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Business Owner **Dr.** **Marcell** **Hellmann,** **Eva-Maria** **Gruner**

Document Owner **Dr.** **Paul** **Flachskampf**

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#### This document describes the information flow between Weighbridge / Operator, SAP / Order taker, SyncroTESS / Dispatcher, Telematics / CADIS and Truck / Driver designed according to the Individual Contract for BeNe.

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## (10) Standard scenario with Telematics, returning (Ag, As, Co, Mo, Ce)

#### Truck returning to loading plant

Weighbridge / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1. order entry
2. order Idoc

signed on

Optimiser run (optional)

5b delivery processed

wait for load

4b delivery CRT Idoc

1. assignment 4a TICKET telegram

5a TICKET telegram

returning

10 delivery change (TAR)

11 delivery TAR Idoc

loading

7 arrive plant

9 start load 11a STLOAD TICKET

6 enter plant geofence 8 button "start load" 11b STLOAD TICKET

12 Weighing / Batching

either 9 or 11 sends

truck into 'loading'

13 delivery change

17 print delivery note

14 delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

14b Change TICKET

(incl. updated quantity) 15 leave plant geofence

14c update qty; substatus

„post load"

21 arrive customer

20 enter site geofence

travelling

23 start unload

22 button "start unload"

wait for unloading

unloading

30 ePOD RFC

25 finish unload

28 ePOD telegram

24 button "finish unload"

27 ePOD telegram

26 'sign on glass'; substatus

„cleaning"

29 auto-assign returnRun

31 RETURN telegram

32 RETURN telegram

34 leave customer

33 leave site geofence

36 shipment Idoc

35 delivery is 'completed'

returning



Remarks:

* if there is one assignment at a time, the steps 3 to 36 are repeated for the next delivery
* if there are several assignments at a time (repetition of steps 3 to 5), the steps 6 to 36 are repeated for each delivery
* the „Start Load" message (8/9) from the truck is optional (might be skipped)
* the completion of the delivery (35) is automatically done within SyncroTESS
* if no ‚finish unload' is received the ‚leave customer' triggers the return‘un request
* during the capture of the signatur (24) also any additional services are signed

## (15) Standard scenario with Telematics, idle (Ag, As, Co, Mo, Ce)

#### Truck idle at loading plant

Telematics / CADIS

SAP / Order taker



Weighbridge / Operator

SyncroTESS / Dispatcher

Truck / Driver

1 order entry

2 order Idoc

signed on, idle at loading plant

Optimiser run (optional)

7b delivery processed 10 delivery change (TAR)

6b delivery CRT Idoc

11 delivery TAR Idoc

loading

3 assignment 6a TICKET telegram

9 start load 11a STLOAD TICKET

7a TICKET telegram

8 button "start load" 11b STLOAD TICKET

wait for load

12 Weighing / Batching

either 9 or 11 sends truck into 'loading'

13 delivery change

17 print delivery note

14 delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

14b Change TICKET (incl. updated quantity)

15 leave plant geofence

14c update qty; substatus

„post load"

travelling

23 arrive customer

wait for unloading

22 enter site geofence

25 start unload

24 button "start unload"

32 ePOD RFC

27 finish unload

30 ePOD telegram

26 button "finish unload" 29 ePOD telegram

28 sign on glass; substatus

unloading

„cleaning"

31 auto-assign returnRun

|  |  |
| --- | --- |
| 33 RETURN telegram    36 leave customer | 34 RETURN telegram |
| 35 leave site geofence |
|  |

1. delivery is 'completed'

returning

1. shipment Idoc

## (17) Standard scenario with Telematics, approaching (Ag, As, Co, Mo, Ce)

#### Truck idle at different plant

SyncroTESS / Dispatcher Truck / Driver



Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

1. order entry
2. order Idoc

signed on, idle at different plant

Optimiser run (optional)

7c delivery processed

6c delivery CRT Idoc

1. assignment 6a TICKET telegram (RR)

6b TICKET telegram

7a TICKET telegram (RR) 7b TICKET telegram

approaching

12 delivery change (TAR)

13 delivery TAR Idoc

9 arrive plant

11 start load 13a STLOAD TICKET

8 enter plant geofence

10 button "start load" 13b STLOAD TICKET

wait for load

loading

14 Weighing / Batching

either 11 or 13 sends truck into 'loading'

15 delivery change

19 print delivery note

16 delivery CHG Idoc

16a Change TICKET (incl. updated quantity)

18 leave plant

16b Change TICKET (incl. updated quantity) 17 leave plant geofence

16c update qty; substatus

„post load"

travelling

23 arrive customer

wait for unloading

22 enter site geofence

25 start unload

24 button "start unload"

31 ePOD RFC

27 finish unload

30 ePOD telegram

26 button "finish unload"

29 ePOD telegram

28 sign on glass; substatus

unloading

„cleaning"

32 auto-assign returnRun

|  |  |
| --- | --- |
| 33 RETURN telegram    36 leave customer | 34 RETURN telegram |
| 35 leave site geofence pleted' |
| 37 delivery is 'com |



returning

38 shipment Idoc

## (20) Standard scenario without Telematics, returning (Ag, As, Co, Mo, Ce)

#### Truck returning to loading plant, no follow-up assignment before *LeavePlant*

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1 order entry

2 order Idoc

signed on

Optimiser run (optional)

3 assignment

|  |  |  |
| --- | --- | --- |
|  | | returning |
|  |
|  |  | |
|  | | wait for load |
|  |  | |
|  | | loading |
|  |
|  |  | |
|  | | travelling |
|  |  | |
|  | | wait for unloading |

5 delivery processed

4 delivery CRT Idoc

10 delivery change (TAR)

11 delivery TAR Idoc

7 arrive plant

9 start load

12 Weighing / Batching

13 delivery change

either 9 or 11 sends truck into 'loading'

14 delivery CHG Idoc

17 print delivery note

either 14 or 16 sends

truck into 'travelling'

16 leave plant

21 arrive customer

23 start unload

unloading

33 call dispatcher

34 leave customer

36 shipment Idoc

35 delivery is 'completed'

idle @ customer site

39 delivery processed

38 delivery CRT Idoc

37 assignment

40 tell next assignment

approaching

Remarks:

* events 9 and 16 can now be triggered by SAP
* events 7, 9, 16, 21, 23 can also be reported via GUI or be skipped
* events 7 and 9 can be reported by DepotViewer at the plant
* the truck status in the GUI shows the „assumed" status up to the next „save" report (steps 11, 14 and 34)
* communication with the driver must be done via telephone

## (25) Standard scenario without Telematics, idle (Ag, As, Co, Mo, Ce)

#### Truck idle at loading plant, no follow-up assignment before *LeavePlant*

SyncroTESS / Dispatcher



Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

1. order entry
2. order Idoc

Optimiser run (optional)

signed on, idle at loading plant

1. assignment

5 delivery processed

1. delivery CRT Idoc

10 delivery change (TAR)

wait for load

11 delivery TAR Idoc

9 start load

loading

12 Weighing / Batching

13 delivery change

either 9 or 11 sends truck into 'loading'

17 print delivery note

14 delivery CHG Idoc

either 14 or 16 sends truck into 'travelling'

16 leave plant

travelling

21 arrive customer

23 start unload

wait for unloading

unloading

33 call dispatcher

34 leave customer

36 shipment Idoc

35 delivery is 'completed'

idle @ customer site

39 delivery processed

38 delivery CRT Idoc

37 assignment

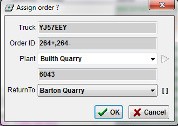
40 tell next assignment

approaching

## (30) Standard scenario without Telematics with RR, returning (Ag, As, Co, Mo, Ce)

#### Truck returning to loading plant, with follow-up returnRun

SAP / Order taker SyncroTESS / Dispatcher



Truck / Driver

Telematics / CADIS

Weighbridge / Operator

1 order entry

2 order Idoc

Optimiser run (optional)

signed on

1. delivery processed (incl. RR destination)

10 delivery change (TAR)

4 delivery CRT Idoc (incl. RR destination)

11 delivery TAR Idoc

3 assignment

(incl. RETURN plant)

|  |  |  |
| --- | --- | --- |
|  | | returning |
|  |
|  |  | |
|  | | wait for load |
|  |  | |
|  | | loading |
|  |
|  |  | |
|  | | travelling |
|  |  | |
|  | | wait for unloading |

7 arrive plant

9 start load

12 Weighing / Batching

13 delivery change

either 9 or 11 sends truck into 'loading'

17 print delivery note

14 delivery CHG Idoc

16 leave plant

(incl. RR destination)

either 14 or 16 sends

truck into 'travelling'

