computer for causing the computer to determine a plurality of time offset values for scheduling traffic transmission of the traffic flow, and wherein ~~transmitting~~the program code executable by the computer for causing the computer to transmit the time offset information ~~transmits~~is further executable by the computer for causing the computer to transmit the plurality of time offset values to an application entity in ~~the~~a wireless communication system.

~~29.~~ 33. The non-transitory computer-readable medium of claim ~~25~~30, wherein the program code for causing the computer to transmit the time offset information further comprises~~:~~

~~———~~ program code executable by ~~a~~the computer for causing the computer to signal the time offset information to at least one application entity in ~~the~~a wireless communication system.

~~30.~~ 34. The non-transitory computer-readable medium of claim ~~29~~33, wherein the at least one application entity includes an Application Function (AF) on ~~an~~the edge server.

~~31.~~ 35. The non-transitory computer-readable medium of claim ~~30, wherein the time offset information comprises a time offset for scheduling traffic originating from or destined to the edge server.~~

~~32. The non-transitory computer-readable medium of claim 30~~34, further comprising~~:~~

~~———~~ program code for causing the computer to transmit the time offset information between ~~a Radio Access Network (~~the RAN~~)~~ and the AF in new fields of existing messages, new messages, or in reinterpreted fields of existing messages, wherein the time offset information is transmitted between the AF and a Policy Control Function (PCF), a Session Management Function (SMF) and the PCF, an Access and Mobility Management Function (AMF) and the SMF, or ~~a Radio Access Network (~~the RAN~~)~~ and the AMF.

~~33.~~ 36. The non-transitory computer-readable medium of claim ~~32~~35, further comprising~~:~~ ~~———~~ program code for causing the computer to transmit the time offset information in a notification message on a 3GPP interface between the AF and the PCF.

~~34.~~ 37. The non-transitory computer-readable medium of claim ~~32~~35, further comprising~~:~~ ~~———~~ program code for causing the computer to transmit the time offset information in a notification message on a 3GPP interface between the RAN and the AMF.

~~35.~~ 38. The non-transitory computer-readable medium of claim ~~29~~33, wherein the at least one application entity includes an application on ~~a user device~~the UE.

~~36.~~ 39. The non-transitory computer-readable medium of claim ~~35~~38, further comprising~~:~~ ~~———~~ program code for causing the computer to transmit the time offset information to the application on the ~~user device~~UE via an operating system on the ~~user device~~UE.

~~37.~~ 40. An apparatus configured for wireless communication, the apparatus comprising:

~~———~~ at least one processor; and

~~———~~ a memory coupled to the at least one processor, wherein the at least one processor is configured~~:~~

~~————————~~ to: receive an indication of a new flow session for a traffic flow ~~to be served by a wireless communication system;~~

~~————————~~ ~~to determine time offset information for transmissions of the traffic flow based at least in part on the indication;~~between an edge server and

~~————————~~ ~~to~~ a user equipment (UE) via the apparatus; and transmit ~~the~~ time offset information in response to the indication~~.~~

~~38. The apparatus of claim 37, wherein,~~ the time offset ~~is~~information determined prior to establishing the new flow session and based on arrival times of data packets of one or more second traffic flows and without reference to a common clock ~~shared between nodes communicating the traffic flow, and wherein~~ , the time offset information ~~comprises~~ configured to facilitate non-overlapping data packet arrival within a radio access network (RAN).

41. The apparatus of claim 40, wherein a time offset value ~~relative to the common clock for scheduling traffic transmission of the traffic flow.~~

~~39. The apparatus of claim 38, wherein the indication of the traffic flow comprises an indication of a new flow session establishment, and wherein determining~~ of the time offset information ~~determines the time offset value of the time offset information~~is determined for the one or more second traffic ~~flow~~flows prior to establishing the new flow session.

~~40.~~ 42. The apparatus of claim ~~37~~40, wherein ~~determining~~determination of the time offset information ~~determines~~comprises determining a plurality of time offset values for scheduling traffic transmission of the traffic flow, and wherein transmitting the time offset information

~~transmits~~comprises transmitting the plurality of time offset values to an application entity in ~~the~~a wireless communication system.

~~41.~~ 43. The apparatus of claim ~~37~~40, wherein the at least one processor configured to transmit the time offset information is further configured~~:~~

~~———~~ to signal the time offset information to at least one application entity in ~~the~~a wireless communication system.

~~42.~~ 44. The apparatus of claim ~~41~~43, wherein the at least one application entity includes an Application Function (AF) on ~~an~~the edge server.

~~43.~~ 45. The apparatus of claim ~~42~~44, wherein the time offset information comprises a time offset for scheduling traffic originating from or destined to the edge server.

~~44.~~ 46. The apparatus of claim ~~42~~44, wherein the at least one processor is further configured~~:~~

~~———~~ to transmit the time offset information between ~~a Radio Access Network (~~the RAN~~)~~ and the AF in new fields of existing messages, new messages, or in reinterpreted fields of existing messages, wherein the time offset information is transmitted between the AF and a Policy Control Function (PCF), a Session Management Function (SMF) and the PCF, an Access and Mobility Management Function (AMF) and the SMF, or ~~a Radio Access Network (RAN)~~the RAN and the AMF.

~~45.~~ 47. The apparatus of claim ~~44~~46, wherein the at least one processor is further configured~~:~~

~~———~~ to transmit the time offset information in a notification message on a 3GPP interface between the AF and the PCF.

~~46.~~ 48. The apparatus of claim ~~44~~46, wherein the at least one processor is further configured~~:~~

~~———~~ to transmit the time offset information in a notification message on a 3GPP interface between the RAN and the AMF.

~~47.~~ 49. The apparatus of claim ~~41~~43, wherein the at least one application entity includes an application on ~~a user device~~the UE.

~~48.~~ 50. The apparatus of claim ~~47~~49, wherein the at least one processor is further configured~~:~~

~~———~~ to transmit the time offset information to the application on the ~~user device~~UE via an operating system on the ~~user device.~~UE.