Snap-shot of the

ISO 11783-11 online data base

DD Entity	0 - Data Dictionary Version
Definition	This DDE is used to specify which version of the Data Dictionary is being used.
Comment	This DDE was a result of Jan 2005 Task Controller meeting.
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	11783-Part 10 Task Force
Submit Date	2005-01-20
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2005-02-02
Status Comments	

DD Entity	1 - Setpoint Volume Per Area Application Rate
Definition	Setpoint Application Rate specified as volume per area in [mm³/m²]
Comment	Test-Comment for change/update test
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 10 - Irrigation
Unit Symbol	mm³/m² - Capacity per area unit
Resolution	0,01
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,00 - 21474836,47
Submit by	Part 10 Task Force
Submit Date	0000-00-00
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	Published
Status Date	2020-02-03
Status Comments	Test Comment for Update test
Attachment	2019-06-11: - May 8 19 TUI M3 Features and Roadmap w planning-v1.pdf
Attachment	2020-07-20: test - Test-v1.jdf

DD Entity	2 - Actual Volume Per Area Application Rate
Definition	Actual Application Rate specified as volume per area
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/mÂ² - Capacity per area unit
Resolution	0,01
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,00 - 21474836,47
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.
Attachment	2023-09-23: NEW TEST - Kids Club roles-v2.pdf

DD Entity	3 - Default Volume Per Area Application Rate
Definition	Default Application Rate specified as volume per area
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/mÂ² - Capacity per area unit
Resolution	0,01
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,00 - 21474836,47
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	4 - Minimum Volume Per Area Application Rate
Definition	Minimum Application Rate specified as volume per area
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/mÂ² - Capacity per area unit
Resolution	0,01
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,00 - 21474836,47
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	5 - Maximum Volume Per Area Application Rate
Definition	Maximum Application Rate specified as volume per area
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/mÂ² - Capacity per area unit
Resolution	0,01
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,00 - 21474836,47
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	6 - Setpoint Mass Per Area Application Rate
Definition	Setpoint Application Rate specified as mass per area
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	7 - Actual Mass Per Area Application Rate
Definition	Actual Application Rate specified as mass per area
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	8 - Default Mass Per Area Application Rate
Definition	Default Application Rate specified as mass per area
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	9 - Minimum Mass Per Area Application Rate
Definition	Minimum Application Rate specified as mass per area
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	10 - Maximum Mass Per Area Application Rate
Definition	Maximum Application Rate specified as mass per area
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 10 - Irrigation
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	11 - Setpoint Count Per Area Application Rate
Definition	Setpoint Application Rate specified as count per area
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	/mÂ² - Quantity per area unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	12 - Actual Count Per Area Application Rate
Definition	Actual Application Rate specified as count per area
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
Unit Symbol	/mÂ² - Quantity per area unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	13 - Default Count Per Area Application Rate
Definition	Default Application Rate specified as count per area
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
Unit Symbol	/mÂ² - Quantity per area unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	14 - Minimum Count Per Area Application Rate
Definition	Minimum Application Rate specified as count per area
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	/mÂ² - Quantity per area unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	15 - Maximum Count Per Area Application Rate
Definition	Maximum Application Rate specified as count per area
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	/mÂ² - Quantity per area unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	16 - Setpoint Spacing Application Rate
Definition	Setpoint Application Rate specified as distance: e.g. seed spacing of a precision seeder
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	17 - Actual Spacing Application Rate
Definition	Actual Application Rate specified as distance: e.g. seed spacing of a precision seeder
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	18 - Default Spacing Application Rate
Definition	Default Application Rate specified as distance: e.g. seed spacing of a precision seeder
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	19 - Minimum Spacing Application Rate
Definition	Minimum Application Rate specified as distance: e.g. seed spacing of a precision seeder
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	20 - Maximum Spacing Application Rate
Definition	Maximum Application Rate specified as distance: e.g. seed spacing of a precision seeder
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	21 - Setpoint Volume Per Volume Application Rate
Definition	Setpoint Application Rate specified as volume per volume
Comment	
Typically used by Device Class(es)	5 - Fertilizer 6 - Sprayers
Unit Symbol	mm³/m³ - Capacity per capacity unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	22 - Actual Volume Per Volume Application Rate
Definition	Actual Application Rate specified as volume per volume
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/mÂ³ - Capacity per capacity unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	23 - Default Volume Per Volume Application Rate
Definition	Default Application Rate specified as volume per volume
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/mÂ³ - Capacity per capacity unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	24 - Minimum Volume Per Volume Application Rate
Definition	Minimum Application Rate specified as volume per volume
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/mÂ³ - Capacity per capacity unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	25 - Maximum Volume Per Volume Application Rate
Definition	Maximum Application Rate specified as volume per volume
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/mÂ³ - Capacity per capacity unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	26 - Setpoint Mass Per Mass Application Rate
Definition	Setpoint Application Rate specified as mass per mass
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	mg/kg - Mass per mass unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	27 - Actual Mass Per Mass Application Rate
Definition	Actual Application Rate specified as mass per mass
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	mg/kg - Mass per mass unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	28 - Default Mass Per Mass Application Rate
Definition	Default Application Rate specified as mass per mass
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mg/kg - Mass per mass unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	29 - Minimum Mass Per Mass Application Rate
Definition	Minimum Application Rate specified as mass per mass
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mg/kg - Mass per mass unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	30 - MaximumMass Per Mass Application Rate
Definition	Maximum Application Rate specified as mass per mass
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mg/kg - Mass per mass unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	31 - Setpoint Volume Per Mass Application Rate
Definition	Setpoint Application Rate specified as volume per mass
Comment	
Typically used by Device Class(es)	5 - Fertilizer
	6 - Sprayers
Unit Symbol	mm³/kg - Capacity per mass unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	32 - Actual Volume Per Mass Application Rate
Definition	Actual Application Rate specified as volume per mass
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	9 - Forage harvester
Unit Symbol	mmÂ³/kg - Capacity per mass unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	Added device class 9 - Forage Harvester

DD Entity	33 - Default Volume Per Mass Application Rate
Definition	Default Application Rate specified as volume per mass
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/kg - Capacity per mass unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	34 - Minimum Volume Per Mass Application Rate
Definition	Minimum Application Rate specified as volume per mass
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/kg - Capacity per mass unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	35 - Maximum Volume Per Mass Application Rate
Definition	Maximum Application Rate specified as volume per mass
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/kg - Capacity per mass unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	36 - Setpoint Volume Per Time Application Rate
Definition	Setpoint Application Rate specified as volume per time
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/s - Flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	37 - Actual Volume Per Time Application Rate
Definition	Actual Application Rate specified as volume per time
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/s - Flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	38 - Default Volume Per Time Application Rate
Definition	Default Application Rate specified as volume per time
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/s - Flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	39 - Minimum Volume Per Time Application Rate
Definition	Minimum Application Rate specified as volume per time
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/s - Flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	40 - Maximum Volume Per Time Application Rate
Definition	Maximum Application Rate specified as volume per time
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mmÂ³/s - Flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	41 - Setpoint Mass Per Time Application Rate
Definition	Setpoint Application Rate specified as mass per time
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	42 - Actual Mass Per Time Application Rate
Definition	Actual Application Rate specified as mass per time
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	43 - Default Mass Per Time Application Rate
Definition	Default Application Rate specified as mass per time
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	44 - Minimum Mass Per Time Application Rate
Definition	Minimum Application Rate specified as mass per time
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	45 - Maximum Mass Per Time Application Rate
Definition	Maximum Application Rate specified as mass per time
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	46 - Setpoint Count Per Time Application Rate
Definition	Setpoint Application Rate specified as count per time
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	47 - Actual Count Per Time Application Rate
Definition	Actual Application Rate specified as count per time
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	48 - Default Count Per Time Application Rate
Definition	Default Application Rate specified as count per time
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	49 - Minimum Count Per Time Application Rate
Definition	Minimum Application Rate specified as count per time
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	50 - Maximum Count Per Time Application Rate
Definition	Maximum Application Rate specified as count per time
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	51 - Setpoint Tillage Depth
Definition	Setpoint Tillage Depth of Device Element below soil surface, value increases with depth. In case of a negative value the system will indicate the distance above the ground.
Comment	
Typically used by Device Class(es)	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	8 - Root Harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2015-06-16
Status Comments	

DD Entity	52 - Actual Tillage Depth
Definition	Actual Tillage Depth of Device Element below soil surface, value increases with depth. In case of a negative value the system will indicate the distance above the ground.
Comment	
Typically used by Device Class(es)	2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2015-06-16
Status Comments	

DD Entity	53 - Default Tillage Depth
Definition	Default Tillage Depth of Device Element below soil surface, value increases with depth. In case of a negative value the system will indicate the distance above the ground.
Comment	Use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 8 - Root Harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2015-06-16
Status Comments	

DD Entity	54 - Minimum Tillage Depth
Definition	Minimum Tillage Depth of Device Element below soil surface, value increases with depth. In case of a negative value the system will indicate the distance above the ground.
Comment	Supplied by device as physical minimum
Typically used by Device Class(es)	2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 8 - Root Harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2015-06-16
Status Comments	

DD Entity	55 - Maximum Tillage Depth
Definition	Maximum Tillage Depth of Device Element below soil surface, value increases with depth. In case of a negative value the system will indicate the distance above the ground.
Comment	Supplied by device as physical maximum
Typically used by Device Class(es)	2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 8 - Root Harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2015-06-16
Status Comments	

DD Entity	56 - Setpoint Seeding Depth
Definition	Setpoint Seeding Depth of Device Element below soil surface, value increases with depth
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	57 - Actual Seeding Depth
Definition	Actual Seeding Depth of Device Element below soil surface, value increases with depth
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	58 - Default Seeding Depth
Definition	Default Seeding Depth of Device Element below soil surface, value increases with depth
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	59 - Minimum Seeding Depth
Definition	Minimum Seeding Depth of Device Element below soil surface, value increases with depth
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	60 - Maximum Seeding Depth
Definition	Maximum Seeding Depth of Device Element below soil surface, value increases with depth
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	61 - Setpoint Working Height
Definition	Setpoint Working Height of Device Element above crop or soil
Comment	
Typically used by Device Class(es)	0 - Non-specific system 5 - Fertilizer 6 - Sprayers 7 - Harvesters 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	62 - Actual Working Height
Definition	Actual Working Height of Device Element above crop or soil
Comment	This is the height above the effective control surface. For sprayers this is the height above the crop canapé and for fertilizer spreaders, harvesters, etc it is the height above the ground.
Typically used by Device Class(es)	5 - Fertilizer 6 - Sprayers 7 - Harvesters 9 - Forage harvester 10 - Irrigation
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	Added comment for clarification.

DD Entity	63 - Default Working Height
Definition	Default Working Height of Device Element above crop or soil
Comment	use when missing Position data or outside any Treatment Zone
Typically used by Device Class(es)	5 - Fertilizer 6 - Sprayers 7 - Harvesters 9 - Forage harvester 10 - Irrigation
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	64 - Minimum Working Height
Definition	Minimum Working Height of Device Element above crop or soil
Comment	supplied by device as physical minimum
Typically used by Device Class(es)	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	9 - Forage harvester
	10 - Irrigation
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	65 - Maximum Working Height
Definition	Maximum Working Height of Device Element above crop or soil
Comment	supplied by device as physical maximum
Typically used by Device Class(es)	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	9 - Forage harvester
	10 - Irrigation
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	66 - Setpoint Working Width
Definition	Setpoint Working Width of Device Element
Comment	
Typically used by Device Class(es)	0 - Non-specific system
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	67 - Actual Working Width
Definition	Actual Working Width of Device Element
Comment	This is the effective / active working width during operation.
Typically used by Device Class(es)	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force

Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	Added comment for clarification.

DD Entity	68 - Default Working Width
Definition	Default Working Width of Device Element
Comment	
Typically used by Device Class(es)	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	69 - Minimum Working Width
Definition	Minimum Working Width of Device Element
Comment	
Typically used by Device Class(es)	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1

Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	70 - Maximum Working Width
Definition	Maximum Working Width of Device Element
Comment	
Typically used by Device Class(es)	2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	71 - Setpoint Volume Content
Definition	Setpoint Device Element Content specified as volume
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	72 - Actual Volume Content
Definition	Actual Device Element Content specified as volume
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	73 - Maximum Volume Content
Definition	Maximum Device Element Content specified as volume
Comment	is a minimum needed as well ??
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02

Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	74 - Setpoint Mass Content
Definition	Setpoint Machine Element Content specified as mass
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	75 - Actual Mass Content
Definition	Actual Device Element Content specified as mass
Comment	If the device is equipped with a weighing system which provides the possibility to tare the current load it is possible that the value has a negative sign in case of an unload operation.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	2

Current Status	ISO-Published
Status Date	2011-04-04
Status Comments	

DD Entity	76 - Maximum Mass Content
Definition	Maximum Device Element Content specified as mass
Comment	is a minimum needed as well ??
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	77 - Setpoint Count Content
Definition	Setpoint Device Element Content specified as count
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02

Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	78 - Actual Count Content
Definition	Actual Device Element Content specified as count
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	79 - Maximum Count Content
Definition	Maximum Device Element Content specified as count
Comment	is a minimum needed as well ??
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	80 - Application Total Volume in [L]
Definition	Accumulated Application specified as volume in liter [L]
Comment	is a counter of a device element
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	L - Capacity count
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	81 - Application Total Mass in [kg]
Definition	Accumulated Application specified as mass in kilogram [kg]
Comment	is a counter of a device element
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	82 - Application Total Count
Definition	Accumulated Application specified as count
Comment	is a counter of a device element
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	83 - Volume Per Area Yield
Definition	Yield as volume per area
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	ml/mÂ² - Capacity per area large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	84 - Mass Per Area Yield
Definition	Yield as mass per area, not corrected for the reference moisture percentage DDI 184.
Comment	This Mass per Area yield is the mass that includes the actual percentage moisture (DDI 99) if this is measured on e.g. harvesting equipment. This comment is added to clarify and differentiate this DDI from the Dry Mass Per Area Yield (DDI 181).
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	85 - Count Per Area Yield
Definition	Yield as count per area
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	/mÂ² - Quantity per area unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	86 - Volume Per Time Yield
Definition	Yield as volume per time
Comment	
Typically used by Device Class(es)	0 - Non-specific system
Unit Symbol	ml/s - Float large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	87 - Mass Per Time Yield
Definition	Yield as mass per time, not corrected for the reference moisture percentage DDI 184.
Comment	This Mass per Time yield is the mass that includes the actual percentage moisture (DDI 99) if this is measured on e.g. harvesting equipment. This comment is added to clarify and differentiate this DDI from the Dry Mass Per Time Yield (DDI 182).
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	88 - Count Per Time Yield
Definition	Yield as count per time
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	89 - Yield Total Volume
Definition	Accumulated Yield specified as volume
Comment	is a counter of a machine element
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	L - Quantity per volume
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	90 - Yield Total Mass
Definition	Accumulated Yield specified as mass, not corrected for the reference moisture percentage DDI 184.
Comment	This Yield Total Mass is the mass that includes the average percentage moisture (DDI 262) if this is measured on e.g. harvesting equipment. This comment is added to clarify and differentiate this DDI from the Yield Total Dry Mass (DDI 183).
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	91 - Yield Total Count
Definition	Accumulated Yield specified as count
Comment	is a counter of a machine element
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	92 - Volume Per Area Crop Loss
Definition	Crop yield loss as volume per area
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	ml/mÂ² - Capacity per area large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	93 - Mass Per Area Crop Loss
Definition	Crop yield loss as mass per area
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	94 - Count Per Area Crop Loss
Definition	Crop yield loss as count per area
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
Unit Symbol	/mÂ² - Quantity per area unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	95 - Volume Per Time Crop Loss
Definition	Crop yield loss as volume per time
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	ml/s - Float large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	96 - Mass Per Time Crop Loss
Definition	Crop yield loss as mass per time
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	97 - Count Per Time Crop Loss
Definition	Crop yield loss as count per time
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	98 - Percentage Crop Loss
Definition	Crop yield loss
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	11 - Transport / Trailers
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	99 - Crop Moisture
Definition	Moisture in crop yield
Comment	This DDE defines the actual percentage moisture of the crop.
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	100 - Crop Contamination
Definition	Dirt or foreign material in crop yield
Comment	This DDE defines the contamination in ratio of the yield DDI units.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	101 - Setpoint Bale Width
Definition	Setpoint Bale Width for square baler or round baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	102 - Actual Bale Width
Definition	Actual Bale Width for square baler or round baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	103 - Default Bale Width
Definition	Default Bale Width for square baler or round baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	104 - Minimum Bale Width
Definition	Minimum Bale Width for square baler or round baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	105 - Maximum Bale Width
Definition	Maximum Bale Width for square baler or round baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	106 - Setpoint Bale Height
Definition	Setpoint Bale Height is only applicable to square baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	107 - ActualBaleHeight
Definition	Actual Bale Height is only applicable to square baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	108 - Default Bale Height
Definition	Default Bale Height is only applicable to square baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	109 - Minimum Bale Height
Definition	Minimum Bale Height is only applicable to square baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	110 - Maximum Bale Height
Definition	Maximum Bale Height is only applicable to square baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	111 - Setpoint Bale Size
Definition	Setpoint Bale Size as length for a square baler or diameter for a round baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	112 - Actual Bale Size
Definition	Actual Bale Size as length for a square baler or diameter for a round baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	113 - Default Bale Size
Definition	Default Bale Size as length for a square baler or diameter for a round baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	114 - Minimum Bale Size
Definition	Minimum Bale Size as length for a square baler or diameter for a round baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	115 - Maximum Bale Size
Definition	Maximum Bale Size as length for a square baler or diameter for a round baler
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	116 - Total Area
Definition	Accumulated Area
Comment	is a counter of a machine element
Typically used by Device Class(es)	0 - Non-specific system
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	mÂ² - Area
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	117 - Effective Total Distance
Definition	Accumulated Distance in working position
Comment	is a counter of a machine element
Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647

Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	118 - Ineffective Total Distance
Definition	Accumulated Distance out of working position
Comment	is a counter of a machine element
Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	119 - Effective Total Time
Definition	Accumulated Time in working position
Comment	is a counter of a machine element
Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	17 - Sensor System
Unit Symbol	s - Time count

Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	2
Current Status	ISO-Published
Status Date	2011-12-21
Status Comments	

DD Entity	120 - Ineffective Total Time
Definition	Accumulated Time out of working position
Comment	is a counter of a machine element
Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	s - Time count
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	121 - Product Density Mass Per Volume
Definition	Product Density as mass per volume
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	mg/l - Mass per capacity unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647

Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	122 - Product Density Mass PerCount
Definition	Product Density as mass per count
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	mg/1000 - 1000 seed Mass
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	123 - Product Density Volume Per Count
Definition	Product Density as volume per count
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	ml/1000 - Volume per quantity unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2003-08-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02

Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	124 - Auxiliary Valve Scaling Extend
Definition	Factor to apply to AuxValveCommand PortFlowCommand. The scaling of the port flow relates to flow, not to spool position, although the position of the spool is of course indirectly affected.
Comment	
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	% - Percent
Resolution	0,1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Lars Althof
Submit Date	2004-09-10
Submit Company	57 - Sauer-Danfoss Co.
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	125 - Auxiliary Valve Scaling Retract
Definition	Factor to apply to AuxValveCommand PortFlowCommand. The scaling of the port flow relates to flow, not to spool position, although the position of the spool is of course indirectly affected.
Comment	
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	% - Percent
Resolution	0,1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Lars Althof
Submit Date	2004-09-10
Submit Company	57 - Sauer-Danfoss Co.
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	126 - Auxiliary Valve Ramp Extend Up
Definition	The valve will apply a ramp to the Auxiliary ValveCommand PortFlowCommand, to limit the acceleration or deceleration of flow. The valve must apply the ramp to create a liniear increase/decrease of flow over time.
Comment	
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	ms - Time
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Lars Althof
Submit Date	2004-09-10
Submit Company	57 - Sauer-Danfoss Co.
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	127 - Auxiliary Valve Ramp Extend Down
Definition	The valve will apply a ramp to the Auxiliary ValveCommand PortFlowCommand, to limit the acceleration or deceleration of flow. The valve must apply the ramp to create a liniear increase/decrease of flow over time.
Comment	
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	ms - Time
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Lars Althof
Submit Date	2004-09-10
Submit Company	57 - Sauer-Danfoss Co.
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	128 - Auxiliary Valve Ramp Retract Up
Definition	The valve will apply a ramp to theAuxiliary ValveCommand PortFlowCommand, to limit the acceleration or deceleration of flow. The valve must apply the ramp to create a liniear increase/decrease of flow over time.
Comment	
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	ms - Time
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Lars Althof
Submit Date	2004-09-10
Submit Company	57 - Sauer-Danfoss Co.
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	129 - Auxiliary Valve Ramp Retract Down
Definition	The valve will apply a ramp to the Auxiliary ValveCommand PortFlowCommand, to limit the acceleration or deceleration of flow. The valve must apply the ramp to create a liniear increase/decrease of flow over time.
Comment	
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	ms - Time
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Lars Althof
Submit Date	2004-09-10
Submit Company	57 - Sauer-Danfoss Co.
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	130 - Auxiliary Valve Float Threshold
Definition	Safety function. Current output of valve must be above threshold before float command is allowed.
Comment	
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	% - Percent
Resolution	0,1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Lars Althof
Submit Date	2004-09-10
Submit Company	57 - Sauer-Danfoss Co.
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	131 - Auxiliary Valve Progressivity Extend
Definition	Define non-linear releationship between command and flow by 2nd degree polynomium. (I will get polynomium)
Comment	
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	n.a. -
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Lars Althof
Submit Date	2004-09-10
Submit Company	57 - Sauer-Danfoss Co.
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	132 - Auxiliary Valve Progressivity Retract
Definition	Define non-linear releationship between command and flow by 2nd degree polynomium. (I will get polynomium)
Comment	
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	n.a. -
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Lars Althof
Submit Date	2004-09-10
Submit Company	57 - Sauer-Danfoss Co.
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	133 - Auxiliary Valve Invert Ports
Definition	Tell valve to swap extend and retract ports, easier than redoing plumbing on valve
Comment	
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	n.a. -
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Lars Althof
Submit Date	2004-09-10
Submit Company	57 - Sauer-Danfoss Co.
Revision Number	1
Current Status	ISO-Published
Status Date	2005-02-02
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	134 - Device Element Offset X
Definition	X direction offset of a DeviceElement relative to a Device.
Comment	This DDE was a result of Jan 2005 Task Controller meeting.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	11783-Part 10 Task Force
Submit Date	2005-01-20
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Approved
Status Date	2005-02-02
Status Comments	