21 arrive customer

23 start unload

unloading

34 leave customer

35 phone to dispatcher

returning

36 arrive plant

38 shipment Idoc

37 delivery (and returnRun) is 'completed'

idle @ plant

## (35) Standard scenario without Telematics with RR, idle (Ag, As, Co, Mo, Ce)

#### Truck idle at loading plant, with follow-up returnRun

SyncroTESS / Dispatcher



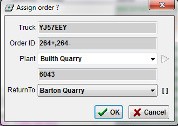
Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

1 order entry

2 order Idoc

Optimiser run (optional)

signed on, idle at loading plant

5 delivery processed (incl. RR destination)

4 delivery CRT Idoc (incl. RR destination)

3 assignment

(incl. RETURN plant)

wait for load

10 delivery change (TAR)

11 delivery TAR Idoc

9 start load

loading

12 Weighing / Batching

13 delivery change

either 9 or 11 sends truck into 'loading'

17 print delivery note

14 delivery CHG Idoc

16 leave plant

(incl. RR destination)

either 14 or 16 sends

truck into 'travelling'

travelling

21 arrive customer

23 start unload



wait for unloading

34 leave customer

unloading

35 phone to dispatcher

returning

36 arrive plant

plant

idle @

38 shipment Idoc

37 delivery (and returnRun) is 'completed'

## (37) Standard scenario without Telematics with RR, approaching (Ag, As, Co, Mo, Ce)

#### Truck idle at different plant, with follow-up returnRun

SyncroTESS / Dispatcher



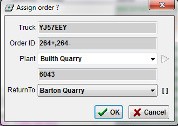
Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

1 order entry

2 order Idoc

signed on, idle at different plant

5 delivery processed (incl. RR destination)

10 delivery change (TAR)

4b delivery CRT Idoc (incl. RR destination)

11 delivery TAR Idoc

3 assignment

Optimiser run (optional)

(incl. RETURN plant)

4a tell driver assignment and returnRun (phone)

|  |  |  |
| --- | --- | --- |
|  | | approaching |
|  |  | |
|  |  | wait for load |
|  |  | |
|  |  | loading |
|  |
|  |  | |
|  |  | travelling |
|  |  | |
|  |  | wait for unloading |

7 arrive plant

9 start load

12 Weighing / Batching

13 delivery change

either 9 or 11 sends truck into 'loading'

17 print delivery note

14 delivery CHG Idoc

16 leave plant

(incl. RR destination)

either 14 or 16 sends

truck into 'travelling'

21 arrive customer

23 start unload

unloading

34 leave customer

unloading

35 phone to dispatcher

returning

36 arrive plant

idle @ plant

38 shipment Idoc

37 delivery (and returnRun) is 'completed'

## (40) Standard scenario without Telematics, F'up-Ass, returning (Ag, As, Co, Mo, Ce)

#### Truck returning to loading plant, with follow-up assignment



d on

signe

Truck / Driver

Telematics / CADIS

SAP / Order taker

|  |  |  |
| --- | --- | --- |
| Weighbridge / Operator | |  |
|  | 5a 1st delivery processed  5b 1st delivery processed 10 1st delivery change (TAR | |
| 12 Weighing / B  13 1st delivery change | |
| 17 print 1st del  36 2nd delivery change (TA | |
|  | |

SyncroTESS / Dispatcher

1 order entry

2 order Idoc

Optimiser run (optional)

4a 1st delivery CRT Idoc

4b 1st delivery CRT Idoc

3a assignment

3b follow-up assignment

|  |  |  |
| --- | --- | --- |
|  | | returning |
|  |
|  |  | |
|  |  | wait for load |
|  |  | |
|  |  | loading |
|  |
|  |  | |
|  |  | travelling |
|  |  | |
|  |  | wait for unloading |

)

11 1st delivery TAR Idoc

7 arrive plant

9 start load

atching



either 9 or 11 sends truck into 'loading'

14 1st delivery CHG Idoc



ivery note

R)

16 leave plant

21 arrive customer



either 14 or 16 sends

truck into 'travelling'

23 start unload



|  |  |  |
| --- | --- | --- |
|  | | unloading |
|  |
|  |  | |
|  |  | approaching |
|  |
|  |  |
|  |  | wait for load |
|  |  | |
|  |  | loading |
|  |
|  |  | |

34 leave customer



35 arrive plant

38 start load

37 2nd delivery TAR Idoc

39 1st delivery is 'completed'

40 1st shipment Idoc

## (45) Standard scenario without Telematics, F'up-Ass, idle (Ag, As, Co, Mo, Ce)

#### Truck idle at loading plant, with follow-up assignment



Truck / Driver

Telematics / CADIS

SAP / Order taker

|  |  |  |
| --- | --- | --- |
| Weighbridge / Operator | |  |
|  | 5a 1st delivery processed  5b 2nd delivery processed 10 1st delivery change (TAR | |
| 12 Weighing / B  13 1st delivery change | |
| 17 print 1st del  36 2nd delivery change (TA | |
|  | |

SyncroTESS / Dispatcher

1 order entry

2 order Idoc

Optimiser run (optional)

4a 1st delivery CRT Idoc

4b 2nd delivery CRT Idoc

3a assignment

3b follow-up assignment

loading

wait for load

approaching

unloading

wait for unloading

loading

wait for load

signed on, idle at loading plant

travelling

)

11 1st delivery TAR Idoc

7 arrive plant

9 start load

atching



either 9 or 11 sends truck into 'loading'

14 1st delivery CHG Idoc

16 leave plant

ivery note



either 14 or 16 sends truck into 'travelling'

21 arrive customer

23 start unload

34 leave customer

35 arrive plant

R)

37 2nd delivery TAR Idoc 38 start load

40 1st shipment Idoc

39 1st delivery is 'completed'

## (47) Standard scenario without Telematics, F'up-Ass, approaching (Ag, As, Co, Mo, Ce)

#### Truck idle at different plant, with follow-up assignment



Truck / Driver

Telematics / CADIS

SAP / Order taker

|  |  |  |
| --- | --- | --- |
| Weighbridge / Operator | |  |
|  | 5a 1st delivery processed    5b 2nd delivery processed 10 1st delivery change (TAR | |
| 12 Weighing / B  13 1st delivery change | |
| 17 print 1st del  36 2nd delivery change (TA | |
|  | |

SyncroTESS / Dispatcher

1 order entry

2 order Idoc

Optimiser run (optional)

signed on, idle at different plant

4a 1st delivery CRT Idoc

4b 2nd delivery CRT Idoc



)

11 1st delivery TAR Idoc

3a assignment

4a tell driver assignment (phone) 3b follow-up assignment

approaching

7 arrive plant

wait for load

9 start load

loading

atching



either 9 or 11 sends truck into 'loading'

14 1st delivery CHG Idoc

16 leave plant

ivery note



either 14 or 16 sends truck into 'travelling'

travelling

21 arrive customer

wait for unloading

23 start unload

unloading

34 leave customer

35 arrive plant

wait for load

approaching

R)

37 2nd delivery TAR Idoc 38 start load

loading

40 1st shipment Idoc

39 1st delivery is 'completed'

## (50) No weighbridge link, with Telematics (Ag, As, Co, Mo, Ce)

#### With telematics

SyncroTESS / Dispatcher Telematics / CADIS



5b delivery processed

SAP / Order taker

Weighbridge / Operator

Truck / Driver

1. order entry
2. order Idoc

Optimiser run (optional)

signed on

4b delivery CRT Idoc

# X

1. assignment 4a TICKET telegram (RR)

5a TICKET telegram

4b TICKET telegram (RR) 5b TICKET telegram

~~10 delivery change (TAR)~~

X

~~11 delivery TAR Idoc~~

7 arrive plant

returning / approaching

9 start load

X

6 enter plant geofence 8 button "start load"

12 Weighing / Batching

loading

wait for load

~~13 delivery change~~

X 14 delivery CHG Idoc

# X

15b) finish load

15a) Enter ticket number and actual loaded quantity

substatus

16 handwritten delivery note

16) finish load

(incl. loaded quantity and ticket number)

15c) finish load

(incl. loaded quantity and ticket number)

17 leave plant geofence

„post load"

18 leave plant

travelling

20 arrive customer

wait for unloading

19 enter site geofence

22 start unload

24 finish unload

21 button "start unload" 23 button "finish unload"

unloading

28 sign on glass; substatus

25 auto-assign returnRun

26 RETURN telegram

„cleaning"

27 RETURN telegram

31 ePOD RFC

30 ePOD telegram

33 leave customer

29 ePOD telegram 32 leave site geofence

34 delivery is 'completed'

returning

35 shipment Idoc

Remarks:

