WIRELESS COMMUNICATION METHOD AND DEVICE

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims benefit of Chinese patent application No. 2021103853896, filed on April 9, 2021 by GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., and entitled "WIRELESS COMMUNICATION METHOD AND DEVICE", and this application claims benefit of PCT patent application No. PCT/CN2021/088708, filed on April 21, 2021 by GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD., and entitled "WIRELESS COMMUNICATION METHOD AND DEVICE". Contents of the applications are hereby incorporated by reference in their entirety.

TECHNICAL FIELD

[0002] Embodiments of the present disclosure relate to the field of communication, and in particular to a wireless communication method and devices.

BACKGROUND

[0003] In standard 802.11bc, a Station (STA) can rapidly discover (i.e. rapidly obtain) an Enhanced Broadcast Service (eBCS) through an Access Network Query Protocol (ANQP) request and an ANQP response, or through an eBCS request and an eBCS response. However, at present, there is no authentication information of the eBCS in the enhanced broadcast response ANQP-element structure in the ANQP response. Likewise, at present, there is no authentication information of the eBCS in the eBCS response element structure in the eBCS response. Therefore, the STA cannot obtain the authentication information of the eBCS through the ANQP request and the ANQP response, or through the eBCS request and the eBCS response, but has to receive eBCS info frame before obtaining the authentication information of the eBCS.

[0004] However, transmission period of the eBCS info frame is large, and transmission interval is Target Beacon Transmission Time (TBTTs). At this time, for eBCS authenticated by Public Key Frame Authentication (PKFA), waiting for the authentication information provided by the eBCS info frame would increase authentication delay of PKFA MAC Protocol Data Unit (MPDU), which cannot satisfy authentication requirement of PKFA for delay-sensitive data. For Hash Chain Frame

CLAIMS

1. A wireless communication method, comprising:

sending, by a sending end, an Access Network Query Protocol (ANQP) request to a receiving end, wherein the ANQP request comprises a requested time to termination, and the requested time to termination is a time when the sending end requests for terminating an Enhanced Broadcast Service (eBCS).

2. The method of claim 1, wherein the ANQP request comprises an enhanced broadcast request ANQP-element structure, the enhanced broadcast request ANQP-element structure comprises enhanced broadcast services request tuples, and the enhanced broadcast services request tuples comprise the requested time to termination.

3. The method of claim 1 or 2, wherein the ANQP request comprises a broadcast action field, and a reserved field of the broadcast action field carries a requested time to termination present,

wherein the requested time to termination present is configured to indicate whether the ANQP request comprises the requested time to termination.

4. The method of claim 2, wherein the enhanced broadcast services request tuples comprise an enhanced broadcast services request control field, and the enhanced broadcast services request control field comprises a requested time to termination present,

wherein the requested time to termination present is configured to indicate whether the ANQP request comprises the requested time to termination.

5. The method of any one of claims 1 to 4, wherein the eBCS is an eBCS which needs registration and does not need association, and the ANQP request is configured to request an extension of the eBCS.

6. A wireless communication method, comprising:

receiving, by a receiving end, an Access Network Query Protocol (ANQP) request from a sending end, wherein the ANQP request comprises a requested time to termination, and the requested time to termination is a time when the sending end requests for terminating an Enhanced Broadcast Service (eBCS).

7. The method of claim 6, wherein the ANQP request comprises an enhanced broadcast request ANQP-element structure, the enhanced broadcast request ANQP-element structure comprises enhanced broadcast services request tuples, and the enhanced broadcast services request tuples comprise the requested time to termination.

8. The method of claim 6 or 7, wherein the ANQP request comprises a broadcast action field, and a reserved field of the broadcast action field carries a requested time to termination present,

wherein the requested time to termination present is configured to indicate whether the ANQP request comprises the requested time to termination.

9. The method of claim 7, wherein the enhanced broadcast services request tuples comprise an enhanced broadcast services request control field, and the enhanced broadcast services request control field comprises a requested time to termination present,

wherein the requested time to termination present is configured to indicate whether the ANQP request comprises the requested time to termination.

10. The method of any one of claims 6 to 9, wherein the eBCS is an eBCS which needs registration and does not need association, and the ANQP request is configured to request an extension of the eBCS.

11. A sending end comprising a processor and a memory, wherein the memory is configured to store a computer program, and the processor is configured to invoke and run the computer program stored in the memory to perform the method of any one of claims 1 to 5.

12. A receiving end comprising a processor and a memory, wherein the memory is configured to store a computer program, and the processor is configured to invoke and run the computer program stored in the memory to perform the method of any one of claims 6 to 10.

13. A computer-readable storage medium for storing a computer program that causes a computer to perform the method of any one of claims 1 to 10.