DD Entity	135 - Device Element Offset Y
Definition	Y direction offset of a DeviceElement relative to a Device.
Comment	This DDE was a result of Jan 2005 Task Controller meeting.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	11783-Part 10 Task Force

Submit Date	2005-01-20
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Approved
Status Date	2005-02-02
Status Comments	

DD Entity	136 - Device Element Offset Z
Definition	Z direction offset of a DeviceElement relative to a Device.
Comment	This DDE was a result of Jan 2005 Task Controller meeting.
Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	mm - Length
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	11783-Part 10 Task Force
Submit Date	2005-01-20
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Approved
Status Date	2005-02-02
Status Comments	

DD Entity	137 - Device Volume Capacity
Definition	DeviceElement Volume Capacity, dimension of a DeviceElement
Comment	This DDE was a result of Jan 2005 Task Controller meeting.
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	11783-Part 10 Task Force
Submit Date	2005-01-20
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1

Current Status	ISO-Approved
Status Date	2005-02-02
Status Comments	

DD Entity	138 - Device Mass Capacity
Definition	DeviceElement Mass Capacity, dimension of a DeviceElement
Comment	This DDE was a result of Jan 2005 Task Controller meeting.
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	11783-Part 10 Task Force
Submit Date	2005-01-20
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Approved
Status Date	2005-02-02
Status Comments	

DD Entity	139 - Device Count Capacity
Definition	DeviceElement Count Capacity, dimension of a DeviceElement
Comment	This DDE was a result of Jan 2005 Task Controller meeting.
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	11783-Part 10 Task Force
Submit Date	2005-01-20
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Approved
Status Date	2005-02-02
Status Comments	

DD Entity	140 - Setpoint Percentage Application Rate
Definition	Application Rate expressed as percentage
Comment	This DDE was a result of Jan 2005 Task Controller meeting.
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	11783-Part 10 Task Force
Submit Date	2005-01-20
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2015-01-26
Status Comments	

DD Entity	141 - Actual Work State
Definition	Actual Work State, 2 bits defined as 00=disabled/off, 01=enabled/on, 10=error, 11=undefined/not installed
Comment	See the DDI 290 attachment "ISO11783-11-DDI-289-SetpointWorkState" as reference for implementation guideline. This DDE has been revised in 2012 to be used as the Actual Work State. A separate Setpoint Work State was added to the data dictionary at that time. Original comment: this DDE was a result of March 2005 TF10 meeting.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 3
Display Range	0 - 3
Submit by	11783-Part 10 Task Force
Submit Date	2005-03-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	142 - Physical Setpoint Time Latency
Definition	The Setpoint Value Latency Time is the time lapse between the moment of receival of a setpoint value command by the working set and the moment this setpoint value is physically applied on the device. That means if the setpoint value is communicated on the network (CAN bus) but the system needs 2 seconds to adjust the value physically on the desired unit (device element) then the Setpoint Latency Time is 2 seconds. The setpoint time latency value can only be positive.
Comment	The use of this DDE is to inform the overall system (e.g. Dektop Software, Task Controller) how the system works. The TC shall not shift this information into log files nor shall the device do that when sending actual values.
Typically used by Device Class(es)	2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	ms - Time
Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	11783-Part 10 Task Force
Submit Date	2005-03-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	2
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	143 - Physical Actual Value Time Latency

Definition	The Actual Value Latency Time is the time lapse between the moment this actual value is communicated to the Task Controller, and the moment that this actual value is physically applied on the device. That means if the system needs 2 seconds to calculate or measure a value before communicating it on the network, then the Actual Latency Time value is minus 2 seconds. Depending of the system characteristics the latency time could be negative or positive. In case where the system communicates an actual value before the actual value has been physically applied the latency value should be positive. In case where the system communicates an actual value after the actual value has been physically applied the latency value should be negative.
Comment	The use of this DDE is to inform the overall system (e.g. Dektop Software, Task Controller) how the system works. The TC shall not shift this information into log files nor shall the device do that when sending actual values. Example for a positive value: A seed flow sensor is placed at the start of the seed tube. At the moment the sensor measures seed flow X, it takes Y seconds for this flow to reach the coulters. The measured value is ahead of the physical value of the unit (coulters). So the latency could be plus 2 seconds. Example for a negative value: A flow sensor has a delay in its response to a flow change that means it takes Y seconds to realize the change. At the moment the sensor measures flow X, the flow is already present for Y seconds on the physical unit. The actual value is ahead of measured value. So the latency could be minus 2 seconds.
Typically used by Device Class(es)	2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	ms - Time

Resolution	1
SAE SPN	not specified
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	11783-Part 10 Task Force
Submit Date	2005-03-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	2
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	144 - Yaw Angle
Definition	Pivot / Yaw Angle of a DeviceElement
Comment	This DDE was a result of March 2005 TF10 meeting
Typically used by Device Class(es)	
Unit Symbol	Â° - Angle
Resolution	0,001
SAE SPN	not specified
CANBus Range	-180000 - 180000
Display Range	-180,000 - 180,000
Submit by	11783-Part 10 Task Force
Submit Date	2005-03-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-05-09
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	145 - Roll Angle
Definition	Roll Angle of a DeviceElement
Comment	This DDE was a result of March 2005 TF10 meeting
Typically used by Device Class(es)	
Unit Symbol	Â° - Angle
Resolution	0,001
SAE SPN	not specified
CANBus Range	-180000 - 180000
Display Range	-180,000 - 180,000
Submit by	11783-Part 10 Task Force
Submit Date	2005-03-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-05-09
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	146 - Pitch Angle
Definition	Pitch Angle of a DeviceElement
Comment	This DDE was a result of March 2005 TF10 meeting
Typically used by Device Class(es)	
Unit Symbol	Â° - Angle
Resolution	0,001
SAE SPN	not specified
CANBus Range	-180000 - 180000
Display Range	-180,000 - 180,000
Submit by	11783-Part 10 Task Force
Submit Date	2005-03-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-05-09
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	147 - Log Count
Definition	Log Counter, may be used to control data log record generation on a Task Controller
Comment	This DDE was a result of March 2005 TF10 meeting
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	n.a. -
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	11783-Part 10 Task Force
Submit Date	2005-03-01
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Published
Status Date	2005-05-09
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	148 - Total Fuel Consumption
Definition	Accumulated Fuel Consumption as Counter
Comment	
Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Stephan ZellerÃ¶hr
Submit Date	2005-04-12
Submit Company	103 - Agrocom GmbH & Co. Agrarsystem KG
Revision Number	1
Current Status	ISO-Published
Status Date	2005-05-09
Status Comments	DDEs have been moved to published for creating the new Annex A version.

DD Entity	149 - Instantaneous Fuel Consumption per Time
Definition	Fuel consumption per time
Comment	

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	mm³/s - Flow
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Stephan Zelleröhr
Submit Date	2005-04-12
Submit Company	103 - Agrocom GmbH & Co. Agrarsystem KG
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	Added "Instantaneous" for clarification

DD Entity	150 - Instantaneous Fuel Consumption per Area
Definition	Fuel consumption per area
Comment	
Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	mmÂ³/mÂ² - Capacity per area unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Stephan ZellerÃ¶hr
Submit Date	2005-04-12
Submit Company	103 - Agrocom GmbH & Co. Agrarsystem KG
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	Added "Instantaneous" for clarification.

DD Entity	151 - Instantaneous Area Per Time Capacity
Definition	Area per time capacity
Comment	

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	mmÂ²/s - Area per time unit
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Stephan ZellerÃ¶hr
Submit Date	2005-04-12
Submit Company	103 - Agrocom GmbH & Co. Agrarsystem KG
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	Added "Instantaneous" for clarification.

DD Entity	153 - Actual Normalized Difference Vegetative Index (NDVI)
Definition	The Normalized Difference Vegetative Index (NDVI) computed from crop reflectances as the difference between NIR reflectance in the 780 to 880 nm band and red reflectance in the 640 to 680 nm band divided by the sum of the NIR and red reflectance in the same bands.
Comment	Document attached.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 10 - Irrigation
Unit Symbol	n.a. -
Resolution	0,001
SAE SPN	TBD
CANBus Range	-1 - 1
Display Range	-0,001 - 0,001
Submit by	Marvin Stone
Submit Date	2008-04-28
Submit Company	39 - Microfirm Inc.
Revision Number	1
Current Status	ISO-Approved
Status Date	0000-00-00
Status Comments	
Attachment	2009-08-11: Definition summary - NDVI_definition_summary.pdf

DD Entity	154 - Physical Object Length
Definition	Length of device element (dimension along the X-axis)
Comment	The reference point of the device element shall be located in the center of the device element
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	mm - Length
Resolution	1
SAE SPN	

CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hans JÃ¼rgen Nissen
Submit Date	2008-12-03
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	

DD Entity	155 - Physical Object Width
Definition	Width of device element (dimension along the Y-axis)
Comment	The reference point of the device element shall be located in the center of the device element
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hans JÃ¼rgen Nissen
Submit Date	2008-12-03
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	

DD Entity	156 - Physical Object Height
Definition	Height of device element (dimension along the Z-axis)
Comment	The reference point of the device element shall be located in the center of the device element

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hans Jürgen Nissen
Submit Date	2008-12-03
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	

DD Entity	157 - Connector Type
Definition	Specification of the type of coupler. The value definitions are: 0 = unknown (default), 1 = ISO 6489-3 Tractor drawbar, 2 = ISO 730 Three-point-hitch semi-mounted, 3 = ISO 730 Three-point-hitch mounted, 4 = ISO 6489-1 Hitch-hook, 5 = ISO 6489-2 Clevis coupling 40, 6 = ISO 6489-4 Piton type coupling, 7 = ISO 6489-5 CUNA hitch, or ISO 5692-2 Pivot wagon hitch 8 = ISO 24347 Ball type hitch all other values are reserved for future assignments.
Comment	This DDE allows systems to automatically select the connection between devices. For instance, when 2 devices are on the network that declare device elements with the same connector type, the system can connect them accordingly. This DDE shall be used with the Device Element of type "Connector" only.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 8
Display Range	0 - 8
Submit by	Hans JÃ¼rgen Nissen
Submit Date	2008-12-03
Submit Company	33 - John Deere
Revision Number	2
Current Status	ISO-Published
Status Date	2012-03-09
Status Comments	

DD Entity	158 - Prescription Control State
Definition	Defines and synchronise the actual state of the prescription system. The state is represented by the lowest significant 2 bits in the lowest significant byte of the process data value: Byte 1: bit 0-1: 00 = manual/off, 01 = auto/on, 10 = error indicator, 11 = undefined/not installed. bits 2-7: reserved set to 0. Byte 2-4: reserved set to 0. The DDI shall support the On Change trigger so that the TC is able to get informed when the value gets changed by the Working Set Master. The TC shall active this trigger when using the DDI. See attachment for more information
Comment	The prescription control master and its clients need to be synchronized in terms of their general state or activation by the user (System activated/deactivated in individual setups). This DDE serves 2 purposes, one is to synchronize the prescription control state and the other is to enable a TC client to announce the support and initial state of its prescription control capabilities. Synchronisation by the prescription master (TC) is done by setting the prescription state of connected TC clients with a process data set value message with this DDE. It is recommended that TC clients reply their state immediately (within 250 ms) when such a message is received. The property flag "setable" and the trigger method "on change" shall be used with this DDE. The state "manual/off" indicates that the device is in manual state and will ignore all prescription commands. The "auto/on" state indicates that the client accepts the prescription commands as far as its overall process state allows.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 3
Display Range	0 - 3

Submit by	Matthias Meyer
Submit Date	2008-11-07
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	
Attachment	2010-04-06: Example Prescription Control State use - PCS Implementation Example.pdf

DD Entity	159 - Number of Sub-Units per Section
Definition	Specifies the number of sub-units for a section (e.g. number of nozzles per sprayer section or number of planter row units per metering device).
Comment	This DDE is used for objects which have further sub-units per section, which are of interest to the operator but not needed for the Task Controller operation itself. With this information and the overall width of the section the system can calculate for instance the row spacing without having individual objects for each row in the DCD.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jason Walter
Submit Date	2008-12-03
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	

DD Entity	160 - Section Control State

Definition	Specifies the actual state of section control. The value definitions are: Byte 1 (bitfield) Bit 0-1: 00 = manual/off, 01 = auto/on, 10 = error indicator, 11 = undefined/not installed. Bits 2-7: reserved, set to 0. Bytes 2-4: reserved, set to 0.
	The DDI shall support the On Change trigger so that the TC is able to get informed when the value gets changed by the Working Set Master. The TC shall active this trigger when using the DDI.
	See attachment for more information

| Comment | In section control systems, the section control master and its clients need to be synchronized in terms of their general state or activation by the user (System activated/deactivated in individual setups). This DDE serves 2 purposes, one is to synchronize the section control state and the other is to enable a TC client to announce the support and initial state of its section control capabilities. Synchronisation by the section control master (TC) is done by setting the section control state of connected TC clients with a process data set value message with this DDE. It is recommended that TC clients reply their state immediately (within 250 ms) when such a message is received. The property flag "setable" and the trigger method "on change" should be used with this DDE. The state "manual/off" indicates that the device is in manual state and will ignore all control commands for section control. The "auto/on" state indicates that the client accepts the section control commands as far as its overall process state allows.

Listed below are 4 example Use Cases for this DDE:

Use case "Start up operation":
1. During a start up the implement shall set the SCS to â€˜manual modeâ€™.

Use case "Auto request from TC":
1. The implement receives an â€˜autoâ€™ request from TC.
2. The implement shall check whether all setup conditions are fulfilled to allow section control.
3. If this check is ok: The implement may respond with â€˜auto modeâ€™ and set its internal SCS client to â€˜auto modeâ€™.
4. If this check not ok: The implement shall respond with â€˜manual modeâ€™. The internal state is still in manual mode. The TC may inform the operator accordingly.

Use case "Manual request from TC":
1. The implement receives a manual request from TC.
2. If the implement is still in â€˜auto modeâ€™ the implement shall set its internal SCS client to â€˜manual modeâ€™.

Use case "Loss of requirements for auto mode":
1. The implement internal setup conditions donâ€™t allow for automatic section control anymore.
2. The implement shall set the internal SCS client to â€˜manual modeâ€™.
3. The implement shall send the SCS to inform the TC accordingly. On reception of this â€˜manual modeâ€™ the TC/Section Control Master may inform the operator accordingly. |

Typically used by Device Class(es)	0 - Non-specific system
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 3
Display Range	0 - 3
Submit by	Matthias Meyer
Submit Date	2008-12-03
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	

DD Entity	161 - Actual Condensed Work State (1-16)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 1 to 16 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See attachment on DDI 290 "ISO11783-11-DDI-290-SetpointCondensedWorkState" for implementation guideline. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Adam Bogenrief

Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	162 - Actual Condensed Work State (17-32)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 17 to 32 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief
Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	163 - Actual Condensed Work State (33-48)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 33 to 48 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief

Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	164 - Actual Condensed Work State (49-64)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 49 to 64 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief
Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	165 - Actual Condensed Work State (65-80)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 65 to 80 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief

Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	166 - Actual Condensed Work State (81-96)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 81 to 96 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief
Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	167 - Actual Condensed Work State (97-112)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 97 to 112 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief

Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	**168 - Actual Condensed Work State (113-128)**
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 113 to 128 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief
Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	169 - Actual Condensed Work State (129-144)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 129 to 144 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, tthen he device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief

Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	170 - Actual Condensed Work State (145-160)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 145 to 160 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief
Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	171 - Actual Condensed Work State (161-176)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 161 to 176 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief

Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	172 - Actual Condensed Work State (177-192)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 177 to 192 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief
Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	173 - Actual Condensed Work State (193-208)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 193 to 208 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief

Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	174 - Actual Condensed Work State (209-224)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 209 to 224 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief
Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	175 - Actual Condensed Work State (225-240)
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 225 to 240 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief

Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	**176 - Actual Condensed Work State (241-256)**
Definition	Combination of the actual work states of individual sections or units (e.g. nozzles) number 241 to 256 into a single actual work state of their parent device element. The actual condensed work state contains the child element actual work states, in the driving direction from left to right, where the leftmost child element actual work state are the 2 lowest significant bits of the Process Data Value. Each child device elements actual work state is represented by 2 bits and defined as: 00 = disabled/off, 01 = enabled/on, 10 = error indicator, 11 = undefined/not installed. In total 16 child device element actual work states can be contained in one actual condensed work state of their parent device element. If less than 16 child device element actual work states are available, then the unused bits shall be set to value 11 (not installed). When the parent device element contains the Actual Condensed Work State DDE, then the device descriptor shall not contain the individual actual work state DDEs of the child device elements.
Comment	See the DDI 161 attachment "ISO11783-11-DDI-289-SetpointWorkState" for implementation guidelines. This DDE is used to reduce number of messages. Individual work state messages for a many-sectioned device can potentially cause performance issues due to overloading communication. With this DDE, 16 work states can be sent via a single message, resulting in less traffic to convey on/off status for an entire device.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Adam Bogenrief
Submit Date	2008-01-14
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Submitted (Pending)
Status Date	2012-04-02
Status Comments	

DD Entity	177 - Actual length of cut
Definition	Actual length of cut for harvested material, e.g. Forage Harvester or Tree Harvester.
Comment	none.
Typically used by Device Class(es)	0 - Non-specific system 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483,647
Display Range	0,000 - 2,147,484
Submit by	Hans Jürgen Nissen
Submit Date	2008-09-22
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	

DD Entity	178 - Element Type Instance
Definition	This DDI is used to enumerate and identify multiple device elements (DET) of the same type within one Device Description object pool. The value of this DDI is independent of the DET number. The combination of device element type and value of Element Type Instance ETI represents a unique object inside the device description object pool and therefore shall exist only once per object pool. Recommendation: The definition of the device elements should be made from left to right direction or from front to back direction. When in a matrix, count left-to-right first, then front-to-back and at last top-to-bottom. See attachment for more information.
Comment	This DDE allows the system to communicate with a device element object independent of the device element number. The same tank of a seeder for instance could have various device element numbers based upon the DDD. The DDD structure may change during setup the implement. In this case a unique implement tank might has a different element number as before. Particular if the Task Controller (TC) use a user interface to display and change data by the operator. Therefore the TC needs clear or rather unique device element information. Assign this DDE for instance to a DET of type bin. This number can be displayed to the operator while it may be printed physically at the bin. The ETI number range from 0 to 65533 inside the object pool corresponds to a displayed value from 1 to 65534 on a user interface or physical device.

Typically used by Device Class(es)	- Not Assigned
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 65533
Display Range	0 - 65533
Submit by	Matthias Meyer
Submit Date	2010-01-15
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	
Attachment	2010-04-06: Example Device Descriptions with Element Type Instance DDI - Mixed product implement DDD recommendation 20100118.pdf

DD Entity	179 - Actual Cultural Practice
Definition	This DDI is used to define the current cultural practice which is performed by an individual device operation. For instance a planter/seeder could provide a sowing and a fertilizing operation at the same time. The cultural practice value definitions are: 0=Unknown, 1=Fertilizing, 2=Sowing and Planting, 3=Crop Protection, 4=Tillage, 5=Baling, 6=Mowing, 7=Wrapping, 8=Harvesting, 9=Forage Harvesting, 10=Transport, 11=Swathing, 12=Slurry/Manure Application, 13-255=Reserved for future Assignment See attachment for more information.
Comment	Implements as Planter or Seeder which provides more than one product application need an option to sign the cultural practice that is performed by each operation. More then ever if the applied products have the same unit type. As for instance a seeder provides a sowing and fertilizing operation which have both mass per area as unit defined. In this case it is not clear to the TC that the second operation is a fertilizing operation. Particular if the TC owns a user interface to display these information to the operator. Through this DDE the TC user interface can display the appropriate information. Adding this DDI to the device element of type device the main cultural practice of the device could be defined. For instance a baler will claim on the bus as forage device class and have set the actual cultural practice as baling.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2010-01-15

Submit Company	33 - John Deere
Revision Number	2
Current Status	ISO-Published
Status Date	2015-01-28
Status Comments	
Attachment	2011-01-11: - Multiple and Single Product Implement Description.pdf