* if there is one assignment at a time, the steps 3 to 35 are repeated for the next delivery
* if there are several assignments at a time (repetition of steps 3 to 5), the steps 6 to 20 are repeated for each delivery
* the „Arrive At Plant" message (6/7) from the driver is optional (might be skipped)
* the completion of the delivery (34) is automatically done within SyncroTESS

## (60) No weighbridge link, without Telematics (Ag, As, Co, Mo, Ce)

#### Without telematics, follow-up assignment with weighbridge

Weighbridge / Operator SyncroTESS / Dispatcher



Truck / Driver

Telematics / CADIS

SAP / Order taker

1 order entry

2 order Idoc

Optimiser run (optional)

signed on

~~5a 1st delivery processed~~ X

5b 2nd delivery processed

10 1st delivery change (TAR)

4a 1st delivery CRT Idoc 4b 2nd delivery CRT Idoc

3a assignment

3b follow-up assignment

6 communicate both assignments

returning / approaching

7 arrive plant

wait for load

X ~~11 1st delivery TAR Idoc~~

X

12 Weighing / Batching

9 start load

loading

~~13 1st delivery change~~

X ~~14 1st delivery CHG Idoc~~ X

15 leave plant (incl.quantity change)

The allocator can confirm the assigned quantity or enter a different one

16 handwritten 1st delivery note

21 arrive customer

|  |  |  |
| --- | --- | --- |
|  | | travelling |
|  |
|  |  | |
|  | | wait for unloading |
|  |  | |
|  | | unloading |
|  |  | |
|  | | approaching |
|  |
|  |  |
|  | | wait for load |
|  |  | |
|  | | loading |
|  |
|  |  | |

23 start unload

25 leave customer

36 2nd delivery change (TAR)

37 2nd delivery TAR Idoc

40 1st shipment Idoc

27 arrive plant

28 start load

39 1st delivery is 'completed'

## (70) No weighbridge link, without Telematics, Next delivery (Ag, As, Co, Mo, Ce)

#### Without telematics, next assignment with weighbridge

Weighbridge / Operator

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver



Optimiser run (optional)

signed on

~~5b delivery proces~~

4b delivery CRT Idoc

3 assignment

6 communicate assignment



|  |  |  |
| --- | --- | --- |
| SAP / Order taker | |  |
| ~~sed~~  X  TAR)  X | 1. order entry 2. order Idoc | |
|  | |

10 delivery change (



~~11 delivery TAR Idoc~~

X

7 arrive plant

9 start load

wait for load

returning / approaching

12 Weighing / Batching

loading

~~13 delivery change~~

X

15 leave plant (incl.quantity change) The allocator can



~~14 delivery CHG Idoc~~

X

16 handwritten delivery note

15 sends

the truck truck into 'travelling'

confirm the assigned quantity or enter a different one

travelling

21 arrive customer

23 start unload

wait for unloading

unloading

33 call dispatcher

34 leave customer

36 shipment Idoc

35 delivery is 'completed'

idle @ customer site

39 delivery processed

38 delivery CRT Idoc

37 assignment

40 tell next assignment

approaching

SyncroTESS / Dispatcher



Truck / Driver

Telematics / CADIS

Weighbridge / Operator

|  |  |  |
| --- | --- | --- |
| SAP / Order taker | |  |
|  | 1. order entry 2. order Idoc | |
|  | |



(unconfirmed validity)

Proposals only in OEV optimizer

no assignments possible against unconfirmed orders

order visible in OTV and despatch GUI



SyncroTESS / Dispatcher

1. order entry
2. order Idoc (incl. list of

alternative plants)

3 assignment out of alternative plant

6 request subitem number

4 TICKET telegram

5 TICKET telegram

sub order item

numberis required only when the 1st delivery out of that alternative plant is assigned

7 send sub item number

9 delivery processed

8 delivery CRT Idoc

(out of alternative plant, against sub item number)

Optimizer run (optional)

signed on

Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

#### Before assignment

SyncroTESS / Dispatcher



7a TICKET telegram

wait for load

signed on, idle at loading plant

Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

1. order entry
2. order Idoc

Optimiser run (optional)

1. change sourcing plant
2. order change Idoc (with different plant)

Optimiser run (optional)

7b delivery processed

6b delivery CRT Idoc

1. assignment 6a TICKET telegram

#### After assignment

SyncroTESS / Dispatcher



Optimiser run (optional)

wait for load

signed on, idle at loading plant

Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

1 order entry

2 order Idoc

5b delivery processed

4b delivery CRT Idoc 6 order change Idoc

(with different plant) 8 order rejection Idoc

3 assignment 4a TICKET telegram

7 reject order Idoc

5a TICKET telegram

#### Before assignment (idle truck)

SyncroTESS / Dispatcher



7a TICKET telegram

wait for load

signed on, idle at loading plant

Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

changes allowed for:

* Truck Type
* Trailer
* Properties
* Contract Type
* Tare Weight
* Gross Weight
* Capacity
* License Plate
* Shift Times

NO changes allowed for:

* Dispatch Group
* Truck Description
* Truck ID
* Data Radio ID
* Vehicle Deletion

7b delivery processed

* 1. order entry
  2. order Idoc

Optimiser run (optional)

* 1. change truck master
  2. truck master change Idoc

Optimiser run (optional)

6b delivery CRT Idoc

* 1. assignment 6a TICKET telegram

#### After assignment (working truck)

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

* + 1. order entry
    2. order Idoc

signed on, idle at loading plant

Optimiser run (optional)

5b delivery processed

4b delivery CRT Idoc

* + 1. assignment 4a TICKET telegram

5a TICKET telegram

wait for load

…

Changes have only effect on future assignments / deliveries

To affect current deliveries these have to be cancelled and re-assigned.

* 1. change truck master
  2. truck master change Idoc

Optimiser does take new truck data into account

10b delivery processed

9b delivery CRT Idoc

* 1. assignment 9a TICKET telegram

10a TICKET telegram

wait for load

changes allowed for:

* Truck Type
* Trailer
* Properties
* Contract Type
* Tare Weight
* Gross Weight
* Capacity
* License Plate
* Shift Times

NO changes allowed for:

* Dispatch Group
* Truck Description
* Truck ID
* Data Radio ID
* Vehicle Deletion

## (140) Update to the truck shift (Ag, As, Co, Mo, Ce)

#### Truck off duty

Weighbridge / Operator

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

|  |  |  |
| --- | --- | --- |
| SAP / Order taker | |  |
|  | 1 change truck | |
|  | |
| 2 truck master change Ido | |
| (new shift details) | |
| New data used for any | |
| RT, OEV and PP | |
| optimization | |

master



c

signed off

1. Truck on duty



1. change truck master
2. truck master change Idoc (new shift details)

SyncroTESS / Dispatcher

SAP / Order taker

New data only used for PP and future OEV optimization;

**NO** influence on current shift

signed on

Truck / Driver

Telematics / CADIS

Weighbridge / Operator

## (150) Order change before any assignment (Ag, As, Co, Mo, Ce)

SyncroTESS / Dispatcher



7a TICKET telegram

wait for load

signed on

Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

1. order entry
2. order Idoc

changes allowed for:

* customer details
* loading location / plant
* travel distance & duration
* quantity
* delivery window
* delivery flow / loadspacing
* truck type
* properties, exclusions
* pre-assigned trucks / hauliers
* validity
* instruction details

NO changes allowed for:

* material
* inbound flag

7b delivery processed

1. order change

Optimiser run (optional)

1. order change Idoc

Optimiser run (optional)

6b delivery CRT Idoc

1. assignment 6a TICKET telegram

#### No delivery cancellation

SAP / Order taker



Weighbridge / Operator

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

* 1. order entry
  2. order Idoc

signed on

Optimiser run (optional)

5b delivery processed

4b delivery CRT Idoc

* 1. assignment 4a TICKET telegram

5a TICKET telegram

changes allowed for:

* customer details
* travel distance & duration
* quantity
* delivery window
* delivery flow / loadspacing
* truck type
* properties, exclusions
* pre-assigned trucks / hauliers
* instruction details

NO changes allowed for:

* material
* inbound flag
* loading location / plant
* order validity

1. order change
2. order change Idoc

wait for load

Changes have only effect on future assignments / deliveries

To affect current deliveries these have to be cancelled and re-assigned.

