

ABSTRACT

This application relates to the field of WLAN technologies, and in particular, to a target wake time-based communication method, an apparatus, and a system, which may be applied to a wireless communication system that supports the 802.11be standard or the EHT standard. In the method, an AP indicates a candidate traffic identifier corresponding to traffic that is allowed to be transmitted within a restricted TWT SP. When requesting to join a restricted TWT, a STA selects one or more traffic identifiers from the candidate traffic identifier indicated by the AP. Traffic corresponding to the traffic identifier selected by the STA is traffic that the STA requests to transmit within the restricted TWT SP. After receiving a request of the STA for joining the restricted TWT, the AP may allow the STA to join the restricted TWT, to transmit, within the restricted TWT SP, the traffic corresponding to the traffic identifier selected by the STA. In other words, in this application, the AP restricts the traffic identifier used for transmission within the restricted TWT SP, so that the STA can be restricted to randomly transmit traffic within the restricted TWT SP as much as possible. This improves traffic fairness between STAs and improves quality of service of low-latency traffic.