DD Entity	180 - Device Reference Point (DRP) to Ground distance
Definition	This DDI is used to specify the distance from the Device Reference Point (DRP) down to the ground surface. The DRP to Ground DDI shall be attached only to the Device Element (DET) with element number zero.
Comment	Depending on the application it might be required to know the distance of a device element down to the ground. All device element offsets refer to the DRP which is the centre of the device coordinate system and usually not at the ground surface. For instance the DRP of a tractor is the centre of the rear axle. In this case the distance from a GPS receiver (DET of type navigation reference) attached on the roof of the cab is calculated through sum up the Z-offset of the DET and the distance of the DRP to ground. The value of the DRP in this case is equivalent to the radius of the rolling wheel which is attached on the tractor rear axle.
Typically used by Device Class(es)	
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Meyer
Submit Date	2010-01-15
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	181 - Dry Mass Per Area Yield
Definition	Actual Dry Mass Per Area Yield. The definition of dry mass is the mass with a reference moisture specified by DDI 184.
Comment	The earlier defined DDI 84 is the mass per area that is measured on e.g. harvesting equipment as a mass including a possibly unknown moisture percentage. This DDI 181 is the mass per area yield, corrected to a reference moisture.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Lyle Jensen
Submit Date	2010-01-29
Submit Company	102 - AGCO GmbH & Co
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	182 - Dry Mass Per Time Yield
Definition	Actual Dry Mass Per Time Yield. The definition of dry mass is the mass with a reference moisture specified by DDI 184.
Comment	The earlier defined DDI 87 is the mass per time that is measured on e.g. harvesting equipment as a mass including a possibly unknown moisture percentage. This DDI 182 is the mass per time yield, corrected to a reference moisture.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Lyle Jensen
Submit Date	2010-01-29
Submit Company	102 - AGCO GmbH & Co
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	183 - Yield Total Dry Mass
Definition	Accumulated Yield specified as dry mass. The definition of dry mass is the mass with a reference moisture specified by DDI 184.
Comment	The earlier defined DDI 90 is considered to be the total mass that is measured on e.g. harvesting equipment as a mass including a possibly unknown moisture percentage. This DDI 183 is the yield total mass, corrected to a reference moisture.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Lyle Jensen
Submit Date	2010-01-29
Submit Company	102 - AGCO GmbH & Co
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	184 - Reference Moisture For Dry Mass
Definition	Moisture percentage used for the dry mass DDIs 181, 182 and 183.
Comment	Example: this definition is similar to the "Standard Payable Moisture" term used by farmers.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Lyle Jensen
Submit Date	2010-01-29
Submit Company	102 - AGCO GmbH & Co
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	185 - Seed Cotton Mass Per Area Yield
Definition	Seed cotton yield as mass per area, not corrected for a possibly included lint percantage.
Comment	This Seed Cotton Mass Per Area Yield is the mass of the raw harvested cotton product as it is measured on e.g. harvesting equipment.
Typically used by Device Class(es)	7 - Harvesters 14 - Special Crops
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Andy Beck
Submit Date	2010-02-26
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	186 - Lint Cotton Mass Per Area Yield
Definition	Lint cotton yield as mass per area.
Comment	This Lint Cotton Mass Per Area Yield is the mass of the lint after it has been removed from the seed cotton at a cotton gin. Calculated by use of the Lint Turnout Percentage.
Typically used by Device Class(es)	7 - Harvesters 14 - Special Crops
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Andy Beck
Submit Date	2010-02-26
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	187 - Seed Cotton Mass Per Time Yield
Definition	Seed cotton yield as mass per time, not corrected for a possibly included lint percantage.
Comment	This Seed Cotton Mass Per Time Yield is the mass of the raw harvested cotton product as it is measured on e.g. harvesting equipment.
Typically used by Device Class(es)	7 - Harvesters 14 - Special Crops
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Andy Beck
Submit Date	2010-02-26
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	188 - Lint Cotton Mass Per Time Yield
Definition	Lint cotton yield as mass per time.
Comment	This Lint Cotton Mass Per Time Yield is the mass of the lint after it has been removed from the seed cotton at a cotton gin. Calculated by use of the Lint Turnout Percentage.
Typically used by Device Class(es)	7 - Harvesters 14 - Special Crops
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Andy Beck
Submit Date	2010-02-26
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	189 - Yield Total Seed Cotton Mass
Definition	Accumulated yield specified as seed cotton mass, not corrected for a possibly included lint percantage.
Comment	This Yield Total Seed Cotton Mass is the total mass of the raw harvested cotton product as it is measured on e.g. harvesting equipment.
Typically used by Device Class(es)	7 - Harvesters 14 - Special Crops
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Andy Beck
Submit Date	2010-02-26
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	190 - Yield Total Lint Cotton Mass
Definition	Accumulated yield specified as lint cotton mass.
Comment	This Yield Total Lint Cotton Mass is the total lint cotton mass, after it has been removed from the total seed cotton at a cotton gin.
Typically used by Device Class(es)	7 - Harvesters 14 - Special Crops
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Andy Beck
Submit Date	2010-02-26
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	191 - Lint Turnout Percentage
Definition	Percent of lint in the seed cotton.
Comment	
Typically used by Device Class(es)	7 - Harvesters 14 - Special Crops
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Andy Beck
Submit Date	2010-02-26
Submit Company	33 - John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2010-03-12
Status Comments	

DD Entity	192 - Ambient temperature
Definition	Ambient temperature measured by a machine. Unit is milli-Kelvin (mK).
Comment	
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	mK - Temperature
Resolution	1
SAE SPN	
CANBus Range	0 - 1000000
Display Range	0 - 1000000
Submit by	Timo Oksanen
Submit Date	2011-01-17
Submit Company	Aalto University
Revision Number	1

Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	193 - Setpoint Product Pressure
Definition	Setpoint Product Pressure to adjust the pressure of the product flow system at the point of dispensing.
Comment	On pressure-based control systems, it is important to be able to monitor and control the system pressure to ensure the proper flow rate and droplet size. Being able to display and log pressure is important. On sprayers, this would be the boom pressure.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-01-19
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-03-27
Status Comments	

DD Entity	194 - Actual Product Pressure
Definition	Actual Product Pressure is the measured pressure in the product flow system at the point of dispensing.
Comment	On pressure-based control systems, it is important to be able to monitor and conrol the system pressure to ensure the proper flow rate and droplet size. Being able to display and log pressure is important. On sprayers, this would be the boom pressure.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-03-09
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	195 - Minimum Product Pressure
Definition	Minimun Product Pressure in the product flow system at the point of dispensing.
Comment	Minimum system product pressure to ensure a consistent product flow. See also "Setpoint Product Pressure"
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-03-09
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	196 - Maximum Product Pressure
Definition	Maximum Product Pressure in the product flow system at the point of dispensing.
Comment	Maximum system product to ensure a stable and safe product flow. See also "Setpoint Product Pressure"

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-03-09
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	197 - Setpoint Pump Output Pressure
Definition	Setpoint Pump Output Pressure to adjust the pressure at the output of the solution pump.
Comment	
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-01-19
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-03-27
Status Comments	

DD Entity	198 - Actual Pump Output Pressure
Definition	Actual Pump Output Pressure measured at the output of the solution pump.
Comment	

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-03-09
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	199 - Minimum Pump Output Pressure
Definition	Minimum Pump Output Pressure for the output pressure of the solution pump.
Comment	
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-03-09
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	200 - Maximum Pump Output Pressure
Definition	Maximum Pump Output Pressure for the output pressure of the solution pump.
Comment	

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-03-09
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	201 - Setpoint Tank Agitation Pressure
Definition	Setpoint Tank Agitation Pressure to adjust the pressure for a stir system in a tank.
Comment	In a liquid application system, this is the pressure used to stir the tank contents to prevent products in liquid suspension from settling in the tank.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-01-19
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-03-27
Status Comments	

DD Entity	202 - Actual Tank Agitation Pressure
Definition	Actual Tank Agitation Pressure measured by the tank stir system.
Comment	In a liquid application system, this is the pressure used to stir the tank contents to prevent products in liquid suspension from settling in the tank. Typically measured at the agitation manifold.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-03-09
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	203 - Minimum Tank Agitation Pressure
Definition	Minimun Tank Agitation Pressure for a stir system in a tank.
Comment	Minimum tank agitation pressure to prevent products in liquid suspension from settling in the tank. See also "Setpoint Tank Agitation Pressure".
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-03-09
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	204 - Maximum Tank Agitation Pressure
Definition	Maximun Tank Agitation Pressure for a stir system in a tank.
Comment	Maximum tank agitation pressure to prevent products in liquid suspension from settling in the tank. See also "Setpoint Tank Agitation Pressure"

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748364,8 - 214748364,7
Submit by	Tony Woodcock
Submit Date	2011-03-09
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-05
Status Comments	

DD Entity	205 - SC Turn On Time
Definition	The Section Control Turn On Time defines the overall time lapse between the moment the TC sends a turn on section command to the working set and the moment this section is physically turned on and the product is applied. The working set may support this DDE as an optional feature to provide the possibility to store the time settings direct on the device to make the settings available after a power cycle. Therefore this DDE needs always to be setable by the TC and shall not be used to change any working set system behavior. The DDI shall support the On Change trigger so that the TC is able to get informed when the value gets changed by the Working Set Master. The TC shall active this trigger when using the DDI.
Comment	The SC Turn On Time setting is used to compensate the average physical machine reaction time (Electrical & Mechanical) from the moment the Task Controller send the command and the Working Set applies the product. To find the right time setting for the used system combination of Task Controller and Working Set it could take awhile and therefore it is a big benefit to store the setting on the working set to make them again available after a power cycle. For working sets supporting Section Control it is recommended to add SC Turn On Time to its device description and make it setable. In case where the device description contains also Physical Setpoint Time Latency or Physical Actual Time Latency the TC Turn On Time will always supercede it.
Typically used by Device Class(es)	0 - Non-specific system 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	ms - Time
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Meyer
Submit Date	2011-03-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-03-28
Status Comments	

DD Entity	206 - SC Turn Off Time

Definition	The Section Control Turn Off Time defines the overall time lapse between the moment the TC sends a turn off section command to the working set and the moment this section is physically turned off. The working set may support this DDE as an optional feature to provide the possibility to store the time settings direct on the device to make the settings available after a power cycle. Therefore this DDE needs always to be setable by the TC and shall not be used to change any working set system behavior. The DDI shall support the On Change trigger so that the TC is able to get informed when the value gets changed by the Working Set Master. The TC shall active this trigger when using the DDI.
Comment	The SC Turn Off Time setting is used to compensate the average physical machine reaction time (Electrical & Mechanical) from the moment the Task Controller send the command and the Working Set turns off the sections. To find the right time setting for the used system combination of Task Controller and Working Set it could take awhile and therefore it is a big benefit to store the setting on the Working Set to make them again available after a power cycle. For Working Sets supporting Section Control it is recommended to add SC Turn Off Time to its device description and make it setable.
Typically used by Device Class(es)	0 - Non-specific system 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	ms - Time
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Meyer
Submit Date	2011-03-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-03-28
Status Comments	

DD Entity	207 - Wind speed
Definition	Wind speed measured in the treated field at the beginning of operations or on the application implement during operations. Measurements at to be made at 2m height or 1 m over the canopy in tree and bush crops. On implements the wind speed needs to be compansated by implement true ground speed and heading.
Comment	Requested by TC23 SC6 WG15
Typically used by Device Class(es)	1 - Tractor 5 - Fertilizer 6 - Sprayers 10 - Irrigation 14 - Special Crops 17 - Sensor System
Unit Symbol	mm/s - Speed
Resolution	1
SAE SPN	
CANBus Range	0 - 100 000 000
Display Range	0 - 100 000 000
Submit by	Bob Benneweis
Submit Date	2011-03-16
Submit Company	Benneweis Consulting Ltd
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	208 - Wind direction
Definition	Wind direction measured in the treated field at the beginning of operations or on the application implement during operations. Measurements at to be made at 2m height or 1 m over the canopy in tree and bush crops. On implements the wind direction needs to be compansated by implement true ground speed and heading.
Comment	
Typically used by Device Class(es)	1 - Tractor 5 - Fertilizer 6 - Sprayers 10 - Irrigation 14 - Special Crops 17 - Sensor System
Unit Symbol	Â° - Angle
Resolution	1
SAE SPN	
CANBus Range	0 - 359
Display Range	0 - 359
Submit by	Bob Benneweis

Submit Date	2011-03-16
Submit Company	Benneweis Consulting Ltd
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	209 - Air Humidity
Definition	Ambient humidty measured by a weather station in a treated field or on the application implement.
Comment	
Typically used by Device Class(es)	1 - Tractor 5 - Fertilizer 6 - Sprayers 7 - Harvesters 9 - Forage harvester 10 - Irrigation 14 - Special Crops 17 - Sensor System
Unit Symbol	% - Percent
Resolution	1
SAE SPN	
CANBus Range	0 - 100
Display Range	0 - 100
Submit by	Bob Benneweis
Submit Date	2011-03-16
Submit Company	Benneweis Consulting Ltd
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-04
Status Comments	

DD Entity	210 - Sky conditions
Definition	This DDE is used to define the current sky conditions during operation. The METAR format and its abbrivations is used as follows to define the sky conditions: CLR=Clear, NSC=Mostly Sunny, FEW=Partly Sunny, SCT=Partly cloud, BKN=Mostly cloudy, OVC=overcast/cloudy 1. Byte = first character 2. Byte = second character 3. Byte = third character 4. Byte = fourt character Unused bytes shall be set to 0x20 Byte 1 to 4 set to 0x00 = error Byte 1 to 4 set to 0xFF = not available

Comment	To setup the METAR abbrivations the IS0 8859-1 standard is used. From the Latin-1 printable characters set the capitals from "A" (0x41) to "Z" (0x5A) shall be used. The space "SP" (0x20) is used for unused bytes. Example for Clear (CLR): 1. Byte = 0x43(C) 2. Byte = 0x4C(L) 3. Byte = 0x52 (R) 4. Byte = 0x20 (unused)
Typically used by Device Class(es)	1 - Tractor 5 - Fertilizer 6 - Sprayers 7 - Harvesters 9 - Forage harvester 10 - Irrigation 14 - Special Crops 17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Bob Benneweis
Submit Date	2011-03-16
Submit Company	Benneweis Consulting Ltd
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-29
Status Comments	

DD Entity	211 - Last Bale Flakes per Bale
Definition	The number of flakes in the most recently produced bale.
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler can add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 1000
Display Range	0 - 1000
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-30
Status Comments	

DD Entity	212 - Last Bale Average Moisture
Definition	The average moisture in the most recently produced bale.
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler may add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 100000000
Display Range	0 - 100000000
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-30
Status Comments	

DD Entity	213 - Last Bale Average Strokes per Flake
Definition	The number of baler plunger compression strokes per flake that has entered the bale compression chamber. This value is the average valid for the most recently produced bale.
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler may add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 1000
Display Range	0 - 1000
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-30
Status Comments	

DD Entity	214 - Lifetime Bale Count
Definition	The number of bales produced by a machine over its entire lifetime. This DDE value can not be set through the process data interface but can be requested and added to a datalog. This DDE value is not affected by a task based total bales but will increment at the same rate as the task based total.
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler may add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	1

Current Status	ISO-Approved
Status Date	2011-04-30
Status Comments	

DD Entity	215 - Lifetime Working Hours
Definition	The number of working hours of a device element over its entire lifetime. This DDE value can not be set through the process data interface but can be requested and added to a datalog.
Comment	The recommended use of this DDE is to be transmitted on a request basis only. The Lifetime Working Hours is the overall time when the device was turned on. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed. Note: unit is h and the bit resolution is 0.05 h/bit, this aligns the resolution and range with similar SPNs as defined in SAE J1939-71.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System
Unit Symbol	h - Hour
Resolution	0,05
SAE SPN	
CANBus Range	0 - 210554060,75
Display Range	0,0 - 10527703,038
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30

Submit Company	AGCO
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-30
Status Comments	

DD Entity	216 - Actual Bale Hydraulic Pressure
Definition	The actual value of the hydraulic pressure applied to the sides of the bale in the bale compression chamber.
Comment	The actual pressure is the resultant of the baler controller targeting a certain setpoint plunger load.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	Pa - Pressure
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-30
Status Comments	

DD Entity	217 - Last Bale Average Hydraulic Pressure
Definition	The average actual value of the hydraulic pressure applied to the sides of the bale in the bale compression chamber. This average is calculated over the most recently produced bale.
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler may add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	Pa - Pressure
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-30
Status Comments	

DD Entity	218 - Setpoint Bale Compression Plunger Load
Definition	The setpoint bale compression plunger load as a unitless number.
Comment	This value is measured / controlled for each new flake that entered the baler chamber and obtained at the rear dead end of the plunger.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 2000
Display Range	0 - 2000
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-30
Status Comments	

DD Entity	219 - Actual Bale Compression Plunger Load
Definition	The actual bale compression plunger load as a unitless number.
Comment	This is the plunger load measured at the rear dead end of the plunger cycle and only updated for each new flake that has entered the baler chamber.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	% - Percent
Resolution	1
SAE SPN	
CANBus Range	0 - 2000
Display Range	0 - 2000
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	2
Current Status	ISO-Published
Status Date	2016-08-23
Status Comments	Status was published

DD Entity	220 - Last Bale Average Bale Compression Plunger Load
Definition	The average bale compression plunger load for the most recently produced bale.
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler may add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 2000
Display Range	0 - 2000
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-30
Status Comments	

DD Entity	221 - Last Bale Applied Preservative
Definition	The total preservative applied to the most recently produced bale.
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler may add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-30
Status Comments	

DD Entity	222 - Last Bale Tag Number
Definition	The Last Bale Tag Number as a decimal number in the range of 0 to 4294967295. Note that the value of this DDI has the limitation of being an unsigned 32 bit number.
Comment	For balers: the recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler may add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Approved

Status Date	2011-04-30
Status Comments	

DD Entity	223 - Last Bale Mass
Definition	The mass of the bale that has most recently been produced.
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler may add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-04-30
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-04-30
Status Comments	

DD Entity	224 - Delta T
Definition	The difference between dry bulb temperature and wet bulb temperature measured by a weather station in a treated field or on the application equipment.
Comment	This parameter is used to determine spray effectiveness in hot and dry environments. If the Delta T value is too high the effectiveness of the overall spray application does not match the requirement for this operation. This value can be used by the application to notify the operator about the effectiveness and whether he should continue with the application or not. It can also be used to document the application environment within the log files for the task.
Typically used by Device Class(es)	5 - Fertilizer 6 - Sprayers 7 - Harvesters 9 - Forage harvester 17 - Sensor System
Unit Symbol	mK - Temperature
Resolution	1
SAE SPN	
CANBus Range	0 - 1000000
Display Range	0 - 1000000
Submit by	Matthias Meyer
Submit Date	2011-05-25

Submit Company	John Deere
Revision Number	1
Current Status	ISO-Approved
Status Date	2011-06-20
Status Comments	

DD Entity	225 - Setpoint Working Length
Definition	Setpoint Working Length of Device Element.
Comment	This is the desired working length of the device element during operation. For the geometry definition and example use, see the attachment of the Actual Working Length, DDI 226.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Moritz Roeingh
Submit Date	2011-07-12
Submit Company	Competence Center ISOBUS e.V.
Revision Number	1
Current Status	ISO-Published
Status Date	2011-08-31
Status Comments	

DD Entity	226 - Actual Working Length
Definition	Actual Working Length of a Device Element.
Comment	Used for Section Control. By using the Actual Working Length of a device element a rectangular area is defined. This area represents the current working area and defines offsets for turning sections on and off by Section Control. The Actual Working Length parameter is useful for fertilizer spreaders and similar implements.

Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Moritz Roeingh
Submit Date	2011-07-07
Submit Company	Competence Center ISOBUS e.V.
Revision Number	1
Current Status	ISO-Published
Status Date	2011-08-31
Status Comments	
Attachment	2012-07-03: - ISO11783-11-DDI-226-ActualWorkingLength-v1.pdf

DD Entity	227 - Minimum Working Length
Definition	Minimum Working Length of Device Element.
Comment	This is the minimum working length of the device element during operation. For the geometry definition and example use, see the attachment of the Actual Working Length, DDI 226.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Moritz Roeingh
Submit Date	2011-07-12
Submit Company	Competence Center ISOBUS e.V.
Revision Number	1
Current Status	ISO-Published
Status Date	2011-08-31
Status Comments	

DD Entity	228 - Maximum Working Length
Definition	Maximum Working Length of Device Element.
Comment	This is the maximum working length of the device element during operation. For the geometry definition and example use, see the attachment of the Actual Working Length, DDI 226.

Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Moritz Roeingh
Submit Date	2011-07-12
Submit Company	Competence Center ISOBUS e.V.
Revision Number	1
Current Status	ISO-Published
Status Date	2011-08-31
Status Comments	

DD Entity	229 - Actual Net Weight
Definition	Actual Net Weight value specified as mass
Comment	The Actual Net Weight is the current measured mass by a weighing system.
	For more information see attachment located at Actual Net Weight DDE
Typically used by Device Class(es)	11 - Transport / Trailers
	17 - Sensor System
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Meyer
Submit Date	2011-09-13
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2011-09-28
Status Comments	
Attachment	2011-09-28: - ISO11783-11-DDI-229-Weighing System Implementation.pdf

DD Entity	230 - Net Weight State
Definition	Net Weight State, 2 bits defined as:
	00 = unstable measurement
	01 = stable measurement
	10 = error (measuring error)
Comment	The Net Weight State indicates whether the current Actual Net Weight value is a reliable value or not.
	Example: After a mass of grain is filled into a grain cart it takes a while until the weighing system is able to provide the valid value of the load.
Typically used by Device Class(es)	11 - Transport / Trailers
	17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 3
Display Range	0 - 3
Submit by	Matthias Meyer
Submit Date	2011-09-13
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2011-09-28
Status Comments	

DD Entity	231 - Setpoint Net Weight
Definition	Setpoint Net Weight value.
Comment	The Setpoint Net Weight value is used to prompt the weighing system to perform a tare procedure. For more information see attachment located at Actual Net Weight DDE.
Typically used by Device Class(es)	11 - Transport / Trailers 17 - Sensor System
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Meyer
Submit Date	2011-09-13
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2011-09-28
Status Comments	

DD Entity	232 - Actual Gross Weight
Definition	Actual Gross Weight value specified as mass
Comment	The Actual Gross Weight is the overall measured mass by a weighing system. For more information see attachment located at Actual Net Weight DDE.
Typically used by Device Class(es)	11 - Transport / Trailers 17 - Sensor System
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Meyer
Submit Date	2011-09-13
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2011-09-28
Status Comments	

DD Entity	233 - Gross Weight State
Definition	Gross Weight State, 2 bits defined as: 00 = unstable measurement 01 = stable measurement 10 = error (measuring error)
Comment	The Gross Weight State indicates whether the current Actual Gross Weight value is a reliable value or not. For more information see attachment located at Actual Net Weight DDE. Example: After a mass of grain is filled into a grain cart it takes a while until the weighing system is able to provide the valid value of the load.
Typically used by Device Class(es)	11 - Transport / Trailers 17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 3
Display Range	0 - 3
Submit by	Matthias Meyer
Submit Date	2011-09-13
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2011-09-28
Status Comments	

DD Entity	234 - Minimum Gross Weight
Definition	Minimum Gross Weight specified as mass.
Comment	The Minimum Gross Weight may represent the minimum value of the effective range of the weighing system. For more information see attachment located at Actual Net Weight DDE.
Typically used by Device Class(es)	11 - Transport / Trailers 17 - Sensor System
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Meyer
Submit Date	2011-09-13
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2011-09-28
Status Comments	

DD Entity	235 - Maximum Gross Weight
Definition	Maximum Gross Weight specified as mass.
Comment	Maximum Gross Weight may represent the maximum value of the effective range of the weighing system. For more information see attachment located at Actual Net Weight DDE.
Typically used by Device Class(es)	11 - Transport / Trailers 17 - Sensor System
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Meyer
Submit Date	2011-09-13
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2011-09-28
Status Comments	

DD Entity	236 - Thresher Engagement Total Time
Definition	Accumulated time while the threshing mechanism is engaged
Comment	This DDE represents the total engagement time of the threshing mechanism of the machine and is recommended to be used at maximum once within the device description in the device element that represents the machine.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	s - Time count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	237 - Actual Header Working Height Status
Definition	Actual status of the header being above or below the threshold height for the in-work state. 2 bit status indicator: 00=disabled/off/above threshold height 01=enabled/on/below threshold height 10=error 11=undefined/not installed
Comment	The DDE has been defined to be able to communicate a more detailed work state of a machine.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 3
Display Range	0 - 3
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-11-17
Status Comments	

DD Entity	238 - Actual Header Rotational Speed Status
Definition	Actual status of the header rotational speed being above or below the threshold for in-work state. 2 bit status indicator: 00=disabled/off/below threshold speed 01=enabled/on/above threshold speed 10=error 11=undefined/not installed
Comment	The DDE has been defined to be able to communicate a more detailed work state of a machine.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 3
Display Range	0 - 3
Submit by	Robert Waggoner

Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	239 - Yield Hold Status
Definition	Status indicator for the yield measurement system. When enabled/on, the measurements from the yield measurement system are ignored and the yield is held constant. 2 bit status indicator: 00=disabled/off 01=enabled/on 10=error 11=undefined/not installed
Comment	This status indicator can e.g. be set by the operator when entering an area of the field where the yield measurement system yield measurements should not be used. This DDE shall not be setable by the TC. The values of the following list of DDE's is are held constant when this DDE is enabled/on: DDI's 83 to 91, 181 to 183 and 185 to 190.
Typically used by Device Class(es)	6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 3
Display Range	0 - 3
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	240 - Actual (Un)Loading System Status

Definition	Actual status of the Unloading and/or Loading system. This DDE covers both Unloading and Loading of the device element wherein it is listed.
	Byte 1:
	2 bit unloading status indicator:
	00=disabled/off
	01=enabled/on/unloading
	10=error
	11=undefined/not installed
	Byte 2:
	2 bit loading status indicator:
	00=disabled/off
	01=enabled/on/loading
	10=error
	11=undefined/not installed
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 3
Display Range	0 - 3
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	241 - Crop Temperature
Definition	Temperature of harvested crop
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	mK - Temperature
Resolution	1
SAE SPN	
CANBus Range	0 - 1000000
Display Range	0 - 1000000
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	242 - Setpoint Sieve Clearance
Definition	Setpoint separation distance between Sieve elements
Comment	
Typically used by Device Class(es)	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	243 - Actual Sieve Clearance
Definition	Actual separation distance between Sieve elements
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	244 - Minimum Sieve Clearance
Definition	Minimal separation distance between Sieve elements
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	245 - Maximum Sieve Clearance
Definition	Maximum separation distance between Sieve elements.
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-10-17
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	246 - Setpoint Chaffer Clearance
Definition	Setpoint separation distance between Chaffer elements.
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-10-17
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	247 - Actual Chaffer Clearance
Definition	Actual separation distance between Chaffer elements.
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	3
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	248 - Minimum Chaffer Clearance
Definition	Minimum separation distance between Chaffer elements.
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-10-17
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	249 - Maximum Chaffer Clearance
Definition	Maximum separation distance between Chaffer elements.
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-10-17
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	250 - Setpoint Concave Clearance
Definition	Setpoint separation distance between Concave elements.
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-10-17
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	251 - Actual Concave Clearance
Definition	Actual separation distance between Concave elements.
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	3
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	252 - Minimum Concave Clearance
Definition	Minimum separation distance between Concave elements.
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-10-17
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	253 - Maximum Concave Clearance
Definition	Maximum separation distance between Concave elements.
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2011-10-17
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	254 - Setpoint Separation Fan Rotational Speed
Definition	Setpoint rotational speed of the fan used for separating product material from non product material.
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Jaap van Bergeijk
Submit Date	2011-10-17
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	255 - Actual Separation Fan Rotational Speed
Definition	Actual rotational speed of the fan used for separating product material from non product material.
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	3
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	256 - Minimum Separation Fan Rotational Speed
Definition	Minimum rotational speed of the fan used for separating product material from non product material.
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Jaap van Bergeijk
Submit Date	2011-10-17
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	257 - Maximum Separation Fan Rotational Speed
Definition	Maximum rotational speed of the fan used for separating product material from non product material.
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Jaap van Bergeijk
Submit Date	2011-10-17
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	258 - Hydraulic Oil Temperature
Definition	Temperature of fluid in the hydraulic system.
Comment	
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	mK - Temperature
Resolution	1
SAE SPN	
CANBus Range	0 - 2000000
Display Range	0 - 2000000
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO

Revision Number	3
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	259 - Yield Lag Ignore Time
Definition	Amount of time to ignore yield data, starting at the transition from the in-work to the out-of-work state. During this time, the yield sensor provides inconsistent or unreliable crop flow data.
Comment	This DDE can be used to filter the yield data when creating yield maps. The values of the following list of DDE's may be inconsistent or unreliable during this yield lag ignore time: DDI's 83 to 91, 181 to 183 and 185 to 190.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	ms - Time
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	3
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	260 - Yield Lead Ignore Time
Definition	Amount of time to ignore yield data, starting at the transition from the out-of-work to the in-work state. During this time, the yield sensor provides inconsistent or unreliable crop flow data.
Comment	This DDE can be used to filter the yield data when creating yield maps. The values of the following list of DDE's may be inconsistent or unreliable during this yield lead ignore time: DDI's 83 to 91, 181 to 183 and 185 to 190.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	ms - Time
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	3
Current Status	ISO-Published

Status Date	2011-10-17
Status Comments	

DD Entity	261 - Average Yield Mass Per Time
Definition	Average Yield expressed as mass per unit time, not corrected for the reference moisture percentage DDI 184. This value is the average for a Task and may be reported as a total.
Comment	This Average Yield Mass Per Time is the mass that includes the average crop moisture (DDI 262) if this is measured on e.g. harvesting equipment. This average yield mass per time is calculated as the yield total mass (DDI 90) divided by the effective total time (DDI 119) of the active task. When a task is resumed and its previously recorded totals are sent by the task controller to the connected working set, a situation can occur where there is a discrepancy between the yield total mass, the effective total time and the average yield mass per time values. In case all three of these DDI's are present in the device description and all three values are set by the task controller upon resuming a task, the working set shall compute its average yield mass per time from the yield total mass divided by the effective total time and shall discard the average yield mass per time value that it received from the task controller.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	2
Current Status	ISO-Approved
Status Date	2011-10-17
Status Comments	

DD Entity	262 - Average Crop Moisture
Definition	Average Moisture of the harvested crop. This value is the average for a Task and may be reported as a total.
Comment	This is the average of the actual crop moisture (DDI 99) for the active task and is calculated as an average based upon the yield total mass (DDI 90). In order to correctly calculate this value when a task is resumed, the yield total mass shall also be reported by the device as a total. When a task is resumed, the task controller sets both the yield total mass and the average crop moisture values. The device uses these values to derive the total moisture and calculate and report the new average crop moisture values for the resumed task.

Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	3
Current Status	ISO-Published
Status Date	2011-10-17
Status Comments	

DD Entity	263 - Average Yield Mass Per Area
Definition	Average Yield expressed as mass per unit area, not corrected for the reference moisture percentage DDI 184. This value is the average for a Task and may be reported as a total.
Comment	This Average Yield Mass Per Area is the mass that includes the average crop moisture (DDI 262) if this is measured on e.g. harvesting equipment. This average yield mass per area is calculated as the yield total mass (DDI 90) divided by the total area (DDI 116) of the active task. When a task is resumed and its previously recorded totals are sent by the task controller to the connected working set, a situation can occur where there is a discrepancy between the yield total mass, the total area and the average yield mass per area values. In case all three of these DDI's are present in the device description and all three values are set by the task controller upon resuming a task, the working set shall compute its average yield mass per area from the yield total mass divided by the total area and shall discard the average yield mass per area value that it received from the task controller.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Robert Waggoner
Submit Date	2011-07-08
Submit Company	AGCO
Revision Number	2
Current Status	ISO-Submitted (Pending)
Status Date	2011-10-17
Status Comments	

DD Entity	264 - Connector Pivot X-Offset
Definition	X direction offset of a connector pivot point relative to DRP. This DDE shall be only attached to a DET element of type connector.
Comment	Some connector types are equipped with a pivot point which will influence the accuracy of applications as section control, prescription or sequence control. The Pivot X-Offset is used to define the distance from the device DRP to the connector pivot point in X direction.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-03-07
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	
Attachment	2012-03-07: - ISO11783-11-DDI-264-Connector Pivot X-Offset-v1.pdf

DD Entity	265 - Remaining Area
Definition	Remaining Area of a field, which is calculated from the total area and the processed area.
Comment	See DDI attachment for further details.
Typically used by Device Class(es)	- Not Assigned 0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops 17 - Sensor System
Unit Symbol	mÂ² - Area
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Markus Eikler
Submit Date	2011-12-15
Submit Company	Mueller Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	
Attachment	2012-04-02: - ISO11783-11-DDI-265-Remaining Area-v1.pdf

DD Entity	266 - Lifetime Application Total Mass
Definition	Entire Application Total Mass of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.

Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	267 - Lifetime Application Total Count
Definition	Entire Application Total Count of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	268 - Lifetime Yield Total Volume
Definition	Entire Yield Total Volume of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	L - Quantity per volume

Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	269 - Lifetime Yield Total Mass
Definition	Entire Yield Total Mass of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	270 - Lifetime Yield Total Count
Definition	Entire Yield Total Count of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops

Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	271 - Lifetime Total Area
Definition	Entire Total Area of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops 15 - Municipal Work
Unit Symbol	mÂ² - Area
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	272 - Lifetime Effective Total Distance
Definition	Entire Total Distance of the device lifetime.

Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	m - Distance
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-03-09
Status Comments	

DD Entity	273 - Lifetime Ineffective Total Distance
Definition	Entire Ineffective Total Distance of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	m - Distance
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-03-09
Status Comments	

DD Entity	274 - Lifetime Effective Total Time
Definition	Entire Effective Total Time of the device lifetime.

Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System
Unit Symbol	s - Time count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	275 - Lifetime Ineffective Total Time
Definition	Entire Ineffective Total Time of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System
Unit Symbol	s - Time count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	276 - Lifetime Fuel Consumption
Definition	Entire Fuel Consumption of the device lifetime.

Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	L - Capacity count
Resolution	0,5
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 1073741823,5
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	277 - Lifetime Average Fuel Consumption per Time
Definition	Entire Average Fuel Consumption per Time of the device lifetime.
Comment	This is the overall average of the device. This average does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	mmÂ³/s - Flow
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	
Submit Date	2012-01-09
Submit Company	
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	278 - Lifetime Average Fuel Consumption per Area
Definition	Entire Average Fuel Consumption per Area of the device lifetime.

Comment	This is the overall average of the device. This average does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	mmÂ³/mÂ² - Capacity per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	279 - Lifetime Yield Total Dry Mass
Definition	Entire Yield Total Dry Mass of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	280 - Lifetime Yield Total Seed Cotton Mass
Definition	Entire Yield Total Seed Cotton Mass of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	7 - Harvesters 14 - Special Crops
Unit Symbol	kg - Mass
Resolution	1

SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	281 - Lifetime Yield Total Lint Cotton Mass
Definition	Entire Yield Total Lint Cotton Mass of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	7 - Harvesters 14 - Special Crops
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	282 - Lifetime Threshing Engagement Total Time
Definition	Entire Threshing Engagement Total Time of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	s - Time count
Resolution	1

SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-09
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	283 - Precut Total Count
Definition	The total number of pre-cutted product units produced by a device during an operation.
Comment	Precut Total Count is a total of a device element. It is intended to be used as a task based total value and therefore it is recommended to support the on-time and on-change trigger methods. The total trigger method and the setable property are required for this DDE.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-12
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	284 - Uncut Total Count
Definition	The total number of un-cutted product units produced by a device during an operation.
Comment	Uncut Total Count is a total of a device element. It is intended to be used as a task based total value and therefore it is recommended to support the on-time and on-change trigger methods. The total trigger method and the setable property are required for this DDE.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-12
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	285 - Lifetime Precut Total Count
Definition	Entire Precut Total Count of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-12
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	286 - Lifetime Uncut Total Count
Definition	Entire Uncut Total Count of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647

Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-01-12
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-02-15
Status Comments	

DD Entity	287 - Setpoint Prescription Mode
Definition	This DDE defines the source of the Task Controller set point value sent to the Control Function. This DDI shall be defined as DPD in the DDOP and needs to be setable. The TC shall then set this DDI before starting a prescription operation. The WS (Working Set) shall set this value to zero (0) after system start.
Comment	The Task Controller Prescription Mode shall have the following values: 0 = Unknown / not defined 1 = Prescription Rate 2 = Prescription Default 3 = Prescription GPS loss 4 = Prescription Out Of Field 5 = Manual Entry 6 = Peer Control 7 and higher are reserved for future assignments
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 6
Display Range	0 - 6
Submit by	Joe Tevis
Submit Date	2013-09-23
Submit Company	Topcon
Revision Number	2
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	
Attachment	2013-09-23: Prescription Mode and Control Function Mode Use Cases - Prescription Mode Supporting Doc-v1.ppt

DD Entity	288 - Actual Prescription Mode
Definition	This DDE defines the actual source of the set point value used by the Control Function. This DDI shall be defined as DPD in the DDOP and shall not be setable and need to support the on change trigger. The TC should request this DDI in case of an active prescription operation for documentation purpose.

Comment	The Control Function Prescription Mode sahll have one of the following values: 　0 = Unknown / not defined 　1 = TC rate 　2 = Manual Entry 　3 = Peer Control 　4 = Max override 　5 = Min override 　6 and higher are reserved for future assignments
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 5
Display Range	0 - 5
Submit by	Joe Tevis
Submit Date	2013-09-23
Submit Company	Topcon
Revision Number	2
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	289 - Setpoint Work State
Definition	The Setpoint Work State DDI is the control command counterparts to the Work State DDI (141). The separation of the control commands through one DDI from the actual state communicated through another DDI enables verification of the transmission of the control commands independent from the effectuation of the requested control action.
Comment	See DDI 290 attachment for implementation guideline.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 3
Display Range	0 - 3
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	Status was published

DD Entity	290 - Setpoint Condensed Work State (1-16)

Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 1 to 16 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	2
Current Status	ISO-Published
Status Date	2017-11-22
Status Comments	Status was published

DD Entity	291 - Setpoint Condensed Work State (17-32)
Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 17 to 32 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	292 - Setpoint Condensed Work State (33-48)

Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176).
	The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 33 to 48 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	293 - Setpoint Condensed Work State (49-64)
Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 49 to 64 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	294 - Setpoint Condensed Work State (65-80)

Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 65 to 80 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	295 - Setpoint Condensed Work State (81-96)
Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176).

The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 81 to 96 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements. |
| Comment | See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines. |
| Typically used by Device Class(es) | 1 - Tractor
2 - Primary Soil Tillage
3 - Secondary Soil Tillage
4 - Planters /Seeders
5 - Fertilizer
6 - Sprayers
7 - Harvesters
8 - Root Harvester
9 - Forage harvester
10 - Irrigation
14 - Special Crops |
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	296 - Setpoint Condensed Work State (97-112)

Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 97 to 112 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	297 - Setpoint Condensed Work State (113-128)
Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 113 to 128 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	2
Current Status	ISO-Published
Status Date	2016-06-27
Status Comments	

DD Entity	298 - Setpoint Condensed Work State (129-144)

Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 129 to 144 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	299 - Setpoint Condensed Work State (145-160)
Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 145 to 160 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	300 - Setpoint Condensed Work State (161-176)

Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 161 to 176 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	301 - Setpoint Condensed Work State (177-192)
Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 177 to 192 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	302 - Setpoint Condensed Work State (193-208)

Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 193 to 208 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	303 - Setpoint Condensed Work State (209-224)
Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 209 to 224 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	304 - Setpoint Condensed Work State (225-240)

Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 225 to 240 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	

DD Entity	305 - Setpoint Condensed Work State (241-256)
Definition	The Setpoint Condensed Work State DDIs are the control command counterparts to the Condensed Work States DDIs (161 â€" 176). The value is a combination of the setpoint work states of individual sections or units (e.g. nozzles) number 241 to 256 into a single setpoint work state of their parent device element. The setpoint condensed work state contains the child element setpoint work states, in the driving direction from left to right, where the leftmost child element setpoint work state are the 2 lowest significant bits of the Process Data Value. Each child device elements setpoint work state is represented by 2 bits and defined as: 00 = disable/off, 01 = enable/on, 10 = error indicator, 11 = no change. In total 16 child device element setpoint work states can be contained in one setpoint condensed work state of their parent device element. If less than 16 child device element setpoint work states are available, then the unused bits shall be set to value 11 (no change). When the parent device element contains the Setpoint Condensed Work State DDE, then the device descriptor shall not contain the individual setpoint work state DDEs in the child device elements.
Comment	See the Setpoint Work State DDI (289) attachment for backwards compatibility and implementation guidelines.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jaap van Bergeijk
Submit Date	2012-01-19
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2012-04-02
Status Comments	Status was published

DD Entity	306 - True Rotation Point X-Offset
Definition	X direction offset of the device rotation point relative to the DRP.
Comment	For devices with more than one axle the rotation point can be located at another position within the device than the DRP. In this case, the True Rotation Point X and Y Offset DDIs shall be used to define the location of the rotation point on the device. Both DDI's shall be attached to the device element of type Device.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 14 - Special Crops 15 - Municipal Work
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-06-05
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-07-03
Status Comments	
Attachment	2012-07-03: - ISO11783-11-DDI-306-True Rotation Point-v1.pdf

DD Entity	307 - True Rotation Point Y-Offset
Definition	Y direction offset of the device rotation point relative to the DRP.
Comment	For devices with more than one axle the rotation point can be located at another position within the device than the DRP. In this case, the True Rotation Point X and Y Offset DDIs shall be used to define the location of the rotation point on the device. Both DDI's shall be attached to the device element of type Device. See also attachment of True Rotation Point X-Offset, DDI 306.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 14 - Special Crops 15 - Municipal Work
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-06-05
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2012-07-03
Status Comments	

DD Entity	308 - Actual Percentage Application Rate
Definition	Actual Application Rate expressed as percentage
Comment	Counterpart to DDI 140 (Percentage Application Rate Setpoint)
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 10 - Irrigation
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647

Display Range	0 - 2147483647
Submit by	Jan Steenbock
Submit Date	2012-06-05
Submit Company	98 - MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2012-07-03
Status Comments	

DD Entity	309 - Minimum Percentage Application Rate
Definition	Minimum Application Rate expressed as percentage
Comment	Supplied by device as physical minimum, see also DDI 140.
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-07-03
Submit Company	John Deere
Revision Number	1
Current Status	Request Pending
Status Date	2012-07-03
Status Comments	

DD Entity	310 - Maximum Percentage Application Rate
Definition	Maximum Application Rate expressed as percentage
Comment	Supplied by device as physical maximum, see also DDI 140.
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2012-07-03
Submit Company	John Deere
Revision Number	1
Current Status	Request Pending
Status Date	2012-07-03
Status Comments	

DD Entity	311 - Relative Yield Potential
Definition	Relative yield potential provided by a FMIS or a sensor or entered by the operator for a certain task expressed as percentage.
Comment	Relative yield potential could be used as input for an intelligent unit to calculate the appropriate amount of fertilizer / seed / etc. more accurate. Typical range is 80 to 120%. Expressed in ppm this is 800,000 to 1,200,000.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Martin Sperlich
Submit Date	2012-07-26
Submit Company	CLAAS Agrosystems GmbH & Co. KG
Revision Number	1
Current Status	Not Specified
Status Date	2012-08-27
Status Comments	

DD Entity	312 - Minimum Relative Yield Potential
Definition	Minimum potential yield expressed as percentage.
Comment	This DDIs is used by the system to provide information about its value range support for relative yield potential.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Martin Sperlich
Submit Date	2012-07-29
Submit Company	CLAAS Agrosystems GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2012-08-27
Status Comments	

DD Entity	313 - Maximum Relative Yield Potential
Definition	Maximum potential yield expressed as percentage.
Comment	This DDIs is used by the system to provide information about its value range support for relative yield potential.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Martin Sperlich
Submit Date	2012-08-27
Submit Company	CLAAS Agrosystems GmbH & Co. KG
Revision Number	1
Current Status	Request Pending
Status Date	2012-08-27
Status Comments	

DD Entity	314 - Actual Percentage Crop Dry Matter
Definition	Actual Percentage Crop Dry Matter expressed as parts per million.
Comment	This DDE defines the actual percentage of dry matter in the harvested crop.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 17 - Sensor System
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Martin Sperlich
Submit Date	2012-09-17
Submit Company	CLAAS Agrosystems GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2012-09-24
Status Comments	

DD Entity	315 - Average Percentage Crop Dry Matter
Definition	Average Percentage Crop Dry Matter expressed as parts per million.
Comment	This DDE defines the average percentage of dry matter in the harvested crop.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 17 - Sensor System
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Martin Sperlich
Submit Date	2012-09-17
Submit Company	CLAAS Agrosystems GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2012-09-24
Status Comments	

DD Entity	316 - Effective Total Fuel Consumption
Definition	Accumulated total fuel consumption in working position.
Comment	
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Martin Sperlich
Submit Date	2012-09-17
Submit Company	CLAAS Agrosystems GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2012-09-24
Status Comments	

DD Entity	317 - Ineffective Total Fuel Consumption
Definition	Accumulated total fuel consumption in non working position.
Comment	
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Martin Sperlich
Submit Date	2012-09-17
Submit Company	CLAAS Agrosystems GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2012-09-24
Status Comments	

DD Entity	318 - Effective Total Diesel Exhaust Fluid Consumption
Definition	Accumulated total Diesel Exhaust Fluid consumption in working position.
Comment	Example: Diesel Exhaust Fluid as specified per ISO22241.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647

Submit by	Martin Sperlich
Submit Date	2012-09-17
Submit Company	CLAAS Agrosystems GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2012-09-24
Status Comments	

DD Entity	319 - Ineffective Total Diesel Exhaust Fluid Consumption
Definition	Accumulated total Diesel Exhaust Fluid consumption in non working position.
Comment	Example: Diesel Exhaust Fluid as specified per ISO22241.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Martin Sperlich
Submit Date	2012-09-24
Submit Company	CLAAS Agrosystems GmbH & Co. KG
Revision Number	1
Current Status	Request Pending
Status Date	2012-09-24
Status Comments	

DD Entity	320 - Last loaded Weight
Definition	Last loaded Weight value specified as mass
Comment	After a loading Procedure, this DDI sends the loaded Mass. For more information see attachment located at Last loaded Weight DDE
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger

Submit Date	2013-01-14
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2013-02-04
Status Comments	
Attachment	2013-02-28: Fix of typo and DDI number correction in DDI table - ISO_11783-11-DDI_320-Weighing_Load_Unload-v3.pdf

DD Entity	321 - Last unloaded Weight
Definition	Last unloaded Weight value specified as mass
Comment	After a unloading Procedure, this DDI sends the unloaded Mass. For more information see attachment located at Last loaded Weight DDE
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2013-01-14
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2013-02-04
Status Comments	