Optimizer (takes changes into account)

1. assignment (incl. changes)

10b delivery processed

9b delivery CRT Idoc

9a TICKET telegram

10a TICKET telegram

wait for load

#### Cancellation of deliveries

SAP / Order taker



Weighbridge / Operator

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1. order entry
2. order Idoc

signed on

Optimiser run (optional)

5b delivery processed

4b delivery CRT Idoc

1. assignment 4a TICKET telegram

5a TICKET telegram

wait for load

Assigned deliveries are cancelled as described in cancellation scenarios (user process)

changes allowed for:

* customer details
* travel distance & duration
* quantity
* delivery window
* delivery flow / loadspacing
* truck type
* properties, exclusions
* pre-assigned trucks / hauliers
* instruction details

NO changes allowed for:

* material
* inbound flag
* loading location / plant
* order validity

1. order change
2. order change Idoc

Optimizer (takes changes into account)

idle

1. assignment (incl. changes)

10b delivery processed

9b delivery CRT Idoc

9a TICKET telegram

10a TICKET telegram

wait for load

## (180) Order deletion before any assignment (Ag, As, Co, Mo, Ce)

Weighbridge / Operator



1. order entry
2. order Idoc
3. order deletion
4. order deletion Idoc

Order number

can't be used any more!

Order no more taken into account

SyncroTESS / Dispatcher

Optimiser run (optional)

SAP / Order taker

Telematics / CADIS

Truck / Driver

#### Before Loading

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1. order entry
2. order Idoc

signed on

Optimiser run (optional)

5b delivery processed

4b delivery CRT Idoc

1. assignment 4a TICKET telegram (RR)

5a TICKET telegram

4b TICKET telegram (RR) 5b TICKET telegram

* 1. arrive plant

6 enter plant geofence

approaching

wait for load

* 1. order locked by dispatcher

10b delivery deletion

9b delivery DEL Idoc

9a CANCEL TICKET telegram

10a CANCEL TICKET telegram

proposed deliveried disappear; next optimizer run does not take this order into account

1. order unlock by dispatcher

next optimizer run takes the order into account again

14b delivery processed

13b delivery CRT Idoc

1. new assignment 13a TICKET telegram

14a TICKET telegram

Remarks:

* + a locked order appears in blue in the order grid
  + all related proposals will appear in brown before they disappear form the plan with the next optimizer run.
  + these proposed deliveries cannot be assigned
  + applying order lock in “yncroTE““ will not change “AP order to ‚hold' status
  + SyncroTESS order locking to be used in exceptional circumstances (for realtime only)

After *StartLoad*

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1. order entry
2. order Idoc

signed on

Optimiser run (optional)

5b delivery processed

4b delivery CRT Idoc

1. t 4a TICKET telegram

5a TICKET telegram

10 delivery change (TAR)

11 delivery TAR Idoc

7 arrive plant

1. start load 11a STLOAD TICKET

6 enter plant geofence

8 button "start load" 11b STLOAD TICKET

wait for load wait for load loading

either 9 or 11 sends truck into 'loading'

12 order locked by dispatcher

loaded delivery is NOT affected

proposed deliveried disappear; next optimizer run does not take this order into account

Optional: cancellation of deliveries as described in cancellation scenarios (user process)

13 order unlock by dispatcher

next optimizer run takes the order into account again

16b delivery processed

15b delivery CRT Idoc

14 new assignment 15a TICKET telegram

16a TICKET telegram

Remarks:

* + locked order appears in blue in the order grid
  + related proposals will appear in brown before they disappear form the plan with the next optimizer run.
  + proposed deliveries cannot be assigned
  + deliveries which are (at least) in ‚loading' status will not be affected by order lock function
  + “yncroTE““ will not change “AP order to ‚hold' status
  + order locking to be used in exceptional circumstances (for realtime only)

## (210) Order locking via ERP (SAP On-Hold) (Ag, As, Co, Mo, Ce)

Before Loading



Truck / Driver

1. order entry
2. order Idoc

signed on

3 assignment

4a TICKET telegram

5b delivery processed

4b delivery CRT Idoc

wait for load

6 enter plant geofence

7 arrive plant

wait for load

1. order set to 'hold'
2. order change Idoc

(with holdflag = ‚X')

10 order lock

11b delivery DEL Idoc

11a CANCEL TICKET telegram 12a CANCEL TICKET telegram

12b delivery deletion

1. order set to 'available'
2. order change Idoc

(with holdflag = ‚ ')

15 order unlock

16 new assignment

18b delivery processed

17b delivery CRT Idoc

17a TICKET telegram

18a TICKET telegram

Remarks:

* a locked order appears in blue in the order grid
* all related proposals will appear in brown before they disappear form the plan with the next optimizer run.
* these proposed deliveries cannot be assigned
* any already assigned delivery which is already in status ‚loading' (or later) will continue

next optimizer run takes the order into account again

proposed deliveried disappear; next optimizer run does not take this order into account

5a TICKET telegram

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator

Optimiser run (optional)

## (220) Order on hold when Qmin/Qmax is reached (Ag, As, Co, Mo, Ce)

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1 order entry

2 order Idoc

Optimiser run (optional)

5b delivery processed

4b delivery CRT Idoc

3 assignment 4a TICKET telegram

5a TICKET telegram

Repeat processing of deliveries as in the standard scenario(s)

8b delivery processed

7b delivery CRT Idoc

6 assignment 7a TICKET telegram

8a TICKET telegram

sum of assigned quantity exceeds min ordered quantity („hold on qmin" = YES) sum of assigned quantity exceeds max ordered quantity („hold on qmin" = NO)

* 1. order goes to "on hold"

Optimizer does not take „on hold" order into account

* 1. increase order quantity
  2. order change Idoc

(with increased quantity)

* 1. order available again

Optimizer does take order into account again

15b delivery processed

14b delivery CRT Idoc

* 1. assignment 14a TICKET telegram

15a TICKET telegram

proposals / assignments until the new min / max quantity is reached and order goes to „on hold" again.

#### Parking different from loading plant

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

* 1. order entry
  2. order Idoc

Optimiser run (optional)

* 1. assignment
     + Loading
     + SignOff
     + SignOn
     + Unloading

signed on

5d delivery processed

5c delivery CRT Idoc (incl. preload flag)

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram (incl. preload flag)

4b TICKET telegram (RR) 5b TICKET telegram

returning / approaching

1. delivery change (TAR)
2. delivery TAR Idoc

loading

7 arrive plant

1. start load 11a STLOAD TICKET

6 enter plant geofence 8 button "start load"

11b STLOAD TICKET

wait for load

either 9 or 11 sends truck into 'loading'

1. Weighing / Batching
2. delivery change

17 print delivery note

load and delivery date to be printed on ticket

1. delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

21 arrive parking

14b Change TICKET (incl. updated quantity)

1. leave plant geofence

20 enter parking geofence

14c update qty; substatus

„post load"

homeing

Ignore message

22 truck automatically signed off

24 sign off message

25 sign off message

signed off

23 sign off

from here follow scenario 270

#### Parking at loading plant

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

* 1. order entry
  2. order Idoc
  3. assignment
* Loading
* SignOff

Optimiser run (optional)

* SignOn
* Unloading

signed on

5d delivery processed

5c delivery CRT Idoc (incl. preload flag)

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram (incl. preload flag)

4b TICKET telegram (RR) 5b TICKET telegram

returning / approaching

1. delivery change (TAR)
2. delivery TAR Idoc

7 arrive plant

1. start load

6 enter plant geofence

8 button "start load"

wait for load

11a STLOAD TICKET

11b STLOAD TICKET

loading

1. Weighing / Batching

either 9 or 11 sends truck into 'loading'

1. delivery change

21 print delivery note

1. delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

17 leave plant

14b Change TICKET (incl. updated quantity)

1. enter parking geofence

14c update qty; substatus

„post load"

load and delivery date to be printed on ticket

19 arrive parking

21 sign off

22 truck off duty

18 enter parking geofence 20 sign off

signed off

from here follow scenario 270

#### Parking at site

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

* 1. order entry
  2. order Idoc

Optimiser run (optional)

* 1. assignment
* Loading
* SignOff
* SignOn
* Unloading

3 assignment

Truck has site as shift end location

signed on

5d delivery processed

5c delivery CRT Idoc (incl. preload flag)

4a TICKET telegram (RR)

5a TICKET telegram (incl. preload flag)

4b TICKET telegram (RR) 5b TICKET telegram

returning / approaching

1. delivery change (TAR)
2. delivery TAR Idoc

7 arrive plant

1. start load 11a STLOAD TICKET

6 enter plant geofence 8 button "start load" 11b STLOAD TICKET

wait for load

1. Weighing / Batching

loading

either 9 or 11 sends truck into 'loading'

1. delivery change
2. print delivery note load and delivery

date to be printed on ticket

1. delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

14b Change TICKET (incl. updated quantity)

