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(54) **COMMUNICATION APPARATUS AND  
COMMUNICATION METHOD FOR  
MULTI-LINK TRAFFIC INDICATION MAP**

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(57) **ABSTRACT**  
The present disclosure provides communication apparatuses and methods for multi-link traffic indication map, the communication apparatus being an Access Point (AP) of a plurality of APs affiliated with an AP multi-link device (MLD), each of the plurality of APs operating in a corresponding link of the AP MLD, the AP comprising: circuitry, which in operation, generates a frame comprising a traffic indication map (TIM) element and a presence bitmap, the element comprising a partial virtual bitmap (PVM) indicating presence of one or more buffered units for one of a non-AP STA or a non-AP MLD associated with the AP or the AP MLD, the presence bitmap indicating whether additional information relating to the one or more BUs is present in the frame for the one of the non-AP STA or the non-AP MLD; and a transmitter, which in operation, transmits the frame in a link.