DD Entity	322 - Load Identification Number
Definition	The Load Identification Number as a decimal number in the range of 0 to 4294967295. Note that the value of this DDI has the limitation of being an unsigned 32 bit number.
Comment	The DDI Load Identification Number can be used together with the DDI â€œ320 - Last loaded Weightâ€• to document the loading of material on a weighing system. See also the attached document for more details.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 14 - Special Crops 17 - Sensor System
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	

CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Franz Hoepfinger
Submit Date	2013-05-21
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2013-07-15
Status Comments	
Attachment	2013-09-22: - ISO11783-11-DDI-322-Load_Identification_Number_v1-v2.pdf

DD Entity	323 - Unload Identification Number
Definition	The Unload Identification Number as a decimal number in the range of 0 to 2147483647. Note that the value of this DDI has the limitation of being an unsigned 32 bit number.
Comment	The DDI Unload Identification Number can be used together with the DDI â€œ321 - Last Unloaded Weightâ€• to document the unloading of material on a weighing system. See also the attached document for more details.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 14 - Special Crops 17 - Sensor System
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2013-07-15
Submit Company	367 - Fliegl Agratechnik GmbH
Revision Number	1
Current Status	Request Pending
Status Date	2013-07-15
Status Comments	
Attachment	2013-07-15: - ISO11783-11-DDI-323-Unload_Identification_Number_v1-v1.pdf

DD Entity	324 - Chopper Engagement Total Time
Definition	Accumulated time while the chopping mechanism is engaged
Comment	This DDE represents the total engagement time of the chopping mechanism of the machine and is recommended to be used at maximum once within the device description in the device element that represents the machine. This DDE is designated for the chopping unit of a forage harvester. It could be also used for the straw chopper of a harvester. For combine harvesters please also see DDE 236 Threshing Engagement Total Time.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops

Unit Symbol	s - Time count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Martin Sperlich
Submit Date	2013-06-17
Submit Company	CLAAS Agrosystems KGaA mbH & Co KG
Revision Number	1
Current Status	ISO-Published
Status Date	2013-07-15
Status Comments	

DD Entity	325 - Lifetime Application Total Volume
Definition	Entire Application Total Volume of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 9 - Forage harvester 10 - Irrigation
Unit Symbol	L - Capacity count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Michael KÃ¶cher
Submit Date	2013-09-02
Submit Company	AMAZONE
Revision Number	1
Current Status	ISO-Published
Status Date	2013-09-27
Status Comments	

DD Entity	326 - Setpoint Header Speed
Definition	The setpoint rotational speed of the header attachment of a chopper, mower or combine
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops 15 - Municipal Work
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2015-11-27
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1

Current Status	ISO-Published
Status Date	2013-12-04
Status Comments	

DD Entity	327 - Actual Header Speed
Definition	The actual rotational speed of the header attachment of a chopper, mower or combine
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops 15 - Municipal Work
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2013-12-04
Status Comments	

DD Entity	328 - Minimum Header Speed
Definition	The minimum rotational speed of the header attachment of a chopper, mower or combine
Comment	This is a value recommented by the manufacturer of the machine as the minimum speed (unlike 0) for a propper working
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops 15 - Municipal Work
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	329 - Maximum Header Speed
Definition	The maximum rotational speed of the header attachment of a chopper, mower or combine
Comment	This is a value recommented by the manufacturer of the machine as the maximum speed the machine is able to offer
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops 15 - Municipal Work
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	330 - Setpoint Cutting drum speed
Definition	The setpoint speed of the cutting drum of a chopper
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops 15 - Municipal Work
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	331 - Actual Cutting drum speed
Definition	The actual speed of the cutting drum of a chopper
Comment	
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	332 - Minimum Cutting drum speed
Definition	The minimum speed of the cutting drum of a chopper
Comment	This is a value recommented by the manufacturer of the machine as the minimum speed (unlike 0) for a propper working
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483,647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	333 - Maximum Cutting drum speed
Definition	The maximum speed of the cutting drum of a chopper
Comment	This is a value recommented by the manufacturer of the machine as the maximum speed the machine is able to offer
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops 15 - Municipal Work
Unit Symbol	/s - Quantity per time unit
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	334 - Operating Hours Since Last Sharpening
Definition	This value describes the working hours since the last sharpening of the cutting device.
Comment	As the sharpness of the cutting drums cutters on a harvester is an important indicator for cutting quality and an important factor for the fuel usage, this value provides information about quality and effectivity of the harvesting process
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 12 - Farmyard Work 14 - Special Crops 15 - Municipal Work
Unit Symbol	s - Time count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	335 - Front PTO hours
Definition	The hours the Front PTO of the machine was running for the current Task
Comment	This value provides information of the active working time for example of the header attachment of a selfpropelled machine
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	s - Time count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	336 - Rear PTO hours
Definition	The hours the Rear PTO of the machine was running for the current Task
Comment	This value provides information of the active working time for example of the header attachment of a selfpropelled machine

Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
Unit Symbol	s - Time count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2014-01-17
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	337 - Lifetime Front PTO hours
Definition	The hours the Front PTO of the machine was running for the lifetime of the machine
Comment	This value provides information of the active working time for example of the header attachment of a selfpropelled machine
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 12 - Farmyard Work 14 - Special Crops 15 - Municipal Work
Unit Symbol	h - Hour
Resolution	0,1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,0 - 214748364,7
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	338 - Lifetime Rear PTO Hours
Definition	The hours the Rear PTO of the machine was running for the lifetime of the machine
Comment	This value provides information of the active working time for example of the header attachment of a selfpropelled machine

Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
Unit Symbol	h - Hour
Resolution	0,1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,0 - 214748364,7
Submit by	Meyer Matthias
Submit Date	2014-01-17
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	339 - Effective Total Loading Time
Definition	The total time needed in the current task to load a product such as crop.
Comment	
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester 11 - Transport / Trailers 12 - Farmyard Work
Unit Symbol	s - Time count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	340 - Effective Total Unloading Time
Definition	The total time needed in the current task to unload a product crop.
Comment	
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 12 - Farmyard Work
Unit Symbol	s - Time count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-01-17
Status Comments	

DD Entity	341 - Setpoint Grain Kernel Cracker Gap
Definition	The setpoint gap (distance) of the grain kernel cracker drums in a chopper.
Comment	The gap (distance) of the grain kernel cracker is an indicator to the quality of chopped corn.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2014-02-24
Status Comments	

DD Entity	342 - Actual Grain Kernel Cracker Gap
Definition	The actual gap (distance) of the grain kernel cracker drums in a chopper
Comment	The actual gap (distance) of the grain kernel cracker is an indicator to the quality of chopped corn.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2014-02-25
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-02-25
Status Comments	

DD Entity	343 - Minimum Grain Kernel Cracker Gap
Definition	The minimum gap (distance) of the grain kernel cracker drums in a chopper
Comment	The minimum gap (distance) of the grain kernel cracker that can be adjusted
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2014-02-25
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-02-25
Status Comments	

DD Entity	344 - Maximum Grain Kernel Cracker Gap
Definition	The maximum gap (distance) of the grain kernel cracker drums in a chopper
Comment	The maximum gap (distance) of the grain kernel cracker that can be adjusted.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2014-02-25
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-02-25
Status Comments	

DD Entity	345 - Setpoint Swathing Width
Definition	This is the setpoint swathing width of the swath created by a raker.
Comment	For mowers the working width DDIs will represent the with of the mower whereas swathing with will represent the swath with created by the mover.
Typically used by Device Class(es)	0 - Non-specific system 7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2014-03-17
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-03-25
Status Comments	

DD Entity	346 - Actual Swathing Width
Definition	This is the width of the swath currently created by a raker.
Comment	For mowers the working width DDIs will represent the width of the mower whereas swathing width will represent the swath width created by the mover.
Typically used by Device Class(es)	0 - Non-specific system 7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2014-03-17
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-03-25
Status Comments	

DD Entity	347 - Minimum Swathing Width
Definition	This is the minimum swath width the raker can create.
Comment	For mowers the working width DDIs will represent the width of the mower whereas swathing with will represent the swath with created by the mover.
Typically used by Device Class(es)	0 - Non-specific system 7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2014-03-17
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-03-25
Status Comments	

DD Entity	348 - Maximum Swathing Width
Definition	This is the maximum with of the swath the raker can create.
Comment	For mowers the working width DDIs will represent the width of the mower whereas swathing width will represent the swath width created by the mover.
Typically used by Device Class(es)	0 - Non-specific system 7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2014-03-17
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-03-25
Status Comments	

DD Entity	349 - Nozzle Drift Reduction
Definition	The Nozzle Drift Reduction classification value of the spraying equipment as percentage
Comment	The use of this DDE is to document the current used drift reducing classification of the nozzles or combination of drift reducing technique as percentage value. To record documentation obligation product during applying in adjacency of sensitive areas. For more information about nozzle drift classification see also Standard ISO 22369-1 "Crop protection equipment - Drift classification of spraying equipment"
Typically used by Device Class(es)	6 - Sprayers
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 100
Display Range	0 - 100
Submit by	Matthias Meyer
Submit Date	2014-06-18
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2014-06-18
Status Comments	

DD Entity	350 - Function Type
Definition	The Function Type DDE can be used to define the operation or functionality performed by the device element of type Function defined within the DDOP. The values to be used are defined in the attached document.
Comment	In a DDOP (Device Description Object Pool) of an ISOBUS device there are different functionalities covered. The device element types in the Task Controller standard which are Device, Function, Bin, Section, Unit, Connector Type, and Navigation Reference do not last out for certain or more complex devices to describe all information in a unique way to the Task Controller Server. For more information see the attached document.

Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2014-07-01
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2014-07-01
Status Comments	
Attachment	2014-07-01: - ISO11783-11-DDI-350-Function Type-v1.pdf

DD Entity	351 - Application Total Volume in [ml]
Definition	Accumulated Application specified as volume in milliliter [ml]
Comment	is a counter of a device element
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2014-07-02
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2014-07-02
Status Comments	

DD Entity	352 - Application Total Mass in gram [g]
Definition	Accumulated Application specified as mass in gram [g]
Comment	is a counter of a device element
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Meyer
Submit Date	2014-07-02
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2014-07-02
Status Comments	

DD Entity	353 - Total Application of Nitrogen
Definition	Accumulated application of nitrogen [N2] specified as gram [g]
Comment	This total is a counter of a device element
Typically used by Device Class(es)	5 - Fertilizer
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Christoph Staub
Submit Date	2014-06-04
Submit Company	Zunhammer
Revision Number	1
Current Status	ISO-Published
Status Date	2014-08-26
Status Comments	Status was published

DD Entity	354 - Total Application of Ammonium
Definition	Accumulated application of ammonium [NH4] specified as gram [g]
Comment	This total is a counter of a device element
Typically used by Device Class(es)	5 - Fertilizer
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Christoph Staub
Submit Date	2014-06-04
Submit Company	Zunhammer GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-08-26
Status Comments	Status was published

DD Entity	355 - Total Application of Phosphor
Definition	Accumulated application of phosphor (P2O5) specified as gram [g]
Comment	This total is a counter of a device element
Typically used by Device Class(es)	5 - Fertilizer
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Christoph Staub
Submit Date	2014-06-04
Submit Company	Zunhammer GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-08-26
Status Comments	Status was published

DD Entity	356 - Total Application of Potassium
Definition	Accumulated application of potassium (K2) specified as gram [g]
Comment	This total is a counter of a device element
Typically used by Device Class(es)	5 - Fertilizer
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Christoph Staub
Submit Date	2014-06-04
Submit Company	Zunhammer GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-08-26
Status Comments	Status was published

DD Entity	357 - Total Application of Dry Matter
Definition	Accumulated application of dry matter in kilogram [kg]. Dry matter measured at zero percent of moisture
Comment	This total is a counter of a device element
Typically used by Device Class(es)	5 - Fertilizer
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Christoph Staub
Submit Date	2014-06-04
Submit Company	Zunhammer GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2014-08-26
Status Comments	Status was published

DD Entity	358 - Average Dry Yield Mass Per Time
Definition	Average Yield expressed as mass per unit time, corrected for the reference moisture percentage DDI 184. This value is the average for a Task and may be reported as a total.
Comment	This Average Dry Yield Mass Per Time is the mass flow that has been corrected for the average crop moisture (DDI 262) based on the reference moisture for dry mass (DDI 184). This is the "dry" equivalent to DDI 261. This average yield mass per time is calculated as the yield total dry mass (DDI 183) divided by the effective total time (DDI 119) of the active task. When resuming a task, the working set shall compute its average dry yield mass per time from the yield total mass (DDI 90), average crop moisture (DDI 262), reference moisture percentage (DDI 184), and effective total time (119) assuming these DDI's are sent by the task controller.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mg/s - Mass flow
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Tony Woodcock
Submit Date	2014-08-08
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Published

Status Date	2014-08-26
Status Comments	Status was published

DD Entity	359 - Average Dry Yield Mass Per Area
Definition	Average Yield expressed as mass per unit area, corrected for the reference moisture percentage DDI 184. This value is the average for a Task and may be reported as a total.
Comment	This Average Dry Yield Mass Per Area is the mass flow that has been corrected for the average crop moisture (DDI 262) based on the reference moisture for dry mass (DDI 184). This is the "dry" equivalent to DDI 263. This average yield mass per area is calculated as the yield total dry mass (DDI 183) divided by the total area (DDI 116) of the active task. When resuming a task, the working set shall compute its average dry yield mass per area from the yield total mass (DDI 90), average crop moisture (DDI 262), reference moisture percentage (DDI 184), and total area (DDI 116) assuming these DDI's are sent by the task controller.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mg/m² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Tony Woodcock
Submit Date	2014-08-08
Submit Company	Ag Leader Technology
Revision Number	1
Current Status	ISO-Published
Status Date	2014-08-26
Status Comments	

DD Entity	360 - Last Bale Size
Definition	The bale size of the most recently produced bale. Bale Size as length for a square baler or diameter for a round baler.
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler can add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647

Display Range	0 - 2147483647
Submit by	Lynn Derynck
Submit Date	2014-11-07
Submit Company	CNH Industrial N.V.
Revision Number	1
Current Status	ISO-Published
Status Date	2014-12-03
Status Comments	

DD Entity	361 - Last Bale Density
Definition	The bale density of the most recently produced bale. Unit: mg/l (mass per unit volume)
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler can add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	mg/l - Mass per capacity unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Lynn Derynck
Submit Date	2014-11-07
Submit Company	CNH Industrial N.V.
Revision Number	1
Current Status	ISO-Published
Status Date	2014-12-03
Status Comments	

DD Entity	362 - Total Bale Length
Definition	Gives the total baled meters during a task. This is calculated as the sum of the lengths of all knotted bales (square baler).
Comment	
Typically used by Device Class(es)	9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Lynn Derynck
Submit Date	2014-11-07
Submit Company	CNH Industrial N.V.
Revision Number	1
Current Status	ISO-Published
Status Date	2014-12-03
Status Comments	
Attachment	2014-11-07: - ISO_11783-11_DDIdentifier_Total Bale Length-v1.doc

DD Entity	363 - Last Bale Dry Mass
Definition	The dry mass of the bale that has most recently been produced. This is the bale mass corrected for the average moisture of this bale (DDI 212).
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler may add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	g - Mass large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Lynn Derynck
Submit Date	2014-11-07
Submit Company	CNH Industrial N.V.
Revision Number	1
Current Status	ISO-Published
Status Date	2014-12-03
Status Comments	
Attachment	2014-11-07: - ISO_11783-11_DDIdentifier Last Bale Mass Dry-v1.doc

DD Entity	364 - Actual Flake Size
Definition	Actual size of the flake that is currently produced by the chamber.
Comment	The recommended use of this DDE is for a baler to report this once for each new flake that entered the baler chamber and obtained at the maximum compression of the plunger. A baler may add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE at each new flake.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 1000
Display Range	0 - 1000
Submit by	Lynn Derynck
Submit Date	2014-11-07
Submit Company	CNH Industrial N.V.
Revision Number	1

Current Status	ISO-Published
Status Date	2015-01-13
Status Comments	
Attachment	2014-11-07: - ISO_11783-11_DDIdentifier _ Flake Size-v1.doc

DD Entity	365 - Setpoint Downforce Pressure
Definition	Setpoint downforce pressure for an operation
Comment	This value represents the system pressure to produce the downforce (or upforce) for an operation messured in Pa (Pascal); In case of an negative value the system pressure would produce Upforce.
Typically used by Device Class(es)	2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer
Unit Symbol	Pa - Pressure
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Brandon McDonald
Submit Date	2014-12-04
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2015-01-13
Status Comments	

DD Entity	366 - Actual Downforce Pressure
Definition	Actual downforce pressure for an operation
Comment	This value represents the actual system pressure to produce the downforce (or upforce) for an operation messured in Pa (Pascal); In case of an negative value the system pressure would produce Upforce.
Typically used by Device Class(es)	2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer
Unit Symbol	Pa - Pressure
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Brandon McDonald
Submit Date	2014-12-04
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2015-01-13
Status Comments	

DD Entity	367 - Condensed Section Override State (1-16)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 1 to 16 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers "on change" and "time based". The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.
Typically used by Device Class(es)	- Not Assigned 0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System
Unit Symbol	not defined - not defined

Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael KÃ¶cher
Submit Date	2014-11-18
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	ISO-Published
Status Date	2016-06-27
Status Comments	Status was published

DD Entity	368 - Condensed Section Override State (17-32)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 17 to 32 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers â€œon changeâ€• and â€œtime basedâ€•. The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael KÃ¶cher
Submit Date	2015-01-20
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	

DD Entity	369 - Condensed Section Override State (33-48)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 33 to 48 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers "on change" and "time based". The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1

SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael Kö̈cher
Submit Date	2015-01-20
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	Replace character "â€"" in the description by ASCII Character for better processability of the txt export

DD Entity	**370 - Condensed Section Override State (49-64)**
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 49 to 64 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers â€œon changeâ€• and â€œtime basedâ€•. The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael KÃ¶cher
Submit Date	2015-01-20
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	Replace character "â€“" in the description by ASCII Character for better processability of the txt export

DD Entity	371 - Condensed Section Override State (65-80)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 65 to 80 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers "on change" and "time based". The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.

Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System 18 - Reserved for Future Assignment 19 - Timber Harvesters 20 - Forwarders 21 - Timber loaders 22 - Timber Processing Machines 23 - Mulchers 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael KÃ¶cher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	Replace character "â€"" in the DDI Name by ASCII Character for better processability of the txt export

DD Entity	**372 - Condensed Section Override State (81-96)**

Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 81 to 96 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers â€œon changeâ€• and â€œtime basedâ€•. The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael Köcher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	Section numbers in the definition were wrong

DD Entity	373 - Condensed Section Override State (97-112)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 97 to 112 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers "on change" and "time based". The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael KÃ¶cher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	Replace character "â€"" in the DDI Name by ASCII Character for better processability of the txt export. The Section numbers in the definition were wrong

DD Entity	**374 - Condensed Section Override State (113-128)**

Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 113 to 128 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers "on change" and "time based". The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael KÃ¶cher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	Replace character "â€"" in the DDI Name by ASCII Character for better processability of the txt export. Section numbers in the definition were wrong

DD Entity	375 - Condensed Section Override State (129-144)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 129 to 144 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers "on change" and "time based". The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael Köcher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	Replace character "â€"" in the DDI Name by ASCII Character for better processability of the txt export. Section numbers in the definition were wrong.