1. leave plant geofence

14c update qty; substatus

„post load"

homeing

21 arrive parking

20 enter parking geofence

Ignore message

22 truck automatically signed off

24 sign off message

25 sign off message

23 sign off

signed off

from here follow scenario 270

#### With dynamic parking location – Situation 1a in SCR2600-04

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

* 1. order entry
  2. order Idoc

Optimiser run (optional)

* 1. assignment
* Loading
* SignOff
* SignOn
* Unloading

signed on

5d delivery processed

5c delivery CRT Idoc (incl. preload flag)

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram (incl. preload flag)

4b TICKET telegram (RR) 5b TICKET telegram

returning / approaching

1. delivery change (TAR)
2. delivery TAR Idoc

7 arrive plant

1. start load 11a STLOAD TICKET
2. enter plant geofence 8 button "start load" 11b STLOAD TICKET

wait for load

either 9 or 11 sends truck into 'loading'

loading

1. Weighing / Batching
2. delivery change

17 print delivery note load and delivery

date to be printed on ticket

1. delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

1. leave plant

14b Change TICKET

(incl. updated quantity) 15 leave plant geofence

14c update qty; substatus

„post load"

homeing

* 1. arrive parking

20 manual report arrive parking

Ignore message

* 1. truck automatically signed off

24 sign off message

25 sign off message

signed off

* 1. sign off

from here follow scenario 270

#### Change regular assignment into PLT assingment with dynamic parking location – Situation 1b in SCR26005-04

Telematics / CADIS

SAP / Order taker



Weighbridge / Operator

SyncroTESS / Dispatcher

Truck / Driver

* 1. order entry
  2. order Idoc

signed on

Optimiser run (optional)

4d delivery processed

4c delivery CRT Idoc

* 1. assignment 4a TICKET telegram (RR)

5a TICKET telegram

returning

4b TICKET telegram (RR) 5b TICKET telegram

1. delivery change (TAR)
2. delivery TAR Idoc
3. arrive plant

9 start load 11a STLOAD TICKET

6 enter plant geofence 8 button "start load" 11b STLOAD TICKET

wait for load loading

1. Weighing / Batching

either 9 or 11 sends truck into 'loading'

1. delivery change
2. delivery CHG Idoc

16 leave plant

1. leave plant geofence

17 print delivery note

18 transformation

travelling

(choose arrive next day in R&A)

* SignOff
* SignOn
* Unloading

18 transformation 19a update TICKET telegram

(incl. preload flag)

19b update TICKET telegram

homeing

21 arrive parking

20 manual report arrive parking

Ignore message

22 truck automatically signed off

* 1. sign off message
  2. sign off message

signed off

23 sign off

from here follow scenario 270

## (240) Assign Preload for Truck without Telematics (Ag, Mo, Ce)

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

TrimFleet / PI

Truck / Driver

1 order entry

2 order Idoc

Optimiser run (optional)

3 assignment

* Loading
* SignOff
* SignOn
* Unloading

signed on

3 assignment

1. delivery processed

returning / approaching

4 delivery CRT Idoc (incl. preload flag)

1. delivery change (TAR)
2. delivery TAR Idoc
3. arrive plant
4. start load

wait for load

either 7 or 9 sends truck into 'loading'

loading

1. Weighing / Batching
2. delivery change

14 print delivery note load and delivery

date to be printed on ticket

1. delivery CHG Idoc

either 12 or 13 sends

truck into 'travelling'

1. leave plant

homeing

1. complete homeRun
2. truck off duty (automatically)

from here follow scenario 280

* 1. external parking location

signed off

Truck / Driver



Weighbridge / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

1 sign on

3 sign on message

2 sign on message

1. truck on duty
2. SignOn ACK message

6 SignOn ACK message

7 auto-assign delivery

8c delivery CRT Idoc

8a TICKET telegram (RR)

8b TICKET telegram (RR)

8d delivery processed

9a TICKET telegram

9b TICKET telegram

11 arrive plant

10 enter plant geofence

wait for load

from here follow standard scenario 10

approaching

* 1. parking at plant



1 sign on

3 sign on message

2 sign on message

1. truck on duty
2. SignOn ACK message

6 SignOn ACK message

7 auto-assign delivery

8a TICKET telegram

9b delivery processed

8b delivery CRT Idoc

9a TICKET telegram

from here follow standard scenario 15, step 8ff

wait for load

signed off

Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator

Remarks:

- If position transmitted with SignOn differs from expected position (cf. SCR 26005-43) Scenario 250b continues after step 6 equal to 250a step 7ff.

* 1. with dynamic parking location – Situation 2a in SCR26005-04

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

* + 1. order entry
    2. order Idoc

Optimiser run (optional)

* + 1. assignment

(choose PreDrive in R&A)

* + - * return run (assigned section R&A)
      * SignOff (assigned section R&A)
      * SignOn (planned section R&A)
      * FAS (planned section R&A)

3 assignment

signed on

returning

4a TICKET telegram (RR) 5a TICKET telegram

4b TICKET telegram (RR) 5b TICKET telegram

1. sign off message

7 sign off message

6 sign off

1. truck off duty

signed off

Start time communication scenario 540 can happen after truck status returning and before sign on

12 sign on message

11 sign on message

1. sign on

13 truck on duty

14 SignOn ACK message

15 SignOn ACK message

16 auto-assign delivery

17d delivery processed

17c delivery CRT Idoc

17a TICKET telegram (RR) 18a TICKET telegram

17b TICKET telegram (RR) 18b TICKET telegram

returning

20 arrive plant

19 enter plant geofence

wait for load

from here follow standard scenario 10

* 1. change regular assignment into assignment with dynamic parking location on the way to the loading point – Situation 2c,d in

SCR26005-04



1 assignment

2a TICKET telegram (RR)

3 TICKET telegram (RR)

4 TICKET telegram

5 TICKET telegram

transformation

choose arrive next day in R&A) SignOff

SignOn Unloading

6 transformation

10 delivery processed

9 delivery change Idoc

7 update TICKET telegram

8 update TICKET telegram

(incl. preload flag)

21 arrive parking

20 manual report arrive parking

22 truck automatically signed off

23 sign off

24 sign off message

Ignore

message

25 sign off message

from here follow scenario 270

signed off

6 (

-

-

-

Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator

homeing

returning

## (251) SignOff Truck with Telematics (Ag, As, Co, Mo, Ce)

#### successful log off



2 sign off message

signed off

idle



SyncroTESS / Dispatcher

Truck / Driver

SAP / Order taker

Weighbridge / Operator

|  |  |  |
| --- | --- | --- |
|  | Telematics / CADIS | |
| 3 sign off message | |  |
| 4 truck off duty | |

1. unsuccessful log off

working

Truck / Driver

|  |  |
| --- | --- |
| SyncroTESS / Dispatcher | |
|  | 4 |

|  |  |  |
| --- | --- | --- |
|  | Telematics / CADIS | |
| 3 sign off message | |  |
|  | |

Weighbridge / Operator

SAP / Order taker

2 sign off message





create Error message in Inbox



1 sign off

1 sign off

working

#### Truck not at parking

|  |  |  |
| --- | --- | --- |
| SyncroTESS / Dispatcher | |  |
| ore ssage | 1. send-to home 2. homeRun ass | |
|  | |

Weighbridge / Operator

SAP / Order taker

Telematics / CADIS



Truck / Driver

10 sign off



ignment

7 enter parking geofence

ally signed off

11 sign off message

signed off

homeing

signed on, idle

|  |  |
| --- | --- |
| 3 HOME telegram    8 arrive parking | 4 HOME telegram |
|  |
| 9 truck automatic  12 sign off message |
|  |

Ign me

#### Truck at parking

Weighbridge / Operator

SAP / Order taker

Telematics / CADIS

1. truck off duty (automatically)



|  |  |  |
| --- | --- | --- |
| SyncroTESS / Dispatcher | |  |
|  | 1 send-to home  2 homeRun ass  3 HOME telegram | |
|  | |

Truck / Driver

5 sign off



ignment

signed off

homeing

signed on, idle



|  |  |
| --- | --- |
| 7 sign off message | 4 HOME telegram |
| 6 sign off message |
|  |

