**3GPP TSG-RAN WG2 Meeting #126R2-2405987**

**Fukuoka, Japan, 20th - 24th May., 2024**

**Title:** LS on relative velocity

**Response to:**

**Release:** Release 18

**Work Item:** NR\_pos\_enh2

**Source:** *Nokia* [to be **TSG RAN WG2**]

**To:** TSG SA WG2

**Cc:**

**Contact Person:**

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**Send any reply LS to: 3GPP Liaisons Coordinator,** **mailto:3GPPLiaison@etsi.org**

**Attachments:** -

**1. Overall Description:**

RAN2 agreed to support “*relative velocity with uncertainty*” in SLPP TS 38.355 which is defined in Section 8.4a in TS 23.032 by “*a radial velocity component and a perpendicular transverse velocity component.”*

To this end, RAN2 adopted the following parametrization of the two components:

*Parameters of the* ***radial velocity component****:*

* *radial velocity [measured in meters / second]*
* *uncertainty and confidence for radial velocity*

*Parameters of the* ***transverse velocity component****:*

* *azimuth rate of change in time [measured in degrees / second]*
* *elevation rate of change in time [measured in degrees / second]*
* *uncertainty and confidence for azimuth rate of change*
* *uncertainty and confidence for elevation rate of change*

*whereby*

* *radial velocity is defined as rate of change of a range between devices A and B*
* *azimuth and elevation are defined with respect to the direction from the device A to the device B.*

**2. Actions:**

**To SA2:**

**ACTION:** RAN2 would like to ask SA2 to kindly confirm that the above parametrization is correct and complete. If this is not the case, RAN2 would like to request further clarification of the “*relative velocity with uncertainty”* definition.

**3. Date of Next TSG-RAN WG2 Meeting:**

RAN2#127 from 2024-08-19 to 2024-08-23 Maastricht, NL

RAN2#127bis from 2024-10-14 to 2024-10-18 China (TBC)