DD Entity	**376 - Condensed Section Override State (145-160)**

Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 145 to 160 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers â€œon changeâ€• and â€œtime basedâ€•. The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	

CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael Köcher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	Replace character "â€"" in the DDI Name by ASCII Character for better processability of the txt export

DD Entity	377 - Condensed Section Override State (161-176)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 161 to 176 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers "on change" and "time based". The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1

SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael Köcher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	Replace character "â€"" in the DDI Name by ASCII Character for better processability of the txt export

DD Entity	378 - Condensed Section Override State (177-192)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 177 to 192 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers â€œon changeâ€• and â€œtime basedâ€•. The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael KÃ¶cher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	Replace character "â€"" in the DDI Name by ASCII Character for better processability of the txt export

DD Entity	379 - Condensed Section Override State (193-208)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 193 to 208 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers "on change" and "time based". The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1

SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael Köcher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	Request Pending
Status Date	2016-06-27
Status Comments	Replace character "â€"" in the DDI Name by ASCII Character for better processability of the txt export

DD Entity	380 - Condensed Section Override State (209-224)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 209 to 224 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers â€œon changeâ€• and â€œtime basedâ€•. The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael KÃ¶cher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	ISO-Published
Status Date	2016-06-27
Status Comments	Status was published

DD Entity	381 - Condensed Section Override State (225-240)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 225 to 240 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers "on change" and "time based". The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1

SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael Köcher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	ISO-Published
Status Date	2016-06-27
Status Comments	Status was published

DD Entity	382 - Condensed Section Override State (241-256)
Definition	This DDE is used by the implement to communicate that a certain section is overridden and will not follow the section control commands. The value is a combination of the override states of individual sections number 241 to 256 into a single override state. The condensed section override state contains the child element override states, in the driving direction from left to right, where the leftmost child element override state are the 2 lowest significant bits of the Process Data Value. Each child device elements override state is represented by 2 bits and defined as: 00 = section is not overridden, 01 = section is overridden, 10 = reserved, 11 = undefined / not installed. In total 16 child device element override states can be contained in one condensed section override state. If less than 16 child device element override states are available, then the unused bits shall be set to value 11 (undefined / not installed). This DDE shall be placed in the same device element as the corresponding actual condensed work state.
Comment	It is common for SC servers to show the current state of the sections in a proprietary screen. As the implement is allowed to override the commanded state from the task controller it is impossible for the operator to predict what happens when driving into an unworked area. With this DDE it is possible for the SC server to show overridden sections in the proprietary screen. This DDE shall be defined as DPD in the DDOP of the implement. The DPD shall at least support the datalog triggers "on change" and "time based". The value shall only be sent by the implement if it was requested (single request or datalog trigger) by the TC-SC server.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Michael KÃ¶cher
Submit Date	2015-01-21
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	ISO-Published
Status Date	2016-06-27
Status Comments	Status was published

DD Entity	383 - Apparent Wind Direction
Definition	The apparent wind is the wind which is measured on a moving vehicle. It is the result of two motions: the actual true wind and the motion of the vehicle. The wind angle is referenced to the present heading of the vehicle (Zero degree refers to the vehicle driving direction).
Comment	DDI 207 defines the true wind. DDI 208 defines the true wind angle.
Typically used by Device Class(es)	0 - Non-specific system
Unit Symbol	Â° - Angle
Resolution	1
SAE SPN	
CANBus Range	0 - 359
Display Range	0 - 359
Submit by	Jan Steenbock
Submit Date	2015-01-12
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	2
Current Status	ISO-Published
Status Date	2015-02-10
Status Comments	

DD Entity	384 - Apparent Wind Speed
Definition	The apparent wind is the wind which is measured on a moving vehicle. It is the result of two motions: the actual true wind and the motion of the vehicle.
Comment	DDI 207 defines the true wind. DDI 208 defines the true wind angle.
Typically used by Device Class(es)	0 - Non-specific system 17 - Sensor System
Unit Symbol	mm/s - Speed
Resolution	1
SAE SPN	
CANBus Range	0 - 100000000
Display Range	0 - 100000000
Submit by	Jan Steenbock
Submit Date	2015-01-12
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	2
Current Status	ISO-Published
Status Date	2015-02-10
Status Comments	

DD Entity	385 - MSL Atmospheric Pressure
Definition	The atmospheric pressure MSL (Mean Sea Level) is the air pressure related to mean sea level.
Comment	In weather charts only the converted pressure to mean sea level is indicated. Only the pressure changes due to the weather has to be considered.
Typically used by Device Class(es)	0 - Non-specific system 17 - Sensor System
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	0 - 2000000
Display Range	0,0 - 200000,0
Submit by	Jan Steenbock
Submit Date	2015-03-30
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-03-30
Status Comments	

DD Entity	386 - Actual Atmospheric Pressure
Definition	The Actual Atmospheric Pressure is the air pressure currently measured by the weather station.
Comment	This value does take the current altitude (field position) into count.
Typically used by Device Class(es)	0 - Non-specific system 17 - Sensor System
Unit Symbol	Pa - Pressure
Resolution	0,1
SAE SPN	
CANBus Range	0 - 2000000
Display Range	0,0 - 200000,0
Submit by	Jan Steenbock
Submit Date	2015-03-30
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-03-30
Status Comments	

DD Entity	387 - Total Revolutions in Fractional Revolutions
Definition	Accumulated Revolutions specified with fractional revolutions
Comment	Forward or Clockwise rotation represented as positive numbers and reverse or Counter-Clockwise rotation represented by negative numbers.To prevent rounding errors the basic unit r/min where chosen.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	# - Quantity/Count
Resolution	0,0001
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748,3648 - 214748,3647
Submit by	Mike Schmidt
Submit Date	2015-04-24
Submit Company	AGCO Corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2015-04-24
Status Comments	

DD Entity	388 - Total Revolutions in Complete Revolutions
Definition	Accumulated Revolutions specified as completed integer revolutions
Comment	Forward or Clockwise rotation represented as positive numbers and reverse or Counter-Clockwise rotation represented by negative numbers.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Mike Schmidt
Submit Date	2015-04-24
Submit Company	AGCO Corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2015-04-24
Status Comments	

DD Entity	389 - Setpoint Revolutions specified as count per time
Definition	Setpoint Revolutions specified as count per time
Comment	Forward or Clockwise rotation represented as positive numbers and reverse or Counter-Clockwise rotation represented by negative numbers. To prevent rounding errors the basic unit r/min where chosen.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	r/min - Revolutions per minute
Resolution	0,0001
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748,3648 - 214748,3647
Submit by	David Kuhnel
Submit Date	2015-04-24
Submit Company	DICKEY-john Corp
Revision Number	1
Current Status	ISO-Published
Status Date	2015-04-24
Status Comments	

DD Entity	390 - Actual Revolutions Per Time
Definition	Actual Revolutions specified as count per time
Comment	Forward or Clockwise rotation represented as positive numbers and reverse or Counter-Clockwise rotation represented by negative numbers. To prevent rounding errors the basic unit r/min where chosen.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	r/min - Revolutions per minute
Resolution	0,0001
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748,3648 - 214748,3647
Submit by	David Kuhnel
Submit Date	2015-03-23
Submit Company	DICKEY-john Corp
Revision Number	1
Current Status	ISO-Published
Status Date	2015-03-23
Status Comments	

DD Entity	391 - Default Revolutions Per Time
Definition	Default Revolutions specified as count per time
Comment	Forward or Clockwise rotation represented as positive numbers and reverse or Counter-Clockwise rotation represented by negative numbers. To prevent rounding errors the basic unit r/min where chosen.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	r/min - Revolutions per minute
Resolution	0,0001
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748,3648 - 214748,3647
Submit by	David Kuhnel
Submit Date	2015-03-23
Submit Company	DICKEY-john Corp
Revision Number	1
Current Status	ISO-Published
Status Date	2015-03-23
Status Comments	

DD Entity	392 - Minimum Revolutions Per Time
Definition	Minimum Revolutions specified as count per time
Comment	Forward or Clockwise rotation represented as positive numbers and reverse or Counter-Clockwise rotation represented by negative numbers. To prevent rounding errors the basic unit r/min where chosen.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	r/min - Revolutions per minute
Resolution	0,0001
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748,3648 - 214748,3647
Submit by	David Kuhnel
Submit Date	2015-03-23
Submit Company	DICKEY-john Corp
Revision Number	1
Current Status	ISO-Published
Status Date	2015-03-23
Status Comments	

DD Entity	393 - Maximum Revolutions Per Time
Definition	Maximum Revolutions specified as count per time
Comment	Forward or Clockwise rotation represented as positive numbers and reverse or Counter-Clockwise rotation represented by negative numbers. To prevent rounding errors the basic unit r/min where chosen.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers
Unit Symbol	r/min - Revolutions per minute
Resolution	0,0001
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-214748,3648 - 214748,3647
Submit by	David Kuhnel
Submit Date	2015-07-02
Submit Company	DICKEY-john Corp
Revision Number	1
Current Status	ISO-Published
Status Date	2015-07-02
Status Comments	

DD Entity	394 - Actual Fuel Tank Content
Definition	The actual content of the fuel tank
Comment	This value can be used to see the refilling of the fuel tank or the theft of fuel.
Typically used by Device Class(es)	1 - Tractor 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hans van Zadelhoff
Submit Date	2015-07-02
Submit Company	Grimme Landmaschinenfabrik GmbH & Co. KG
Revision Number	2
Current Status	ISO-Published
Status Date	2021-09-13
Status Comments	Status was published

DD Entity	395 - Actual Diesel Exhaust Fluid Tank Content
Definition	The actualcontent of the diesel exhaust fluid tank
Comment	This value can be used to see the refilling of the diesel exhaust fluid tank or the theft of diesel exhaust fluid.
Typically used by Device Class(es)	1 - Tractor 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Hans van Zadelhoff
Submit Date	2015-07-02
Submit Company	Grimme Landmaschinenfabrik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-07-02
Status Comments	

DD Entity	396 - Setpoint Speed
Definition	The setpoint speed that can be specified in a process data variable for communication between farm management information systems and mobile implement control systems. The setpoint speed DDI may also be used in a device description object pool to specify support for speed control by a device. A positive value will represent forward direction and a negative value will represent reverse direction.
Comment	The implementation of speed control on the mobile implement control system may use other ISO11783 network parameter groups (e.g. ISO11783-7 Commanded Vehicle Speed and Machine Selected Speed Setpoint) and may be subject to control request authentication requirements. The definition of this DDI has been added to the ISO 11783-11 data dictionary to facilitate the specification of a setpoint speed in a task data transfer file and to enable specification of the support of speed control in a device description object pool.

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
Unit Symbol	mm/s - Speed
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Hans van Zadelhoff
Submit Date	2015-02-12
Submit Company	Grimme Landmaschinenfabrik GmbH & Co. KG
Revision Number	3
Current Status	ISO-Published
Status Date	2015-04-24
Status Comments	

DD Entity	397 - Actual Speed
Definition	The actual speed as measured on or used by a device for the execution of task based data, e.g. to convert a setpoint rate expressed per area to device specific control data that is expressed as a rate per time. The actual speed can be measured by the device itself or it can be a speed value that is obtained from one of the speed parameter groups that are broadcasted on the ISO11783 network and defined in ISO11783-7. Examples of broadcasted speed parameter groups are wheel based speed, ground based speed and machine selected speed. The source of the actual speed can be specified by a Speed Source DDI that is present in the same device element as the speed DDI. A positive value will represent forward direction and a negative value will represent reverse direction.
Comment	This DDI has been added to the data dictionary to support logging of the speed that the device uses for processing and for generation of task data. The addition of a DDI for actual speed allows speed values to be added to the default data set that devices present to a task controller or a data logger.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops
Unit Symbol	mm/s - Speed
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Hans van Zadelhoff
Submit Date	2015-04-24
Submit Company	Grimme Landmaschinenfabrik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-04-24
Status Comments	

DD Entity	398 - Minimum Speed

Definition	The minimum speed that can be specified in a process data variable for communication between farm management information systems and mobile implement control systems. A positive value will represent forward direction and a negative value will represent reverse direction.
Comment	This DDI has been added to the data dictionary to support the setting and logging of a minimum speed for a part of a device. See also the definitions of the Setpoint, Actual and Maximum Speed DDIs for additional definition and implementation information of Speed DDIs.
Typically used by Device Class(es)	- Not Assigned 0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops
Unit Symbol	mm/s - Speed
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Hans van Zadelhoff
Submit Date	2015-09-02
Submit Company	Grimme Landmaschinenfabrik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-09-02
Status Comments	

DD Entity	399 - Maximum Speed
Definition	The maximum speed that can be specified in a process data variable for communication between farm management information systems and mobile implement control systems. A positive value will represent forward direction and a negative value will represent reverse direction.
Comment	This DDI has been added to the data dictionary to support the setting and logging of a maximum speed for a part of a device. See also the definitions of the Setpoint, Actual and Minimum Speed DDIs for additional definition and implementation information of Speed DDIs.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops
Unit Symbol	mm/s - Speed
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Hans van Zadelhoff
Submit Date	2015-09-02
Submit Company	Grimme Landmaschinenfabrik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-09-02
Status Comments	

DD Entity	400 - Speed Source

Definition	The Speed Source that the device uses to report actual speed and to process the setpoint, minimum and maximum speeds. The Speed Source value is an enumeration with the following definitions:
	  0 = Unknown
	  1 = Wheel-based speed
	  2 = Ground-based speed
	  3 = Navigation-based speed
	  4 = Blended speed
	  5 = Simulated speed
	  6 = Machine Selected speed
	  7 = Machine measured speed (This option indicates the machine uses an own sensor to measures the actual speed, instead of the speed provided on the bus).
	  8 to 100 = Reserved

Comment	The Speed Source DDI can be used in conjunction with the Actual Speed DDI to specify which speed measurement method is used to determine the value reported via the Actual, Setpoint, Minimum and Maximum Speed DDIs. When a device receives commands for Setpoint, Minimum or Maximum Speed then the Speed Source can be used to select a ISO 11783-7 command for speed control.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 100
Display Range	0 - 100
Submit by	Jaap van Bergeijk
Submit Date	2015-09-02
Submit Company	AGCO corporation
Revision Number	1
Current Status	ISO-Published
Status Date	2015-09-02
Status Comments	

DD Entity	401 - Actual Application of Nitrogen
Definition	Actual application of Nitrogen [N2] specified as milligram per liter [mg/l]
Comment	Is the actual amount of Nitrogen [N2] in liquid manure (see also DD Entity 353)
Typically used by Device Class(es)	5 - Fertilizer
Unit Symbol	mg/l - Mass per capacity unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Christoph Staub
Submit Date	2015-09-02
Submit Company	Zunhammer GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-03-11
Status Comments	

DD Entity	402 - Actual application of Ammonium
Definition	Actual application of Ammonium [NH4] specified as milligram per liter [mg/l]
Comment	Is the actual amount of Ammonium [NH4] in liquig manure (see also DD Entity 354)
Typically used by Device Class(es)	5 - Fertilizer
Unit Symbol	mg/l - Mass per capacity unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Christoph Staub
Submit Date	2015-09-02
Submit Company	Zunhammer GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-03-11
Status Comments	

DD Entity	403 - Actual application of Phosphor
Definition	Actual application of Phosphor [P2O5] specified as milligram per liter [mg/l]
Comment	Is the actual amount of Phosphor [P2O5] in liquid manure (see also DD Entity 355)
Typically used by Device Class(es)	5 - Fertilizer
Unit Symbol	mg/l - Mass per capacity unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Christoph Staub
Submit Date	2015-03-11
Submit Company	Zunhammer GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-07-30
Status Comments	

DD Entity	404 - Actual application of Potassium
Definition	Actual application of Potassium [K2] specified as gram [g]
Comment	is the actual amount of Potassium [K2] in liquid manure (see also DD Entity 356)
Typically used by Device Class(es)	5 - Fertilizer
Unit Symbol	mg/l - Mass per capacity unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Christoph Staub
Submit Date	2015-09-02
Submit Company	Zunhammer GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-09-04
Status Comments	

DD Entity	405 - Actual application of Dry Matter
Definition	Actual application of Dry Matter in kilogram [kg]. Dry matter measured at Zero percent of moisture.
Comment	is the actual amount of Dry matter in liquid manure (see also DD Entity 357)
Typically used by Device Class(es)	5 - Fertilizer
Unit Symbol	mg/l - Mass per capacity unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Christoph Staub
Submit Date	2015-09-02
Submit Company	Zunhammer GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-09-04
Status Comments	

DD Entity	406 - Actual Protein Content
Definition	Actual Protein content of a harvested crops
Comment	Protein content of harvested crop expressed as a percent mass of the total crop.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Joe Tevis
Submit Date	2015-09-04
Submit Company	Topcon
Revision Number	1
Current Status	ISO-Published
Status Date	2015-09-04
Status Comments	

DD Entity	407 - Average Protein Content
Definition	Average protein content in a harvested crop
Comment	Average protein content of harvested crop.
Typically used by Device Class(es)	7 - Harvesters 8 - Root Harvester
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Joe Tevis
Submit Date	2015-09-04
Submit Company	Topcon
Revision Number	1
Current Status	ISO-Published
Status Date	2015-09-04
Status Comments	

DD Entity	408 - Average Crop Contamination
Definition	Average amount of dirt or foreign in a harvested crop
Comment	Average amount of dirt or foreign in a harvested crop
Typically used by Device Class(es)	7 - Harvesters
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Ben Craker
Submit Date	2015-09-02
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2015-06-15
Status Comments	

DD Entity	409 - Total Diesel Exhaust Fluid Consumption
Definition	Accumulated Diesel Exhaust Fluid Consumption as a Task Total.
Comment	This data definition is the Diesel Exhaust Fluid (DEF) consumption counterpart of the previously defined data dictionary entity 148 - Total Fuel Consumption. These data dictionary entities can be used by devices that support data logging of Fuel and Diesel Exhaust Fluid consumption.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Eric Bongaerts
Submit Date	2015-06-01
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2015-06-16
Status Comments	
Attachment	2015-06-01: - DEF_DDI_Requests-v1.pptx

DD Entity	410 - Instantaneous Diesel Exhaust Fluid Consumption per Time
Definition	Diesel Exhaust Fluid consumption per time
Comment	This data definition is the Diesel Exhaust Fluid (DEF) consumption counterpart of the previously defined data dictionary entity 149 - Instantaneous Fuel Consumption per Time. These data dictionary entities can be used by devices that support data logging of Fuel and Diesel Exhaust Fluid consumption.

Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	mm³/s - Flow
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Eric Bongaerts
Submit Date	2015-06-01
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2015-06-16
Status Comments	

DD Entity	411 - Instantaneous Diesel Exhaust Fluid Consumption per Area
Definition	Diesel Exhaust Fluid consumption per area
Comment	This data definition is the Diesel Exhaust Fluid (DEF) consumption counterpart of the previously defined data dictionary entity 150 - Instantaneous Fuel Consumption per Area. These data dictionary entities can be used by devices that support data logging of Fuel and Diesel Exhaust Fluid consumption.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	mmÂ³/mÂ² - Capacity per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Eric Bongaerts
Submit Date	2015-06-01
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2015-06-16
Status Comments	

DD Entity	412 - Lifetime Diesel Exhaust Fluid Consumption
Definition	Accumulated Diesel Exhaust Fluid Consumption over the entire lifetime of the device.

Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changed. It is up to the device control system when to reset this value. The Device shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed. This data definition is the Diesel Exhaust Fluid (DEF) consumption counterpart of the previously defined data dictionary entity 276 - Lifetime Fuel Consumption. These data dictionary entities can be used by devices that support data logging of Fuel and Diesel Exhaust Fluid consumption.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	L - Capacity count
Resolution	0,5
SAE SPN	5963
CANBus Range	0 - 2147483647
Display Range	0 - 1073741823,5
Submit by	Eric Bongaerts
Submit Date	2015-06-01
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2015-06-16
Status Comments	

DD Entity	413 - Lifetime Average Diesel Exhaust Fluid Consumption per Time
Definition	Average Diesel Exhaust Fluid Consumption per Time over the entire lifetime of the device.
Comment	This is the overall average of the device. This average does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Device shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed. This data definition is the Diesel Exhaust Fluid (DEF) consumption counterpart of the previously defined data dictionary entity 277 - Lifetime Average Fuel Consumption per Time. These data dictionary entities can be used by devices that support data logging of Fuel and Diesel Exhaust Fluid consumption.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	mmÂ³/s - Flow
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Eric Bongaerts
Submit Date	2015-06-01
Submit Company	AGCO
Revision Number	1

Current Status	ISO-Published
Status Date	2015-06-16
Status Comments	Status was published

DD Entity	**414 - Lifetime Average Diesel Exhaust Fluid Consumption per Area**
Definition	Average Diesel Exhaust Fluid Consumption per Area over the entire lifetime of the device.
Comment	This is the overall average of the device. This average does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Device shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed. This data definition is the Diesel Exhaust Fluid (DEF) consumption counterpart of the previously defined data dictionary entity 278 - Lifetime Average Fuel Consumption per Area. These data dictionary entities can be used by devices that support data logging of Fuel and Diesel Exhaust Fluid consumption.
Typically used by Device Class(es)	1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	mm³/m² - Capacity per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647

Display Range	0 - 2147483647
Submit by	Eric Bongaerts
Submit Date	2015-06-01
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2015-06-16
Status Comments	

DD Entity	415 - Actual Seed Singulation Percentage
Definition	Actual Seed Singulation Percentage calculated from measured seed spacing using ISO 7256-1 "Quality of Feed Index" algorithm
Comment	Reference ISO 7256-1 "Quality of Feed Index" for details on the standardized method for calculating the seed singulation parameter. The number of seed drops for calculating this real-time percentage is not specified due to the possible differences in measurement and performance of the equipment and seeding rates.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 1000000
Display Range	0 - 1000000
Submit by	Matthias Rothmund
Submit Date	2015-03-25
Submit Company	HORSCH
Revision Number	2
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	416 - Average Seed Singulation Percentage
Definition	Average Seed Singulation Percentage calculated from measured seed spacing using ISO 7256-1 "Quality of Feed Index" algorithm. The value is the average for a Task.
Comment	Reference ISO 7256-1 "Quality of Feed Index" for details on the standardized method for calculating the seed singulation parameter. The number of seed drops for calculating this real-time percentage is not specified due to the possible differences in measurement and performance of the equipment and seeding rates.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 1000000
Display Range	0 - 1000000
Submit by	Matthias Rothmund
Submit Date	2015-03-25
Submit Company	HORSCH
Revision Number	2
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	417 - Actual Seed Skip Percentage
Definition	Actual Seed Skip Percentage calculated from measured seed spacing using ISO 7256-1 "Miss Index" algorithm
Comment	Reference ISO 7256-1 "Miss Index" for details on the standardized method for calculating a percentage. The number of seed drops for calculating this real-time percentage is not specified due to the possible differences in measurement and performance of the equipment and seeding rates.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 1000000
Display Range	0 - 1000000
Submit by	Matthias Rothmund
Submit Date	2015-03-25
Submit Company	HORSCH
Revision Number	2
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	418 - Average Seed Skip Percentage
Definition	Average Seed Skip Percentage calculated from measured seed spacing using ISO 7256-1 "Miss Index" algorithm. The value is the average for a Task.
Comment	Reference ISO 7256-1 "Miss Index" for details on the standardized method for calculating a percentage. The number of seed drops for calculating this real-time percentage is not specified due to the possible differences in measurement and performance of the equipment and seeding rates.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 1000000
Display Range	0 - 1000000
Submit by	Matthias Rothmund
Submit Date	2015-03-25
Submit Company	HORSCH
Revision Number	3
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	419 - Actual Seed Multiple Percentage
Definition	Actual Seed Multiple Percentage calculated from measured seed spacing using ISO 7256-1 "Multiples Index" algorithm.
Comment	Reference ISO 7256-1 "Multiples Index" for details on the standardized method for calculating a percentage. The number of seed drops for calculating this real-time percentage is not specified due to the possible differences in measurement and performance of the equipment and seeding rates.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 1000000
Display Range	0 - 1000000
Submit by	Matthias Rothmund
Submit Date	2015-03-25
Submit Company	HORSCH
Revision Number	3
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	420 - Average Seed Multiple Percentage
Definition	Average Seed Multiple Percentage calculated from measured seed spacing using ISO 7256-1 "Multiples Index" algorithm. The value is the average for a Task.
Comment	Reference ISO 7256-1 "Multiples Index" for details on the standardized method for calculating a percentage. The number of seed drops for calculating this real-time percentage is not specified due to the possible differences in measurement and performance of the equipment and seeding rates.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 1000000
Display Range	0 - 1000000
Submit by	Matthias Rothmund
Submit Date	2015-03-25
Submit Company	HORSCH
Revision Number	3
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	421 - Actual Seed Spacing Deviation
Definition	Actual Seed Spacing Deviation from setpoint seed spacing
Comment	Deviation is a positive value independently of if distance between seeds is smaller or larger than the setpoint value
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Rothmund
Submit Date	2015-03-25
Submit Company	HORSCH
Revision Number	3
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	422 - Average Seed Spacing Deviation
Definition	Average Seed Spacing Deviation from setpoint seed spacing. The value is the average for a Task.
Comment	Deviation is a positive value independently of if distance between seeds is smaller or larger than the setpoint value
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Rothmund
Submit Date	2015-03-25
Submit Company	HORSCH
Revision Number	3
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	423 - Actual Coefficient of Variation of Seed Spacing Percentage
Definition	Actual Coefficient of Variation of Seed Spacing Percentage calculated from measured seed spacing using ISO 7256-1 algorithm
Comment	Reference ISO 7256-1 "Coefficient of Variation" for details on the standardized method for calculating a percentage. The number of seed drops for calculating this real-time percentage is not specified due to the possible differences in measurement and performance of the equipment and seeding rates.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 1000000
Display Range	0 - 1000000
Submit by	Matthias Rothmund
Submit Date	2015-03-25
Submit Company	HORSCH
Revision Number	3
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	424 - Average Coefficient of Variation of Seed Spacing Percentage
Definition	Average Coefficient of Variation of Seed Spacing Percentage calculated from measured seed spacing using ISO 7256-1 algorithm. The value is the average for a Task.
Comment	Reference ISO 7256-1 "Coefficient of Variation" for details on the standardized method for calculating a percentage. The number of seed drops for calculating this real-time percentage is not specified due to the possible differences in measurement and performance of the equipment and seeding rates.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	ppm - Parts per million
Resolution	1
SAE SPN	
CANBus Range	0 - 1000000
Display Range	0 - 1000000
Submit by	Matthias Rothmund
Submit Date	2015-03-25
Submit Company	HORSCH
Revision Number	5
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	425 - Setpoint Maximum Allowed Seed Spacing Deviation
Definition	Setpoint Maximum Allowed Seed Spacing Deviation
Comment	Value is for TIM purposes. An acceptable seeding quality range can be defined in a task or prescription. Deviation is a positive value independently of if distance between seeds is smaller or larger than the setpoint value
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Matthias Rothmund
Submit Date	2015-03-25
Submit Company	HORSCH
Revision Number	5
Current Status	ISO-Submitted (Pending)
Status Date	2015-07-30
Status Comments	