## ReturnRun Assignment (Ce)

#### With dynamic parking location on the way to a plant – Situation 2b in SCR 26005-04

Weighbridge / Operator

SAP / Order taker

10 sign off



1. send-to location
2. returnRun assignment With check box

'allow overnight stop' set

3 RETURN telegram

4 RETURN telegram

8 arrive parking

7 manual report arrive parking

9 truck automatically signed off

11 sign off message

Ignore

message

12 sign off message

12 sign on message

11 sign on message

1. truck on duty
2. SignOn ACK message

15 SignOn ACK message

d off

signe

returning

signed on, idle or working

Truck / Driver

SyncroTESS / Dispatcher

Telematics / CADIS

returning

10 sign on

## Remote SignOff truck (Ag, As, Co, Mo, Ce)



Telematics / CADIS

|  |  |  |
| --- | --- | --- |
| SyncroTESS / Dispatcher | |  |
|  | 1 manually sign  2 sign off message | |
| 5 truck off duty | |

Weighbridge / Operator

SAP / Order taker

Truck / Driver

signed on

off truck



1. de-couple driver-truck
2. sign off message

signed off

## (260) SignOn Truck with Telematics, no FAS (Ag, As, Co, Mo, Ce)

#### external parking location

1 sign on



1. sign on message
2. sign on message
3. truck on duty
4. SignOn ACK message
5. SignOn ACK message
6. auto-assign returnRun
7. RETURN telegram
8. RETURN telegram

from here follow standard scenario 10

signed on

returning

signed off

Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator



#### parking at plant or roaming truck or option „“ignOn Non-‘oaming ‘eturn ‘un" deactivated

1 sign on



2 sign on message

1. sign on message
2. truck on duty
3. SignOn ACK message

6 SignOn ACK message

from here follow standard scenario 10

signed on, idle

signed off

Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator



Remarks:

- If position transmitted with SignOn differs from expected position (cf. SCR 26005-43) Scenario 260b continues after step 6 equal to 260a step 7ff.

#### before end load

Weighbridge / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

* 1. order entry
  2. order Idoc

signed off

1 manually sign on

Optimiser run (optional)

idle

1. delivery processed
2. delivery change (TAR)

4 delivery CRT Idoc

1. delivery TAR Idoc
   1. assignment
2. start load

wait for load

1. Weighing / Batching

either 7 or 8 sends truck into 'loading'

12 sign on message

11 sign on message

loading

1. manually sign on

13 truck now telematic

1. delivery change

18 print delivery note

1. delivery CHG Idoc

14 SignOn ACK message

14a TICKET telegram (incl. updated quantity)

1. start load

16 leave plant

15 SignOn ACK message

14b TICKET telegram

(incl. updated quantity) 8 button "start load"

15 leave plant geofence

manually report start load

substatus

„post loading"

travelling

21 arrive customer

20 enter site geofence

1. start unload

22 button "start unload"

wait for unloading

30 ePOD RFC

1. finish unload

unloading

28 ePOD telegram

1. button "finish unload"

27 ePOD telegram

1. 'sign on glass'; substatus

„cleaning"

26 auto-assign returnRun

27 RETURN telegram

28 RETURN telegram

34 leave customer

33 leave site geofence

1. shipment Idoc

24 delivery is 'completed'

returning



Remark:

* The SignOn (10) may happen at any time during the delivery cycle
* If the truck is working on an assignment, it will continue following the non-telematic workflow until the next message
* If the SignOn happens during load as outlines above, the two systems are in sync after the quantity update again
* In a cancellation scenario, the truck will receive the CANCEL message if already signed on as telematics truck

#### after end load

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Truck / Driver

* 1. order entry
  2. order Idoc

signed off

1 manually sign on

Telematics / CADIS

idle

Optimiser run (optional)

1. delivery processed
2. delivery change (TAR)

4 delivery CRT Idoc

1. delivery TAR Idoc

loading

* 1. assignment

1. start load

wait for load

1. Weighing / Batching

either 7 or 8 sends truck into 'loading'

1. delivery change
2. delivery CHG Idoc
3. print delivery note
4. leave plant

16 sign on message

17 truck now telematic

15 sign on message

1. manually sign on

17 SignOn ACK message

1. SignOn ACK message

travelling

1. arrive customer
2. start unload

Delivery continues as non-telematic delivery

wait for unloading

unloading

1. call dispatcher
2. leave customer

24 shipment Idoc

1. delivery is 'completed'

25 auto-assign returnRun

26 RETURN telegram

27 RETURN telegram

From now on Truck and SyncroTESS are in sync again

returning

Remark:

* The SignOn (14) may happen at any time during the delivery cycle
* If the truck is working on an assignment, it will continue following the non-telematic workflow
* In a cancellation scenario, the truck will receive the CANCEL message if already signed on as telematics truck

#### before end wait load

Weighbridge / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

* 1. order entry
  2. order Idoc

signed off

1 manually sign on

Optimiser run (optional)

idle

5 delivery processed

4 delivery CRT Idoc

* 1. assignment

8 sign on message

7 sign on message

6 manually sign on

wait for load

9 truck now telematic

14 delivery change (TAR)

15 delivery TAR Idoc

1. SignOn ACK message

13 start load 15a STLOAD TICKET

1. SignOn ACK message
2. button "start load" 15b STLOAD TICKET

loading

16 Weighing / Batching

either 13 or 15 sends

truck into 'loading'

17 delivery change

19 print delivery note

18 delivery CHG Idoc

18a TICKET telegram (incl. updated quantity)

18b TICKET telegram (incl. updated quantity)

substatus

„post loading"

21 leave plant

travelling

20 leave plant geofence

23 arrive customer

22 enter site geofence

25 start unload

24 button "start unload"

wait for unloading

31 ePOD RFC

27 finish unload

unloading

30 ePOD telegram

26 button "finish unload"

29 ePOD telegram

28 'sign on glass'; substatus

„cleaning"

32 auto-assign returnRun

33 RETURN telegram

34 RETURN telegram

36 leave customer

35 leave site geofence

38 shipment Idoc

37 delivery is 'completed'

returning

Remark:



* The SignOn (10) may happen at any time during the delivery cycle
* If the truck is working on an assignment, it will continue following the non-telematic workflow until the next message

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47 - If the SignOn happens during load as outlines above, the two systems are in sync after the quantity update again

- In a cancellation scenario, the truck will receive the CANCEL message if already signed on as telematics truck

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## (265) SignOn unsuccessful (Ag, As, Co, Mo, Ce)

Weighbridge / Operator

SAP / Order taker

1 sign on



Telematics / CADIS

Truck / Driver

2 sign on message

6 SignOn NAK message

Truck status

unchanged

|  |  |  |
| --- | --- | --- |
| SyncroTESS / Dispatcher | |  |
|  | 1. sign on message      1. reject signon 2. SignOn NAK message | |
|  | |



#### with travel (following 230a and 230b)

Weighbridge / Operator

1 sign on



SyncroTESS / Dispatcher

Telematics / CADIS

3 sign on message

2 sign on message

1. truck on duty
2. SignOn ACK message

6 SignOn ACK message

7 leave plant geofence

SyncroTESS ignores

the incoming event leave plant in this scenario

1. leave plant
2. ignore event

11 arrive customer

10 enter site geofence

13 start unload

12 button "start unload"

15 finish unload

14 button "finish unload"

16 auto-assign returnRun

17 RETURN telegram

18 RETURN telegram

20 ePOD telegram

22 ePOD RFC

21 ePOD telegram

24 leave customer

23 leave site geofence

25 delivery is 'completed'

26 shipment Idoc

returning

wait for unloading

signed off, preloaded

Truck / Driver

SAP / Order taker

unloading

travelling

19 'sign on glass'; substatus

„cleaning"

1. without travel (following 230c)

Weighbridge / Operator



SyncroTESS / Dispatcher

Telematics / CADIS

signed off, preloaded

3 sign on message

2 sign on message

1 sign on

1. truck on duty
2. SignOn ACK message

6 SignOn ACK message

8 start unload

7 button "start unload"

10 finish unload

9 button "finish unload"

13 ePOD telegram

12 ePOD telegram

11 sign on glass;

substatus

„cleaning"

15 ePOD RFC

14 auto-assign returnRun

returning

20 delivery is 'completed'

21 shipment Idoc

Truck / Driver

SAP / Order taker

unloading

wait for unloading

|  |  |
| --- | --- |
| 16 RETURN telegram    19 leave customer | 17 RETURN telegram |
| 18 leave site geofence |
|  |

