

COMMUNICATION METHOD, APPARATUS, AND SYSTEM

ABSTRACT

A communication method, apparatus, and system are provided, which supports flexible changes in a quantity of ports for reference signals when RF channels are dynamically disabled. A network device sends, on some or all resources in a base reference signal resource, a reference signal of m_1 ports. The base reference signal resource may be used to transmit a reference signal of a maximum of M ports, and supports channel estimation for a maximum of K ports. The m_1 ports used for the reference signals are from the M ports. A terminal may perform channel estimation based on base channel estimation assistance information and the reference signal, and then send CSI. In the method, $m_1 \leq k_1 \leq K$, and $m_1 \leq M \leq K$. That is, by using the base channel estimation assistance information, the terminal can perform channel estimation based on a reference signal of a small quantity of ports, to obtain a channel of a large quantity of ports. As a quantity of ports for reference signals sent over an air interface decreases, and port multiplexing is considered, air interface overhead introduced by the reference signals is reduced.

FIG. 4