DD Entity	426 - Setpoint Downforce as Force
Definition	Setpoint Downforce as Force
Comment	This value represents the system pressure to produce the downforce (or upforce) for an operation messured in newton; In case of an negative value the system pressure would produce Upforce.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	N - Newton
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Rothmund
Submit Date	2015-09-03
Submit Company	HORSCH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-09-03
Status Comments	

DD Entity	427 - Actual Downforce as Force
Definition	Actual Downforce as Force
Comment	This value represents the actual downforce to produce the downforce (or upforce) for an operation messured in newton; In case of an negative value the system pressure would produce Upforce.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	N - Newton
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647
Display Range	-2147483648 - 2147483647
Submit by	Matthias Rothmund
Submit Date	2015-09-03
Submit Company	HORSCH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-09-03
Status Comments	

DD Entity	428 - Loaded Total Mass
Definition	Accumulated Loads specified as mass, not corrected for the reference moisture percentage DDI 184.
Comment	Is a counter of a machine element.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-02
Status Comments	

DD Entity	429 - Unloaded Total Mass
Definition	Accumulated Unloads specified as mass, not corrected for the reference moisture percentage DDI 184.
Comment	Is a counter of a machine element.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-02
Status Comments	

DD Entity	430 - Lifetime Loaded Total Mass
Definition	Entire Yield Total Mass of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	

CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-02
Status Comments	

DD Entity	431 - Lifetime Unloaded Total Mass
Definition	Entire Unloaded Total Mass of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-02
Status Comments	

DD Entity	432 - Setpoint Application Rate of Nitrogen
Definition	Setpoint application rate of nitrogen specified as a mass per area
Comment	As a reference the toal amount of nitrogen will be documented with DDE353
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/m² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295

Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik GmbH Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	433 - Actual Application Rate of Nitrogen
Definition	Actual application rate of nitrogen specified as a mass per area
Comment	As a reference the toal amount of nitrogen will be documented with DDE353
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	17 - Sensor System
	25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	434 - Minimum Application Rate of Nitrogen
Definition	Minimum application rate of nitrogen specified as a mass per area
Comment	As a reference the toal amount of nitrogen will be documented with DDE353
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	17 - Sensor System
	25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	435 - Maximum Application Rate of Nitrogen
Definition	Maximum application rate of nitrogen specified as a mass per area
Comment	As a reference the toal amount of nitrogen will be documented with DDE353
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	436 - Setpoint Application Rate of Ammonium
Definition	Setpoint application rate of Ammonium specified as a mass per area
Comment	As a reference the total amount of ammonium will be documented with DDE354
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	437 - Actual Application Rate of Ammonium
Definition	Actual application rate of Ammonium specified as a mass per area
Comment	As a reference the total amount of Ammonium will be documented with DDE354
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	438 - Minimum Application Rate of Ammonium
Definition	Minimum application rate of Ammonium specified as a mass per area
Comment	As a reference the total amount of ammonium will be documented with DDE354
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	439 - Maximum Application Rate of Ammonium
Definition	Maximum application rate of Ammonium specified as a mass per area
Comment	As a reference the total amount of ammonium will be documented with DDE354
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	440 - Setpoint Application Rate of Phosphor
Definition	Setpoint application rate of phosphor specified as a mass per area
Comment	As a reference the total amount of phosphor will be documented with DDE355
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	441 - Actual Application Rate of Phosphor
Definition	Actual application rate of phosphor specified as a mass per area
Comment	As a reference the total amount of phosphor will be documented with DDE355
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	442 - Minimum Application Rate of Phosphor
Definition	Minimum application rate of phosphor specified as a mass per area
Comment	As a reference the total amount of phosphor will be documented with DDE355
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	443 - Maximum Application Rate of Phosphor
Definition	Maximum application rate of phosphor specified as a mass per area
Comment	As a reference the total amount of phosphor will be documented with DDE355
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik GmbH & Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	444 - Setpoint Application Rate of Potassium
Definition	Setpoint application rate of potassium specified as a mass per area
Comment	As a reference the toal amount of potassium will be documented with DDE356
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik GmbH Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-02
Status Comments	

DD Entity	445 - Actual Application Rate of Potassium
Definition	Actual application rate of potassium specified as a mass per area
Comment	As a reference the toal amount of potassium will be documented with DDE356
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 4294967295
Display Range	0 - 4294967295
Submit by	Jan Steenbock
Submit Date	2015-11-02
Submit Company	MÃ¼ller-Elektronik GmbH Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	446 - Minimum Application Rate of Potassium
Definition	Minimum application rate of potassium specified as a mass per area
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jan Steenbock
Submit Date	2016-03-29
Submit Company	MÃ¼ller-Elektronik GmbH Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	447 - Maximum Application Rate of Potassium
Definition	Maximum application rate of potassium specified as a mass per area
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	mg/mÂ² - Mass per area unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jan Steenbock
Submit Date	2015-11-03
Submit Company	MÃ¼ller-Elektronik GmbH Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	448 - Setpoint Application Rate of Dry Matter
Definition	Setpoint application rate of dry matter expressed as percentage
Comment	As a reference the toal amount of dry matter will be documented with DDE 357
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	ppm (parts per million) - Quantity per quantity unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jan Steebock
Submit Date	2015-11-03
Submit Company	MÃ¼ller-Elektronik GmbH Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	449 - Actual Application Rate of Dry Matter
Definition	Actual application rate of dry matter expressed as percentage
Comment	As a reference the toal amount of dry matter will be documented with DDE 357
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	ppm (parts per million) - Quantity per quantity unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jan Steenbock
Submit Date	2015-09-03
Submit Company	MÃ¼ller-Elektronik GmbH Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	450 - Minimum Application Rate of Dry Matter
Definition	Minimum application rate of dry matter expressed as percentage
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 17 - Sensor System 25 - Slurry Applicators
Unit Symbol	ppm (parts per million) - Quantity per quantity unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jan Steenbock
Submit Date	2015-11-03
Submit Company	MÃ¼ller-Elektronik GmbH Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	451 - Maximum Application Rate of Dry Matter
Definition	Maximum application rate of dry matter expressed as percentage
Comment	
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	17 - Sensor System
	25 - Slurry Applicators
Unit Symbol	ppm (parts per million) - Quantity per quantity unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Jan Steenbock
Submit Date	2015-11-03
Submit Company	MÃ¼ller-Elektronik GmbH Co. KG
Revision Number	1
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	452 - Loaded Total Volume
Definition	Accumulated Loaded Volume specified as volume
Comment	Is a counter of a machine element
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	17 - Sensor System
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	453 - Unloaded Total Volume
Definition	Accumulated Unloaded Volume specified as volume
Comment	Is a counter of a machine element
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	17 - Sensor System
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	454 - Lifetime loaded Total Volume
Definition	Entire loaded Volume of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	17 - Sensor System

Unit Symbol	L - Capacity count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	455 - Lifetime Unloaded Total Volume
Definition	Entire unloaded Volume of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	L - Capacity count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	456 - Last loaded Volume
Definition	Last loaded Volume value specified as volume
Comment	After a loading Procedure, this DDI sends the loaded Volume. For more information see attachment located at Last loaded Weight DDE320

Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	457 - Last unloaded Volume
Definition	Last unloaded Volume value specified as volume
Comment	After a unloading Procedure, this DDI sends the uloaded Volume. For more information see attachment located at Last loaded Weight DDE320
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	458 - Loaded Total Count
Definition	Accumulated Loads specified as count
Comment	Is a counter of a device element
Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 14 - Special Crops 17 - Sensor System
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2

Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	459 - Unloaded Total Count
Definition	Accumulated Unloaded specified as count
Comment	Is a counter of a device element
Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 14 - Special Crops 17 - Sensor System
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	460 - Lifetime Loaded Total Count
Definition	Entire Loaded Total Count of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 14 - Special Crops 17 - Sensor System
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647

Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	461 - Lifetime Unloaded Total Count
Definition	Entire Unloaded Total Count of the device lifetime.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 14 - Special Crops 17 - Sensor System
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	462 - Last loaded Count
Definition	Last loaded Count value specified as count
Comment	After a loading Procedure, this DDI sends the loaded Count. For more information see attachment located at Last loaded Weight DDE320
Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	# - Quantity/Count
Resolution	1

SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	463 - Last unloaded Count
Definition	Last unloaded Count value specified as count
Comment	After a unloading Procedure, this DDI sends the loaded Count. For more information see attachment located at Last loaded Weight DDE 320
Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 14 - Special Crops 17 - Sensor System
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-11-03
Status Comments	

DD Entity	464 - Haul Counter
Definition	Each Time a Device Element is filled and emptied this is called a haul cycle. This counter counts the cycles
Comment	Is a counter of a device element. Can be used to count loads, fillings, tippings and such.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH

Revision Number	2
Current Status	ISO-Published
Status Date	2015-12-14
Status Comments	

DD Entity	465 - Lifetime Haul Counter
Definition	The number of haul cycles done by a machine over its entire lifetime. This DDE value can not be set through the process data interface but can be requested and added to a datalog. This DDE value is not affected by a task based total haul cycles but will increment at the same rate as the task based total.
Comment	This is the overall total of the device. This total does not refer to an application controlled by a Task Controller. Therefore this DDE shall not be setable within the device description and neither shall the device reset the value when the task status changes. It is up to the device control system when to reset this value. The Working Set Master shall support the total trigger method for this DDE but shall not support the setable property. The Task Controller can request and store this DDE at the end of a task. But it shall not set this DDE when the task is resumed.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	# - Quantity/Count
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Franz Hoepfinger
Submit Date	2015-07-24
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	2
Current Status	ISO-Published
Status Date	2015-12-14
Status Comments	

DD Entity	466 - Actual relative connector angle

Definition	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 of the attachment. In case of for example a malfunction sensor the error value is set to 0xFExxxxxx.
Comment	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.
Typically used by Device Class(es)	2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 25 - Slurry Applicators
Unit Symbol	Â° - Angle
Resolution	0,001
SAE SPN	
CANBus Range	-180000 - 180000
Display Range	-180,000 - 180,000
Submit by	Thomas Konermann
Submit Date	2015-07-27
Submit Company	AMAZONEN-Werke H. Dreyer GmbH & Co. KG
Revision Number	2
Current Status	ISO-Published
Status Date	2016-01-25
Status Comments	
Attachment	2015-07-27: - Actual relative connector angle-v1.pdf

DD Entity	467 - Actual Percentage Content
Definition	Actual Device Element Content specified as percent.
Comment	
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System 18 - Reserved for Future Assignment 19 - Timber Harvesters 20 - Forwarders 21 - Timber loaders 22 - Timber Processing Machines 23 - Mulchers 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	% - Percent
Resolution	0,01
SAE SPN	
CANBus Range	0 - 10000
Display Range	0,00 - 100,00
Submit by	Matthias Meyer
Submit Date	2016-06-13
Submit Company	John Deere
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-13
Status Comments	

DD Entity	472 - Setpoint Length of Cut
Definition	Setpoint length of cut for harvested material, e.g. Forage Harvester or Tree Harvester.
Comment	

Typically used by Device Class(es)	0 - Non-specific system 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483,647
Display Range	0,000 - 2,147,484
Submit by	Frank Wiebeler
Submit Date	2016-03-21
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2016-03-21
Status Comments	

DD Entity	473 - Minimum length of cut
Definition	Minimum length of cut for harvested material, e.g. Forage Harvester or Tree Harvester.
Comment	
Typically used by Device Class(es)	0 - Non-specific system 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483,647
Display Range	0,000 - 2,147,484
Submit by	Frank Wiebeler
Submit Date	2016-03-21
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2016-03-21
Status Comments	

DD Entity	474 - Maximum Length of Cut
Definition	Maximum length of cut for harvested material, e.g. Forage Harvester or Tree Harvester.
Comment	
Typically used by Device Class(es)	0 - Non-specific system 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 14 - Special Crops
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483,647
Display Range	0,000 - 2,147,484
Submit by	Frank Wiebeler
Submit Date	2016-03-21
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2016-03-21
Status Comments	

DD Entity	475 - Setpoint Bale Hydraulic Pressure
Definition	The setpoint value of the hydraulic pressure applied to the sides of the bale in the bale compression chamber.
Comment	
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	Pa - Pressure
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2016-03-21
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2016-03-21
Status Comments	

DD Entity	476 - Minimum Bale Hydraulic Pressure
Definition	The minimum value of the hydraulic pressure applied to the sides of the bale in the bale compression chamber.
Comment	
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	Pa - Pressure
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2016-03-21
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2016-03-21
Status Comments	

DD Entity	477 - Maximum Bale Hydraulic Pressure
Definition	The maximum value of the hydraulic pressure applied to the sides of the bale in the bale compression chamber.
Comment	
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	Pa - Pressure
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2016-03-21
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2016-03-21
Status Comments	

DD Entity	478 - Setpoint Flake Size
Definition	Setpoint size of the flake to be produced by the chamber.
Comment	See also DDI 364.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 1000
Display Range	0 - 1000
Submit by	Frank Wiebeler
Submit Date	2016-03-21
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2016-03-21
Status Comments	

DD Entity	479 - Minimum Flake Size
Definition	Minimum size of the flake that can be produced by the chamber.
Comment	See also DDI 364.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 1000
Display Range	0 - 1000
Submit by	Frank Wiebeler
Submit Date	2016-03-21
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2016-03-21
Status Comments	

DD Entity	480 - Maximum Flake Size
Definition	Maximum size of the flake that can be produced by the chamber.
Comment	See also DDI 364
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 1000
Display Range	0 - 1000
Submit by	Frank Wiebeler
Submit Date	2016-03-21
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2016-03-21
Status Comments	

DD Entity	481 - Setpoint Number of Subbales
Definition	Number of smaller bales that shall be included in one bigger bale.
Comment	Defines the number of sub-bales included of a big square bale.
Typically used by Device Class(es)	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	11 - Transport / Trailers
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2016-03-09
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-13
Status Comments	

DD Entity	482 - Last Bale Number of Subbales
Definition	Number of smaller bales included in the latest produced bale.
Comment	This DDI is needed as there might be another bale in the chamber. When sending this DDI on dropping the bale on the field, the system can define how many subbales are in that specific bale.
Typically used by Device Class(es)	7 - Harvesters
	9 - Forage harvester
	11 - Transport / Trailers
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2016-03-09
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-13
Status Comments	

DD Entity	483 - Setpoint Engine Speed
Definition	The setpoint of the rotational speed of the engine.
Comment	The addition of a DDI for such values allows such values to be added to the default data set that devices present to a task controller or a data logger
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System 18 - Reserved for Future Assignment 19 - Timber Harvesters 20 - Forwarders 21 - Timber loaders 22 - Timber Processing Machines 23 - Mulchers 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	r/min - Revolutions per minute
Resolution	0,0001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,0000 - 214748,3647
Submit by	Frank Wiebeler
Submit Date	2016-04-01
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-13
Status Comments	

DD Entity	484 - Actual Engine Speed
Definition	Actual rotational speed of the engine.

Comment	The addition of a DDI for such values allows such values to be added to the default data set that devices present to a task controller or a data logger.
Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	r/min - Revolutions per minute
Resolution	0,0001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,0000 - 214748,3647
Submit by	Frank Wiebeler
Submit Date	2016-04-01
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-13
Status Comments	

DD Entity	485 - Minimum Engine Speed
Definition	The minimum of the rotational speed of the engine.
Comment	The addition of a DDI for such values allows such values to be added to the default data set that devices present to a task controller or a data logger
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System 18 - Reserved for Future Assignment 19 - Timber Harvesters 20 - Forwarders 21 - Timber loaders 22 - Timber Processing Machines 23 - Mulchers 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	r/min - Revolutions per minute
Resolution	0,0001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,0000 - 214748,3647
Submit by	Frank Wiebeler
Submit Date	2016-04-01
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-13
Status Comments	

DD Entity	486 - Maximum Engine Speed
Definition	The maximum of the rotational speed of the engine.

Comment	The addition of a DDI for such values allows such values to be added to the default data set that devices present to a task controller or a data logger.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System 18 - Reserved for Future Assignment 19 - Timber Harvesters 20 - Forwarders 21 - Timber loaders 22 - Timber Processing Machines 23 - Mulchers 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	r/min - Revolutions per minute
Resolution	0,0001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,0000 - 214748,3647
Submit by	Frank Wiebeler
Submit Date	2016-04-01
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-13
Status Comments	

DD Entity	488 - Diesel Exhaust Fluid Tank Percentage Level
Definition	The actual level of the Diesel Exhaust Fluid Tank in percent.
Comment	The addition of a percentage DDI allows such values to be added to the default data set that devices present to a task controller or a data logger
Typically used by Device Class(es)	- Not Assigned 0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System 18 - Reserved for Future Assignment 19 - Timber Harvesters 20 - Forwarders 21 - Timber loaders 22 - Timber Processing Machines 23 - Mulchers 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	% - Percent
Resolution	0,01
SAE SPN	
CANBus Range	0 - 10000
Display Range	0,00 - 100,00
Submit by	Frank Wiebeler
Submit Date	2016-04-01
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-13
Status Comments	

DD Entity	489 - Maximum Diesel Exhaust Fluid Tank Content

Definition	This value describes the maximum ammount of Diesel Exhaust fluid, that can be filled into the tank of the machine
Comment	
Typically used by Device Class(es)	- Not Assigned 0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System 18 - Reserved for Future Assignment 19 - Timber Harvesters 20 - Forwarders 21 - Timber loaders 22 - Timber Processing Machines 23 - Mulchers 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2016-04-01
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-13
Status Comments	

DD Entity	490 - Maximum Fuel Tank Content
Definition	This value describes the maximum ammount of fuel that can be filled into the machines Fuel tank.
Comment	
Typically used by Device Class(es)	- Not Assigned 0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System 18 - Reserved for Future Assignment 19 - Timber Harvesters 20 - Forwarders 21 - Timber loaders 22 - Timber Processing Machines 23 - Mulchers 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	ml - Capacity large
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2016-04-01
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-14
Status Comments	

DD Entity	491 - Fuel Percentage Level
Definition	The actual level of the machine fuel tank in percent.
Comment	

Typically used by Device Class(es)	- Not Assigned
	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	% - Percent
Resolution	0,01
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,00 - 21474836,47
Submit by	Frank Wiebeler
Submit Date	2016-04-01
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-14
Status Comments	

DD Entity	492 - Total Engine Hours
Definition	The total time the engine was running when the task was active.
Comment	
Typically used by Device Class(es)	- Not Assigned 0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work 17 - Sensor System 18 - Reserved for Future Assignment 19 - Timber Harvesters 20 - Forwarders 21 - Timber loaders 22 - Timber Processing Machines 23 - Mulchers 24 - Utility Vehicles 25 - Slurry Applicators 26 - Feeder / Mixer
Unit Symbol	h - Hour
Resolution	0,05
SAE SPN	
CANBus Range	0 - 210554060,75
Display Range	0,0 - 10527703,038
Submit by	Frank Wiebeler
Submit Date	2016-04-01
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-14
Status Comments	

DD Entity	493 - Lifetime Engine Hours
Definition	The total time, when the engine was running over the whole lifetime of the machine.
Comment	

Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	h - Hour
Resolution	0,1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 214748364,7
Submit by	Frank Wiebeler
Submit Date	2016-04-01
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	
Status Date	2016-04-01
Status Comments	

DD Entity	494 - Last Event Partner ID (Byte 1-4)
Definition	Last Event Partner ID as a decimal number of 128bit length. This DDI should include the Byte 1-4 of the Last Event Partner ID. It should always be sent as Group of 4 DDI's to send all 128 bit together. After this a DDI 147 "Log Count" shall be sent.
Comment	Using Methods do determine the Location of a Vehicle or Storage which is not equipped with ISOBUS and GPS.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	0 - 0xFFFFFFFF
Display Range	0 - 0xFFFFFFFF
Submit by	Franz Hoepfinger
Submit Date	2016-07-20
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2015-10-11
Status Comments	
Attachment	2016-07-20: - ISO11783-11-DDI-494 Partner ID-v1.pdf

DD Entity	495 - Last Event Partner ID (Byte 5-8)
Definition	Last Event Partner ID as a decimal number of 128bit length. This DDI should include the Byte 5-8 of the Last Event Partner ID. It should always be sent as Group of 4 DDI's to send all 128 bit together. After this a DDI 147 "Log Count" shall be sent.
Comment	Using Methods do determine the Location of a Vehicle or Storage which is not equipped with ISOBUS and GPS. See also DDI 494 attachment.

Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	11 - Transport / Trailers
	17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0x00000000 - 0xFFFFFFFF
Display Range	0x00000000 - 0xFFFFFFFF
Submit by	Franz Hoepfinger
Submit Date	2015-10-11
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	3
Current Status	ISO-Published
Status Date	2016-06-15
Status Comments	

DD Entity	496 - Last Event Partner ID (Byte 9-12)
Definition	Last Event Partner ID as a decimal number of 128bit length.
	This DDI should include the Byte 9-12 of the Last Event Partner ID. It should always be sent as Group of 4 DDI's to send all 128 bit together. After this a DDI 147 â€œLog Countâ€• shall be sent.
Comment	Using Methods do determine the Location of a Vehicle or Storage which is not equipped with ISOBUS and GPS. See also DDI 494 attachment.
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	11 - Transport / Trailers
	17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0x00000000 - 0xFFFFFFFF
Display Range	0x00000000 - 0xFFFFFFFF
Submit by	Franz Hoepfinger
Submit Date	2015-10-11
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	3
Current Status	ISO-Published
Status Date	2016-06-15
Status Comments	

DD Entity	497 - Last Event Partner ID (Byte 13-16)
Definition	Last Event Partner ID as a decimal number of 128bit length.
	This DDI should include the Byte 13-16 of the Last Event Partner ID. It should always be sent as Group of 4 DDI's to send all 128 bit together. After this a DDI 147 â€œLog Countâ€• shall be sent.
Comment	Using Methods do determine the Location of a Vehicle or Storage which is not equipped with ISOBUS and GPS. See also DDI 494 attachment.
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	11 - Transport / Trailers
	17 - Sensor System

Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	0x00000000 - 0xFFFFFFFF
Display Range	0x00000000 - 0xFFFFFFFF
Submit by	Franz Hoepfinger
Submit Date	2015-10-11
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	3
Current Status	ISO-Published
Status Date	2016-06-15
Status Comments	

DD Entity	498 - Last Event Partner ID Type
Definition	Defines The Type of the Partner ID Device. See Attatchment for Definition.
Comment	See also DDI 494 attachment.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0x00000000 - 0xFFFFFFFF
Display Range	0x00000000 - 0xFFFFFFFF
Submit by	Franz Hoepfinger
Submit Date	2015-10-11
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	4
Current Status	ISO-Published
Status Date	2016-06-20
Status Comments	Status was published

DD Entity	499 - Last Event Partner ID Manufacturer ID Code
Definition	The Partner ID has to tell its Manufacturer, and the Manufacturer Numbers from SAE J1939 / ISO 11783 shall be used.
Comment	Remark: This is not the Manufacturer of the ISOBUS ECU sending this DDI to the Task-Controller, but the Manufacturer of the â€œPartnerâ€• Device. See also DDI 494 attachment.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	0x00000000 - 0xFFFFFFFF
Display Range	0x00000000 - 0xFFFFFFFF
Submit by	Franz Hoepfinger

Submit Date	2015-10-11
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	4
Current Status	ISO-Published
Status Date	2016-06-20
Status Comments	Status was published

DD Entity	500 - Last Event Partner ID Device Class
Definition	This DDI should tell the Device Class of the "Partner" Device.
Comment	Look at DDI 494 attachment to get the device class details.
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 11 - Transport / Trailers 17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0x00000000 - 0xFFFFFFFF
Display Range	0x00000000 - 0xFFFFFFFF
Submit by	Franz Hoepfinger
Submit Date	2015-10-11
Submit Company	367 - Fliegl Agrartechnik GmbH
Revision Number	4
Current Status	ISO-Published
Status Date	2016-06-20
Status Comments	Status was published

DD Entity	501 - Setpoint Engine Torque
Definition	The setpoint of the engine torque.
Comment	The addition of a DDI for such values allows such values to be added to the default data set that devices present to a task controller or a data logger.

Typically used by Device Class(es)	- Not Assigned
	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	% - Percent
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler
Submit Date	2016-04-01
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	5
Current Status	ISO-Published
Status Date	2016-06-28
Status Comments	

DD Entity	502 - Actual Engine Torque
Definition	The current torque of the engine.
Comment	The addition of a DDI for such values allows such values to be added to the default data set that devices present to a task controller or a data logger
Typically used by Device Class(es)	- Not Assigned
	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	% - Percent
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	
Submit Date	2016-04-01
Submit Company	
Revision Number	2
Current Status	ISO-Published
Status Date	2016-06-28
Status Comments	

DD Entity	503 - Minimum Engine Torque
Definition	The minimum value of the engine torque

Comment	
Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	% - Percent
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483,647
Submit by	Frank Wiebeler
Submit Date	2016-06-28
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-28
Status Comments	

DD Entity	504 - Maximum Engine Torque
Definition	The maximum value of the engine torque
Comment	
Typically used by Device Class(es)	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	% - Percent
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483,647
Submit by	Frank Wiebeler
Submit Date	2016-06-28
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2016-06-28
Status Comments	

DD Entity	555 - Tramline Control Level
Definition	This DDI defines the Tramline Control capability of the Implement.

Comment	The Implement shall provide in its root DeviceElement which Tramline Control Levels are supported. The Tramline Control Levels are independent of each other. It is allowed to support for example only Level 3 Tramlining. Byte 1 Bit 0 = 1 Support Tramline Control Level 1 Byte 1 Bit 1 = 1 Support Tramline Control Level 2 Byte 1 Bit 2 = 1 Support Tramline Control Level 3 Byte 1 Bit 3-7 = 0 Reserved
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	0 - 7
Display Range	0 - 7
Submit by	Karsten Helweg
Submit Date	2015-12-10
Submit Company	Competence Center ISOBUS e.V.
Revision Number	1
Current Status	ISO-Published
Status Date	2016-08-31
Status Comments	Status was published
Attachment	2015-12-10: - TramlineControl_BasicRequirements_v1.10-v1.docx

DD Entity	556 - test
Definition	test
Comment	test
Typically used by Device Class(es)	22 - Timber Processing Machines
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	0 - 0
Display Range	-
Submit by	
Submit Date	2017-11-22
Submit Company	
Revision Number	1

DD Entity	557 - test
Definition	test
Comment	test
Typically used by Device Class(es)	7 - Harvesters
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	0 - 0
Display Range	-
Submit by	
Submit Date	2017-11-22
Submit Company	
Revision Number	1
Current Status	New Request Submitted
Status Date	2017-11-22
Status Comments	

DD Entity	700 - Import DDI 0
Definition	Default Application Rate specified as volume per distance
Comment	Defines a default volume to be sprayed per distance travelled. e.g. in vineyards, orchards
Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 10 - Irrigation 25 - Slurry Applicators
Unit Symbol	ml/m - Volume per distance
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483,647
Submit by	Stefan Welsch
Submit Date	2020-07-14
Submit Company	John Deere
Revision Number	1
Current Status	Published
Status Date	2020-07-14
Status Comments	

DD Entity	701 - Import DDI 1
Definition	Wrapping film overlap percentage in the most recently produced bale
Comment	The recommended use of this DDE is for a baler to report this once for every bale that is produced. A baler may add this to its default set of data, based on an internal on-change data trigger that causes the baler to report the value of this DDE after the bale is produced. The recommendation for data logging is that all "Last Bale" DDEs that are supported by a device are reported together at the moment that the bale is produced and leaves the machine.
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	% - Percent
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483,647
Submit by	Mike Schmidt on behalf of Steffen Hoffmann
Submit Date	2021-04-20
Submit Company	AGCO
Revision Number	1
Current Status	Published
Status Date	2021-09-13
Status Comments	

DD Entity	702 - Import DDI 2
Definition	Actual CO2 equivalent specified as mass per volume
Comment	For more details see also ISO-14040 and ISO-14044 documents.
Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
	25 - Slurry Applicators
Unit Symbol	mg/l - Mass per capacity unit
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hendrik HagebÃ¶ke
Submit Date	2022-10-20
Submit Company	GRIMME Landmaschinenfabrik GmbH & Co. KG
Revision Number	1
Current Status	Published
Status Date	2022-11-15
Status Comments	

DD Entity	703 - Import DDI 3
Definition	Entire Lifetime CO2 equivalentÂ specified as mass in kilogram [kg]
Comment	For more details see also ISO-14040 and ISO-14044 documents.
Typically used by Device Class(es)	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	kg - Mass
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hendrik HagebÃ¶ke
Submit Date	2022-10-20

Submit Company	GRIMME Landmaschinenfabrik GmbH & Co. KG
Revision Number	1
Current Status	Published
Status Date	2022-11-15
Status Comments	

DD Entity	704 - Import DDI 4
Definition	The Working Width of the Irrigation system is the Distance between the single Tramline Tracks for the Irrigation system.
Comment	Besides a Tramlining rhythm for a Sprayer, a second Tramlining rhythm with a different pattern for an irrigation system may exist. The Working Width of the Irrigation system is also the Distance between the single Tramline Tracks for the Irrigation system. This value is a manual user input and is provided by the Implement to the Tramline Controller. The following picture shows an example with a 6m Seed drill Width, 24m Sprayer Width and a 66m Irrigation Width.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Karsten Helweg
Submit Date	2015-12-10
Submit Company	Competence Center ISOBUS e.V.
Revision Number	1
Current Status	Published
Status Date	2022-12-02
Status Comments	

DD Entity	705 - Import DDI 5
Definition	Distance between the centre of the Wheels of the Irrigation system.
Comment	For more details see attachment DDI 505.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Karsten Helweg
Submit Date	2015-12-10
Submit Company	Competence Center ISOBUS e.V.
Revision Number	1
Current Status	Published
Status Date	2022-12-02
Status Comments	

DD Entity	744 - Import DDI 4
Definition	The Working Width of the Irrigation system is the Distance between the single Tramline Tracks for the Irrigation system.
Comment	Besides a Tramlining rhythm for a Sprayer, a second Tramlining rhythm with a different pattern for an irrigation system may exist. The Working Width of the Irrigation system is also the Distance between the single Tramline Tracks for the Irrigation system. This value is a manual user input and is provided by the Implement to the Tramline Controller. The following picture shows an example with a 6m Seed drill Width, 24m Sprayer Width and a 66m Irrigation Width.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Karsten Helweg
Submit Date	2015-12-10
Submit Company	Competence Center ISOBUS e.V.
Revision Number	1
Current Status	Published
Status Date	2022-12-02
Status Comments	

DD Entity	755 - Import DDI 5
Definition	Distance between the centre of the Wheels of the Irrigation system.
Comment	For more details see attachment DDI 505.
Typically used by Device Class(es)	4 - Planters /Seeders
Unit Symbol	mm - Length
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Karsten Helweg
Submit Date	2015-12-10
Submit Company	Competence Center ISOBUS e.V.
Revision Number	1
Current Status	Published
Status Date	2022-12-02
Status Comments	

DD Entity	3233 - Steering Type
Definition	This DDI is used to steering type of a device which can be utilized by an Automatic Steering System for identification purposes. The valid definitions are: 1 = Front-wheel Steer (FWS) Machine 2 = Rear-wheel Steer (RWS) Machine 3 = Zero-Turn Machine 4 = Articulated Machine 5 = Four-wheel Steer (4WS) Machine 6 = Dog-walk Machine
Comment	Examples of specific types of machines are listed below; 1 = Tractor or Sprayer 2 = Harvester 3 = Windrower or Track Machine 4 = Articulated Tractor 5 = Certain Applicators 6 = Certain Applicators
Typically used by Device Class(es)	1 - Tractor 6 - Sprayers 7 - Harvesters
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 6
Display Range	0 - 6
Submit by	Paul Matthews
Submit Date	2013-04-10
Submit Company	AGCO
Revision Number	1
Current Status	ISO-Published
Status Date	2019-05-30
Status Comments	Status was published

DD Entity	3423 - Cutting Angle
Definition	The angle of the mower bar of a mower relative to the ground
Comment	
Typically used by Device Class(es)	7 - Harvesters 9 - Forage harvester
Unit Symbol	Â° - Angle
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0,000 - 2,147,483,647
Submit by	Frank Wiebeler

Submit Date	2013-12-04
Submit Company	Maschinenfabrik Bernard Krone GmbH
Revision Number	1
Current Status	ISO-Published
Status Date	2019-05-30
Status Comments	Status was published

DD Entity	5044 - Product Placement Marker
Definition	This DDI shall mark a position, where a countable product was placed on the field. It shall be sent once, when the product is placed on the field. The value depends on the type of product: 0 - None 1 - Unknown 2 - Square Bale 3 - Wrapped Square Bale 4-102: Reserved for Square Bale specific Products 103 - Round Bale 104 - Wrapped Square Bale 105 - 202 Reserved for Round Bale specific Products 42 - Pile e.g. for potatoes 42 - etc. Reserved
Comment	If this DDI is supported, it shall be part of the Default Set of a machine using an on change trigger. It shall be sent whenever a product or a groupable package of products is placed on the field. For systems having trouble sending the same value multiple times, a 0 can be sent after the actual value was successfully transmitted.

Typically used by Device Class(es)	- Not Assigned
	0 - Non-specific system
	1 - Tractor
	2 - Primary Soil Tillage
	3 - Secondary Soil Tillage
	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	7 - Harvesters
	8 - Root Harvester
	9 - Forage harvester
	10 - Irrigation
	11 - Transport / Trailers
	12 - Farmyard Work
	13 - Powered Auxilary Units
	14 - Special Crops
	15 - Municipal Work
	17 - Sensor System
	18 - Reserved for Future Assignment
	19 - Timber Harvesters
	20 - Forwarders
	21 - Timber loaders
	22 - Timber Processing Machines
	23 - Mulchers
	24 - Utility Vehicles
	25 - Slurry Applicators
	26 - Feeder / Mixer
Unit Symbol	not defined - not defined
Resolution	1
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Frank Wiebeler
Submit Date	2016-06-06
Submit Company	Maschinenfabrik Bernard Krone
Revision Number	1
Current Status	ISO-Published
Status Date	2019-05-30
Status Comments	Status was published

DD Entity	32769 - Maximum Crop Grape Diameter
Definition	Maximum crop size in mm, measured with crop specific methods
Comment	The most common method of measurement is to determine the diameter of the crop.

Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 14 - Special Crops 17 - Sensor System
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hendrik Hageböke
Submit Date	2023-03-24
Submit Company	GRIMME Landmaschinen GmbH & Co.KG
Revision Number	1
Current Status	New Request Submitted
Status Date	2023-03-24
Status Comments	

DD Entity	32770 - Maximum Crop Grape Length
Definition	Maximum crop size in mm, measured with crop specific methods
Comment	The most common method of measurement is to determine the length of the crop.
Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 14 - Special Crops 17 - Sensor System
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hendrik Hageböke
Submit Date	2023-03-24
Submit Company	GRIMME Landmaschinen GmbH & Co.KG
Revision Number	1
Current Status	New Request Submitted
Status Date	2023-03-24
Status Comments	

DD Entity	36865 - Range DDI 2
Definition	The minimum droplet size the system can produce. Defined as: 0 = Unknown, 1 = Extremely Fine - XF, 2 = Very Fine - VF, 3 = Fine - F, 4 = Medium - M, 5 = Coarse - C, 6 = Very Coarse - VC, 7 = Extremely Coarse - XC, 8 = Ultra Coarse - UC, 9-254 = Reserved, 255 = No Droplet Size Available.
Comment	Droplet sizes are currently defined in ISO 25358 and are broken into 8 classification categories and also assigned a corresponding colour code as follows: Extremely Fine = Purple, Very Fine = Red, Fine = Orange, Medium = Yellow, Coarse = Green, Very Coarse = Blue, Extremely Coarse = White, Ultra Coarse = Black

Typically used by Device Class(es)	4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 10 - Irrigation 17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 255
Display Range	0 - 255
Submit by	John Summers
Submit Date	2021-03-08
Submit Company	TeeJet Technologies
Revision Number	1
Current Status	Published
Status Date	2021-05-12
Status Comments	

DD Entity	36866 - Minimum Crop Grade Length
Definition	Minimum crop size in mm, measured with crop specific methods
Comment	The most common method of measurement is to determine the length of the crop.
Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 14 - Special Crops 17 - Sensor System
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hendrik Hageböke
Submit Date	2023-03-24
Submit Company	GRIMME Landmaschinen GmbH & Co.KG
Revision Number	1
Current Status	New Request Submitted
Status Date	2023-03-24
Status Comments	

DD Entity	40961 - Range DDI 3
Definition	The default droplet size the system is producing. Defined as: 0 = Unknown, 1 = Extremely Fine - XF, 2 = Very Fine - VF, 3 = Fine - F, 4 = Medium - M, 5 = Coarse - C, 6 = Very Coarse - VC, 7 = Extremely Coarse - XC, 8 = Ultra Coarse - UC, 9-254 = Reserved, 255 = No Droplet Size Available.
Comment	Droplet sizes are currently defined in ISO 25358 and are broken into 8 classification categories and also assigned a corresponding colour code as follows: Extremely Fine = Purple, Very Fine = Red, Fine = Orange, Medium = Yellow, Coarse = Green, Very Coarse = Blue, Extremely Coarse = White, Ultra Coarse = Black

Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 255
Display Range	0 - 255
Submit by	John Summers
Submit Date	2021-05-12
Submit Company	TeeJet Technologies
Revision Number	1
Current Status	Published
Status Date	2021-05-12
Status Comments	

DD Entity	40962 - Default Crop Grade Length
Definition	Default crop size in mm, measured with crop specific methods
Comment	The most common method of measurement is to determine the length of the crop.
Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 14 - Special Crops 17 - Sensor System
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hendrik Hageböke
Submit Date	2023-03-24
Submit Company	GRIMME Landmaschinen GmbH & Co.KG
Revision Number	1
Current Status	New Request Submitted
Status Date	2023-03-24
Status Comments	

DD Entity	45057 - Range DDI 4
Definition	The actual droplet size the system is producing. Defined as: 0 = Unknown, 1 = Extremely Fine - XF, 2 = Very Fine - VF, 3 = Fine - F, 4 = Medium - M, 5 = Coarse - C, 6 = Very Coarse - VC, 7 = Extremely Coarse - XC, 8 = Ultra Coarse - UC, 9-254 = Reserved, 255 = No Droplet Size Available.
Comment	Droplet sizes are currently defined in ISO 25358 and are broken into 8 classification categories and also assigned a corresponding colour code as follows: Extremely Fine = Purple, Very Fine = Red, Fine = Orange, Medium = Yellow, Coarse = Green, Very Coarse = Blue, Extremely Coarse = White, Ultra Coarse = Black

Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
	17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 255
Display Range	0 - 255
Submit by	John Summers
Submit Date	2021-03-08
Submit Company	TeeJet Technologies
Revision Number	1
Current Status	Published
Status Date	2021-05-12
Status Comments	

DD Entity	45058 - Actual Crop Grade Length
Definition	Actual crop size in mm, measured with crop specific methods
Comment	The most common method of measurement is to determine the length of the crop.
Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 14 - Special Crops 17 - Sensor System
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hendrik Hageböke
Submit Date	2023-03-24
Submit Company	GRIMME Landmaschinen GmbH & Co.KG
Revision Number	1
Current Status	New Request Submitted
Status Date	2023-03-24
Status Comments	

DD Entity	49153 - Range DDI 5
Definition	The setpoint for droplet size. Defined as: 0 = Unknown, 1 = Extremely Fine - XF, 2 = Very Fine - VF, 3 = Fine - F, 4 = Medium - M, 5 = Coarse - C, 6 = Very Coarse - VC, 7 = Extremely Coarse - XC, 8 = Ultra Coarse - UC, 9-254 = Reserved, 255 = No Droplet Size Available.
Comment	Droplet sizes are currently defined in ISO 25358 and are broken into 8 classification categories and also assigned a corresponding colour code as follows: Extremely Fine = Purple, Very Fine = Red, Fine = Orange, Medium = Yellow, Coarse = Green, Very Coarse = Blue, Extremely Coarse = White, Ultra Coarse = Black

Typically used by Device Class(es)	4 - Planters /Seeders
	5 - Fertilizer
	6 - Sprayers
	10 - Irrigation
	17 - Sensor System
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	0 - 255
Display Range	0 - 255
Submit by	John Summers
Submit Date	2021-03-08
Submit Company	TeeJet Technologies
Revision Number	1
Current Status	Published
Status Date	2021-05-12
Status Comments	

DD Entity	49154 - Setpoint Crop Grade Length
Definition	Setpoint crop size in mm, measured with crop specific methods
Comment	The most common method of measurement is to determine the length of the crop, but other methods are also possible, like e.g. length.
Typically used by Device Class(es)	4 - Planters /Seeders 7 - Harvesters 8 - Root Harvester 14 - Special Crops 17 - Sensor System
Unit Symbol	mm - Length
Resolution	0,001
SAE SPN	
CANBus Range	0 - 2147483647
Display Range	0 - 2147483647
Submit by	Hendrik HagebÃ¶ke
Submit Date	2023-03-24
Submit Company	GRIMME Landmaschinen GmbH & Co.KG
Revision Number	1
Current Status	New Request Submitted
Status Date	2023-03-24
Status Comments	

DD Entity	57342 - PGN Based Data
Definition	This DDI is used in the XML files to identify PGN based data.
Comment	This DDI is specified in ISO 11783-10 IS paragraph 6.3 Logging parameters from parameter groups.
Typically used by Device Class(es)	0 - Non-specific system 1 - Tractor 2 - Primary Soil Tillage 3 - Secondary Soil Tillage 4 - Planters /Seeders 5 - Fertilizer 6 - Sprayers 7 - Harvesters 8 - Root Harvester 9 - Forage harvester 10 - Irrigation 11 - Transport / Trailers 12 - Farmyard Work 13 - Powered Auxilary Units 14 - Special Crops 15 - Municipal Work
Unit Symbol	n.a. -
Resolution	1
SAE SPN	
CANBus Range	-2147483648 - 2147483647

Display Range	-2147483648 - 2147483647
Submit by	Part 10 Task Force
Submit Date	2005-01-25
Submit Company	0 - Reserved
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	Added to the on-line database

DD Entity	57343 - Request Default Process Data
Definition	Request Default Process Data. This DDE is the highest ISO assigned entity. The range above this number is reserved for manufacture specific DDE's.
Comment	This DDE was a result of Jan 2005 Task Controller meeting.
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	n.a. -
Resolution	1
SAE SPN	not specified
CANBus Range	0 - 0
Display Range	0 - 0
Submit by	11783-Part 10 Task Force
Submit Date	2005-01-20
Submit Company	89 - Kverneland Group, Electronics Division
Revision Number	1
Current Status	ISO-Approved
Status Date	2009-02-05
Status Comments	Updated description, added reference to ISO11783-10

DD Entity	57344 - 65534 Proprietary DDI Range
Definition	Manufacturer proprietary definitions
Comment	It is not recommended to process proprietary DDEs from other manufacturers
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	n.a. -
Resolution	0
SAE SPN	
CANBus Range	-
Display Range	-
Submit by	Part 10 Task Force
Submit Date	0000-00-00
Submit Company	0 - Reserved
Revision Number	1

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DD Entity	**65535 - Reserved**
Definition	Reserved
Comment	
Typically used by Device Class(es)	- Not Assigned
Unit Symbol	n.a. -
Resolution	0
SAE SPN	
CANBus Range	-
Display Range	-
Submit by	Part 10 Task Force
Submit Date	0000-00-00
Submit Company	0 - Reserved
Revision Number	1

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