## (280) SignOn Truck without Telematics, preloaded (Ag, Mo, Ce)

Weighbridge / Operator



Telematics / CADIS

Truck / Driver

signed off, preloaded

1 SignOn

2 truck on duty

3 arrive customer

4 start unload

5 leave customer

returning

1. phone to dispatcher
2. arrive plant
3. delivery (and returnRun) completed

9 shipment Idoc

unloading

wait for unloading

SyncroTESS / Dispatcher

SAP / Order taker

idle

travelling

Telematics / CADIS

Truck / Driver

1 SignOn



4 delivery CRT Idoc

5 delivery processed

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator

from here follow standard scenario 20

wait for load

approaching

signed off

2 truck on duty

3 auto-assign delivery

6 arrive plant

#### parking at plant

Telematics / CADIS

Truck / Driver

* 1. SignOn



5b delivery processed

4b delivery CRT Idoc

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator

from here follow standard scenario 25

wait for load

signed off

* 1. truck on duty
  2. auto-assign delivery



1. SignOn
2. truck on duty
3. auto-assign returnRun
4. phone for 1st plant

from here follow standard scenario 20

idle

5 arrive plant

returning

signed off

Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator

#### parking at plant



1. SignOn
2. truck on duty

3 call dispatcher (ask for assignment)

from here follow standard scenario 25

idle

signed off

Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator



SAP / Order taker SyncroTESS / Dispatcher

1. order entry
2. order Idoc

3 assignment

4a TICKET telegram

5b delivery processed

4b delivery CRT Idoc

5a TICKET telegram

now the delivery

appears at the top of the delivery monitor

6 cancel delivery

7b delivery DEL Idoc

7a CANCEL TICKET telegram

8a CANCEL TICKET telegram

8b delivery deletion

9 remove delivery from list Aggregates:

The delivery is removed from the

Delivery Monitor

Concrete: The delivery appears at the top of the

Delivery Monitor

still working

working

Truck / Driver

Telematics / CADIS

Optimiser run (optional)

Weighbridge / Operator

SyncroTESS / Dispatcher



Optimiser run (optional)

still working

working

Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

* 1. order entry
  2. order Idoc
  3. assignment
     + Loading
     + SignOff
     + SignOn
     + Unloading

5b delivery processed

now the delivery appears at the top of the delivery monitor

8b delivery deletion

4b delivery CRT Idoc (incl. preload flag)

7b delivery DEL Idoc

3 assignment 4a TICKET telegram (incl. preload flag)

6 cancel preload 7a CANCEL TICKET telegram

5a TICKET telegram

8a CANCEL TICKET telegram

9 remove delivery from list

Aggregates: The delivery is removed from the

Delivery Monitor



1. order entry
2. order Idoc

3 assignment

4d delivery processed

4c delivery CRT Idoc

4a TICKET telegram (RR)

4b TICKET telegram (RR)

5a TICKET telegram

5b TICKET telegram

now the delivery

appears at the top of the delivery monitor

7 arrive plant

6 enter plant geofence

8 cancel delivery

9b delivery DEL Idoc

9a CANCEL TICKET telegram

10a CANCEL TICKET telegram

10b delivery deletion

11 remove deliver Aggregates:

The delivery is removed from the

Delivery Monitor

Concrete: The delivery appears at the top of the

Delivery Monitor

from here follow scenario 10 or 500

idle

y from list

Optimiser run (optional)

signed on

Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator

wait for load

returning / approaching

1. order entry



from here follow scenario 10 or 500

idle

returning / approaching

Optimiser run (optional)

signed on

Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator

wait for load

1. order Idoc
2. assignment
   * Loading
   * SignOff
   * SignOn
   * Unloading

4d delivery processed

4c deliver CRT Idoc (incl. preload flag)

now the delivery appears at the top of the delivery monitor

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram (incl. preload flag) 7 arrive plant

4b TICKET telegram (RR) 5b TICKET telegram

6 enter plant geofence

10b delivery deletion

9b delivery DEL Idoc

1. cancel preload 9a CANCEL TICKET telegram

10a CANCEL TICKET telegram

11 remove delivery from list

Aggregates: The delivery is removed from the

Delivery Monitor

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1. order entry
2. order Idoc

Optimiser run (optional)

signed on

4d delivery processed

4c delivery CRT Idoc

1. assignment 4a TICKET telegram (RR)

5a TICKET telegram

4b TICKET telegram (RR) 5b TICKET telegram

returning / approaching

now the delivery appears at the top of the delivery monitor

8 delivery change (TAR)

9 delivery TAR Idoc

7 arrive plant

6 enter plant geofence

wait for load

loading

10 cancel before end load

12b delivery deletion

11b delivery DEL Idoc

Time of next availability = now

11a CANCEL TICKET telegram

12a CANCEL TICKET telegram

13 remove delivery from list

Aggregates: The delivery is removed from the

Delivery Monitor

Remark:

* Scenario 330 is typical of the process in a Quarry, but in concrete there is little time between the delivery creation and delivery change Idoc, therefore it is very unlikely that this scenario would be seen in the concrete business. Scenarios 340-350 are more likely.
* This scenario only applies where material can be re-stocked or has not yet been produced.
* The point-of-no-return for “yncroTE““ is when the delivery is picked and the status becomes ‚Loading'. From this point forward the SyncroTESS cancellation process should be followed and a returns order raised if material has been produced. See scenario 331 for cancellation and return order process where material has been produced.

#### Material produced, with Return Order

SAP / Order taker



|  |  |  |
| --- | --- | --- |
| Batcher / Operator | |  |
|  | 4d delivery processed    now the delivery appears at the top of the delivery monitor  10 delivery change (TAR) | |
|  | |

SyncroTESS / Dispatcher

1 order entry

2 order Idoc

Telematics / CADIS

Truck / Driver

signed on

Optimiser run (optional)

4c delivery CRT Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram

7 arrive plant

4b TICKET telegram (RR) 5b TICKET telegram

6 enter plant geofence

returning / approaching

wait for load

now the delivery appears as 'batched' at the bottom of the delivery monitor

11 delivery TAR Idoc

either 9 or 11 sends truck into 'loading'

1. start load

8 button "start load"

loading

12 Weighing / Batching



14 phone to plant

15b delivery DEL Idoc

13 cancel

15a CANCEL TICKET telegram

16a CANCEL TICKET telegram

16b Reverse Goods issue

16c delivery deletion

idle

16d Reverse Production Order Conf.

17 cancel delivery note

The delivery appears at the top of the delivery monitor

Return Order process starts here

#### with start load

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

* 1. order entry
  2. order Idoc

signed on

Optimiser run (optional)

5b delivery processed

4b delivery CRT Idoc

* 1. assignment 4a TICKET telegram

5a TICKET telegram

returning

1. delivery change (TAR)
2. delivery TAR Idoc

7 arrive plant

9 start load 11a STLOAD TICKET

1. enter plant geofence

8 button "start load" 11b STLOAD TICKET

wait for load loading

either 9 or 11 sends truck into 'loading'

1. delivery cancel (RPR)
2. delivery RPR Idoc
3. substatus

„reprocessing"

1. delivery change (TAR)
2. delivery TAR Idoc
3. Weighing / Batching
4. delivery change
5. delivery CHG Idoc

20a Change TICKET (incl. updated quantity)

20b Change TICKET (incl. updated quantity)

20c update qty; substatus

„post load"

from here follow standard scenario 10

#### with cancellation

SyncroTESS / Dispatcher



SAP / Order taker

|  |  |  |
| --- | --- | --- |
| Weighbridge / Operator | |  |
|  | 4d delivery processed    now the delivery appears at the top of the delivery monitor  8 delivery change (TAR) | |
| 10 delivery cancel (RPR) | |
|  | |

* 1. order entry
  2. order Idoc

Optimiser run (optional)

Truck / Driver

signed on

Telematics / CADIS

4c delivery CRT Idoc

9 delivery TAR Idoc

11 delivery RPR Idoc

* 1. assignment 4a TICKET telegram (RR)

5a TICKET telegram

1. arrive plant

cancel is not allowed at this point

9a STLOAD TICKET

12

substatus

„reprocessing"

4b TICKET telegram (RR) 5b TICKET telegram

6 enter plant geofence

returning / approaching

wait for load

loading

9b STLOAD TICKET

13 cancel before end load

15b delivery deletion

14b delivery DEL Idoc

Time of next availability = now

14a CANCEL TICKET telegram

15a CANCEL TICKET telegram

16 remove delivery from list



Aggregates: The delivery is removed from the

Delivery Monitor

## (333) Cancel delivery before end load with reuse (Co)

#### With Re-Use and Return Order

SAP / Order taker

|  |  |  |
| --- | --- | --- |
| Batcher / Operator | |  |
|  | 4d delivery processed    now the delivery appears at the top of the delivery monitor  10 delivery change (TAR) | |
|  | |

SyncroTESS / Dispatcher

1 order entry

2 order Idoc

Optimiser run (optional)

