DDE Supplement / Attachment

DDIdentifier(10)	DDEName
	Actual relative connector angle [°]

Introduction:

When working with Section Control it is necessary that the TC-Server calculates the exact position of the implement and its boom and sections to mark the covered area on its section control screen properly. To calculate the positions the TC-SC server uses the x and y offsets of the DRP and CRP. This works well for mounted and for non-steered trailed implements but comes up against limits when implements do have a steering axle or even a steering drawbar because the TC-SC server can't know the current steering angle and moving the DRP doesn't fit in all means. But this could be solved when the TC-SC server would knew the exact angle of the implement related to the tractor. This information could be provided by the implement because when they have a steering mechanism they even have a sensor to measure the angle between tractor and implement.

Description:

The DDI *Actual relative connector angle* shall be placed in the device element of type connector in the DDOP of the TC-SC Client. The value describes the actual angle of the longitudinal axis of the implement relative to the longitudinal axis of the tractor. This angle should be used by the TC-SC server to calculate the real position of implement. The TC-SC server may smooth the rendering in any proprietary screen.

The reference system is the coordinate system of the tractor. This results in the angles from table 1.

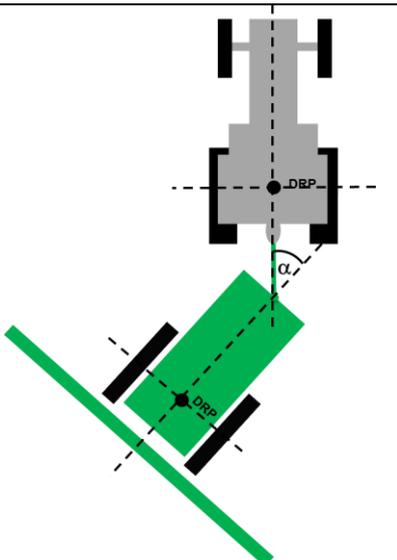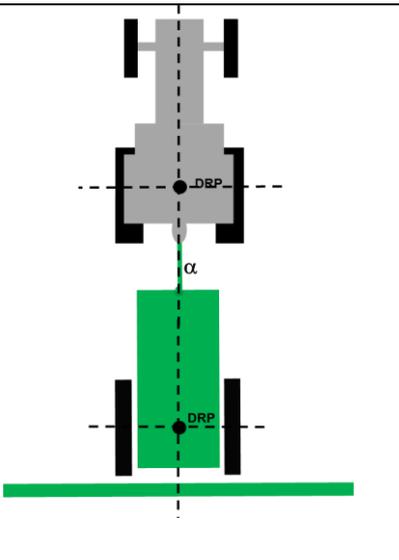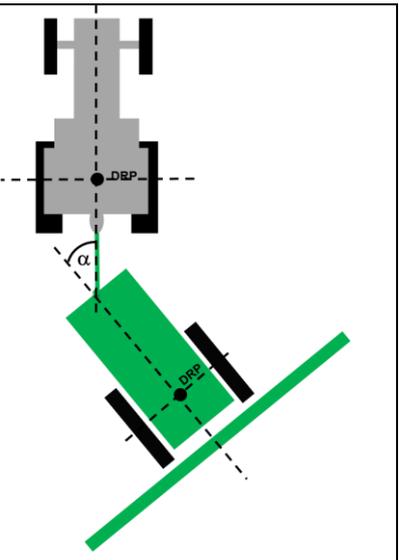In case of for example a malfunction sensor the error value is set to 0xFExxxxxx.

Positive angle ($\alpha > 0°$)	$\alpha = 0°$	Negative angle ($\alpha < 0°$)

Table 1: Angle definition

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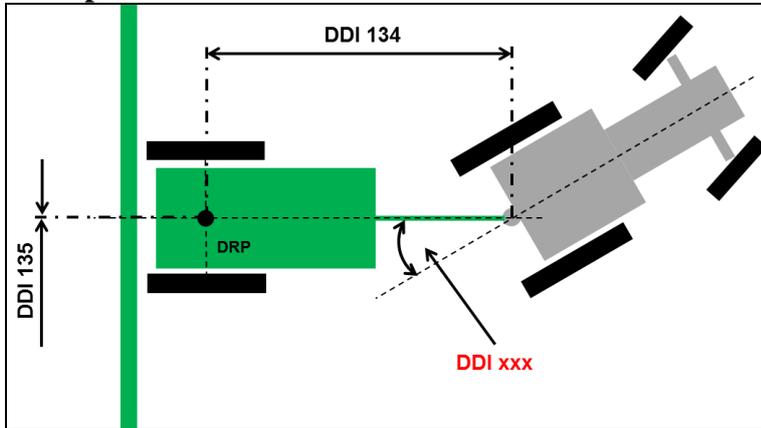
Examples:

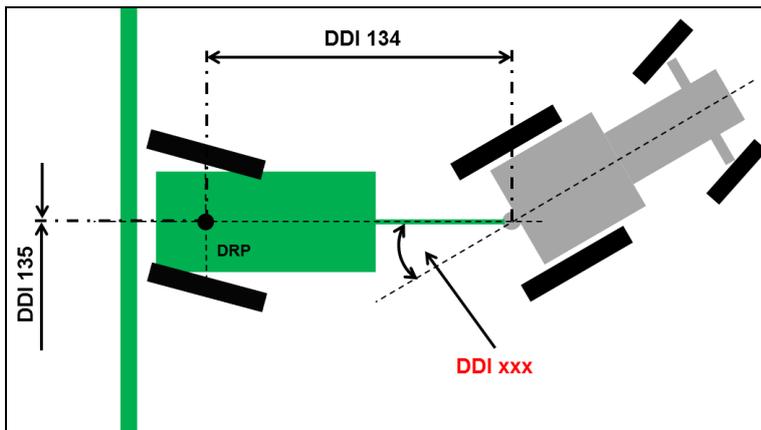**Figure 1: Example for non-steered implements**

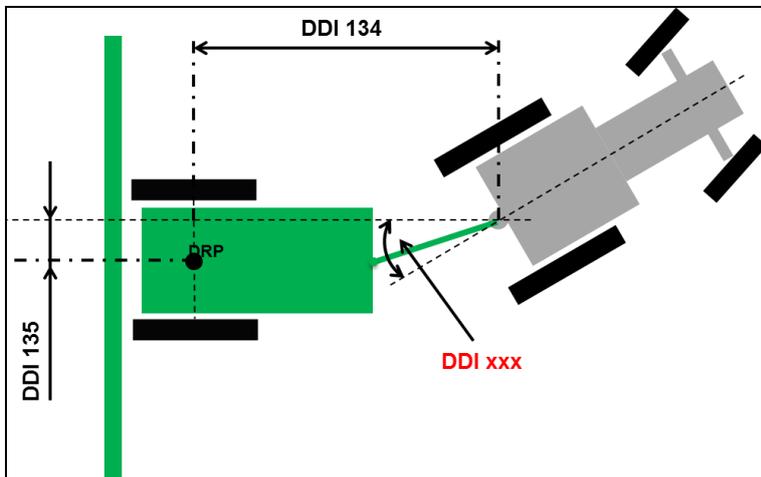**Figure 2: Example for implements with steering axis**

Figure 3: Example for implements with drawbar steering (with modified DDI 134, DDI135)