WHAT IS CLAIMED IS:

1. A first device comprising:

at least one processor; and

at least one memory including computer program code;

the at least one memory and the computer program codes are configured to, with the at least one processor, cause the first device to:

receive a resource configuration of configured grant transmission from a second device;

determine whether a timing advance is valid in a subsequent configured grant occasion for a small data transmission based on a first timer and the resource configuration;

perform an evaluation of a validity condition for a small data transmission, wherein the validity condition is a reference signal received power, RSRP, based timing advance validity condition;

determine whether the evaluation of the validity condition for the small data transmission is applicable in the subsequent configured grant occasion based on a second timer and the resource configuration, wherein the evaluation of the validity condition remains valid for a certain period according to the second timer after the evaluation is performed; and

initiate the small data transmission in the subsequent configured grant occasion if the timing advance is valid and the evaluation of the validity condition for the small data transmission is applicable in the subsequent configured grant occasion.

2. The first device of claim 1, wherein the at least one memory and the computer program code are configured to, with the at least one processor, cause the first device to determine whether the timing advance is valid by:

determining whether the first timer remains running until the subsequent configured grant occasion; and

in accordance with a determination that the first timer remains running until the subsequent configured grant occasion, determining that the timing advance is valid.

3. The first device of claim 1 or claim 2, wherein the at least one memory and the computer program code are configured to, with the at least one processor, cause the first device to determine whether the timing advance is valid by:

in accordance with a determination that the small data transmission is initiated, determining whether the timing advance is valid during selecting a transmission type for the small data

transmission, the transmission type comprising the configured grant transmission or a random access transmission.

4. The first device of any one of claims 1-3, wherein the at least one memory and the computer program code are configured to, with the at least one processor, cause the first device to:

in accordance with a determination that the timing advance is invalid, perform the small data transmission in a random access procedure or initiate a non-small data transmission procedure.

5. The first device of any one of claims 1-4, wherein the at least one memory and the computer program code are configured to, with the at least one processor, further cause the first device to perform the small data transmission in the subsequent configured grant occasion based on the determination and at least one of:

a data volume of the small data transmission, or

a reference signal received power.

6. The first device of any one of claims 1-5, wherein the first device comprises a terminal device and the second device comprises a network device.

7. The first device of any one of claims 1-6, wherein the second timer is up to 640 ms.

8. A system comprising a network device and a terminal device,

wherein the network device comprises:

at least one processor; and

at least one memory including computer program code,

wherein the at least one memory and the computer program code are configured to, with the at least one processor, cause the network device to:

transmit a resource configuration of a configured grant transmission to the terminal device; and

receive a small data transmission from the terminal device in a subsequent configured grant occasion, and

wherein the terminal device comprises:

at least one processor; and

at least one memory including computer program code,

wherein the at least one memory and the computer program code are configured to:

determine whether a timing advance is valid in the subsequent configured grant occasion for a small data transmission based on a first timer and the resource configuration;

perform an evaluation of a validity condition for a small data transmission, wherein the validity condition is a reference signal received power, RSRP, based timing advance validity condition, and

determine whether the evaluation of the validity condition for the small data transmission is applicable in the subsequent configured grant occasion based on a second timer and the resource configuration, wherein the evaluation of the validity condition remains valid for a certain period according to the second timer after the evaluation is performed; and

initiate the small data transmission in the subsequent configured grant occasion if the timing advance is valid and the evaluation of the validity condition for the small data transmission is applicable in the subsequent configured grant occasion.

9. A method, comprising:

receiving, at a first device, a resource configuration of configured grant transmission from a second device;

determining whether a timing advance is valid in a subsequent configured grant occasion for a small data transmission based on a first timer and the resource configuration;

performing an evaluation of a validity condition for a small data transmission, wherein the validity condition is a reference signal received power, RSRP, based timing advance validity condition;

determining whether the evaluation of the validity condition for the small data transmission is applicable in the subsequent configured grant occasion based on a second timer and the resource configuration wherein the evaluation of the validity condition remains valid for a certain period according to the second timer after the evaluation is performed; and

initiating, by the first device, the small data transmission in the subsequent configured grant occasion if the timing advance is valid and the evaluation of the validity condition for the small data transmission is applicable in the subsequent configured grant occasion.

10. The method of claim 9, wherein determining whether the timing advance is valid comprises:

determining whether the first timer remains running until the subsequent configured grant occasion; and

in accordance with a determination that the first timer remains running until the subsequent configured grant occasion, determining that the timing advance is valid.

11. The method of claim 9 or claim 11, wherein determining whether the timing advance is valid comprises:

in accordance with a determination that the small data transmission is initiated, determining whether the timing advance is valid during selecting a transmission type for the small data transmission, the transmission type comprising the configured grant transmission or a random access transmission.

12. The method of any one of claims 9-11, further comprising:

in accordance with a determination that the timing advance is invalid, performing, by the first device, the small data transmission in a random access procedure or initiating a non-small data transmission procedure.

13. The method of any one of claims 9-12, wherein performing the small data transmission in the subsequent configured grant occasion comprises:

initiating, by the first device, the small data transmission in the subsequent configured grant occasion based on the determination and at least one of:

a data volume of the small data transmission, or

a reference signal received power.

14. The method of any one of claims 9-13, wherein the first device comprises a terminal device and the second device comprises a network device.

15. The method of claim 14 further comprising:

transmitting, at the network device, the resource configuration of configured grant transmission to the terminal device; and

transmitting, at the terminal device, the small data transmission in the subsequent configured grant occasion based on the determination.

16. A computer readable storage medium comprising program instructions stored thereon, the instructions, when executed by an apparatus, causing the apparatus to perform the method of any one of claims 9-15 .