Telematics / CADIS

Truck / Driver

signed on

4c delivery CRT Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram

7 arrive plant

4b TICKET telegram (RR) 5b TICKET telegram

6 enter plant geofence

loading

returning / approaching

now the delivery

1. delivery TAR Idoc

wait for load

1. start load

8 button "start load"

appears as 'batched' at the bottom of the delivery monitor

1. Weighing / Batching

14 phone to plant

either 9 or 11 sends truck into 'loading'

1. cancel with reuse

16b Reverse Goods issue 16c delivery deletion

16d Issue Cost of Scrap to Prod. Costs

15b delivery DEL Idoc Reason code 03

15a CANCEL TICKET telegram

16a CANCEL TICKET telegram

18 highlight truck in pink

idle

book qty and reference number on truck

Optimiser run (optional)

17 cancel delivery note

The delivery appears as 'cancelled' at the top of the delivery monitor

19 assign with re-use

21b deliver processed (incl. re-use quantity)

22 delivery change (TAR)

20b delivery CRT Idoc

(incl. re-use quantity and reference to cancelled delivery)

23 delivery TAR Idoc

20a TICKET telegram

25 start load

21a TICKET telegram

wait for load

24 button "start load"

26 Weighing / Batching

loading

27 delivery change

31 print delivery note

28 delivery CHG Idoc

28a Change TICKET (incl. updated quantity)

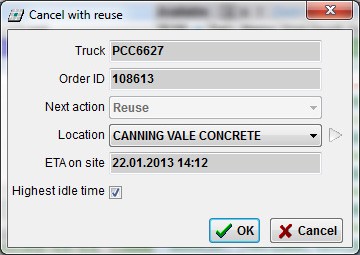
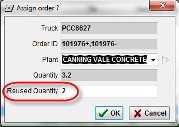
30 leave plant

28b Change TICKET (incl. updated quantity)

29 leave plant geofence

28c update qty; substatus

„post load"



travelling

Returns Order process starts here Re-use in full or Re-use in part!

Variant Configuration to provide re-use QC

#### in status „wait load"

Batcher / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

Start after scenario 333, step 18, scenario 511, step 39, scenario 512, step 38, or scenario 513, step 36)

Let the originally cancelled (scenario 333, step 13) or partly delivered (scenarios 511, 512, 513) delivery be D1.

* 1. assign with re-use

Let the delivery assigned in step 1 be delivery be D2.

returning/idle

* 1. book reference to and quantity of D1 from truck on D2 (automatically)
  2. de-highlight truck (automatically)

5b deliver processed (incl. re-use quantity)

5a delivery CRT Idoc

(incl. re-use quantity and reference to

4a TICKET telegram

4b TICKET telegram

cancelled delivery D1)

1. cancel delivery D2 with reuse
2. book reference to and quantity of **D1** to truck (automatically)

wait for load

10b delivery deletion

10a delivery DEL Idoc

1. highlight truck in pink (automatically)

9a CANCEL TICKET telegram

9b CANCEL TICKET telegram

* 1. remove delivery from list

idle

Let the delivery assigned in step 12 be delivery be D3.

* 1. assign with re-use
  2. book reference to and quantity of **D1** from truck on D3 (automatically)
  3. de-highlight truck

16b deliver processed (incl. re-use quantity)

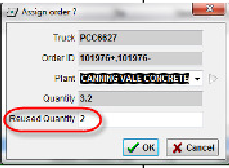
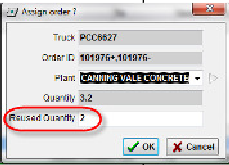
16a delivery CRT Idoc

(incl. re-use quantity and reference to cancelled delivery **D1**)

15a TICKET telegram

15b TICKET telegram

wait for load



If delivery is executed, proceed with scenario 10, step 10, if delivery is cancelled again, proceed with step 5 of this scenario.

Remarks:

-The assignment with reuse (step 12) is only possible if the company code of the loading plant relating to the leftover material is the same as the company code of the plant, from which a newly to be assigned order is to be loaded (cf. SCR 26006-27) and if the leftover material is "pure", i.e. has not been reused for another delivery yet (cf. SCR 26006-28).

#### in status „loading"

Batcher / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

Start after scenario 333, step 18, scenario 511, step 39, scenario 512, step 38, or scenario 513, step 36)

Let the originally cancelled (scenario 333, step 13) or partly delivered (scenarios 511, 512, 513) delivery be D1.

1. assign with re-use

Let the delivery assigned in step 1 be delivery be D2.

returning/idle

1. book reference to and quantity of D1 from truck on D2 (automatically)
2. de-highlight truck (automatically)

5b deliver processed (incl. re-use quantity)

6a delivery change (TAR)

5a delivery CRT Idoc

(incl. re-use quantity and reference to cancelled delivery D1)

6b delivery TAR Idoc

4a TICKET telegram

7b start load

4b TICKET telegram

7a button "start load"

wait for load

1. Weighing / Batching

13b delivery deletion

13a delivery DEL Idoc

1. cancel delivery D2 with reuse
2. book reference to and quantity of **D2** to truck (automatically)

loading

1. highlight truck in pink (automatically)

12a CANCEL TICKET telegram

12b CANCEL TICKET telegram

1. remove delivery from list

Let the delivery assigned in step 15 be delivery be D3.

1. assign with re-use

idle

1. book reference to and quantity of **D2** from truck on D3 (automatically)
2. book reference to and quantity of D2 on D3 (automatically)

19b deliver processed (incl. re-use quantity)

20a delivery change (TAR)

19a delivery CRT Idoc (incl. re-use quantity

and reference to cancelled delivery **D2**)

20b delivery TAR Idoc

18a TICKET telegram

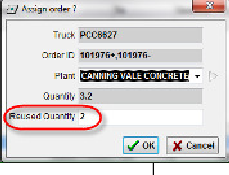
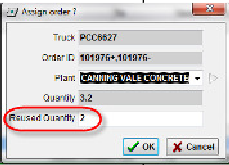
21b start load

18b TICKET telegram

wait for load

21a button "start load"

22 Weighing / Batching



loading

If delivery is executed, proceed with scenario 10, step 13, if delivery is cancelled again, proceed with step 8 of this scenario.

Remark:

-The difference between this scenario and the previous one (334a) is the fact the second delivery D2 already has commenced loading. In this case the quantity and reference number of the second delivery D2 is retained, overwriting the one from the first delivery D1.

-The assignment with reuse (step 15) is only possible if the company code of the loading plant relating to the leftover material is the same as the company code of the plant, from which a newly to be assigned order is to be loaded (cf. SCR 26006-27) and if the leftover material is "pure", i.e. has not been reused for another delivery yet (cf. SCR 26006-28).

## (335) Cancel Preload before end load (Ag)

#### Full Re-Stock of material without Return-Order

Telematics / CADIS

SAP / Order taker



Weighbridge / Operator

SyncroTESS / Dispatcher

Truck / Driver

1. order entry
2. order Idoc
3. assignment
   * Loading
   * SignOff

Optimiser run (optional)

* + SignOn
  + Unloading

signed on

4d delivery processed

4c delivery CRT Idoc (incl. preload flag)

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram

(incl. preload flag)

4b TICKET telegram (RR) 5b TICKET telegram

load and delivery date to be printed on ticket

returning / approaching

1. delivery change (TAR)
2. delivery TAR Idoc

7 arrive plant

1. start load

6 enter plant geofence

8 button "start load"

wait for load

loading

1. Weighing / Batching

either 9 or 11 sends truck into 'loading'

1. cancel before end load

Enter time of next availability

15b delivery deletion

14b delivery DEL Idoc

14a CANCEL TICKET telegram

15a CANCEL TICKET telegra

m

17 auto-assign returnRun

16 remove delivery from list

|  |  |
| --- | --- |
| 18 DISCHARGE telegram    21 start unload | 19 DISCHARGE telegram |
| 20 start unload  23 finish unload    nRun |
| 24 finish unload |
| 25 complete retur |

A 'discharge' returnRun is created and assigned if the truck is not immediately available

Aggregates: The delivery is removed from the

Delivery Monitor

returning

22 tip

idle

## (340) Cancel delivery after load, tip (Ag, As, Co, Mo, Ce)

#### Without Re-Use and with Returns-Order

Weighbridge / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1 order entry

2 order Idoc

signed on

Optimiser run (optional)

4d delivery processed

now the delivery appears at the top of the delivery monitor

1. delivery change (TAR)

4c delivery CRT Idoc

1. delivery TAR Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram

7 arrive plant

9 start load

11a STLOAD TICKET

4b TICKET telegram (RR) 5b TICKET telegram

6 enter plant geofence

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | |  |
| returning / approaching |
|  | |  | |
| 8 button "start load" |  | | wait for load |

11b STLOAD TICKET

loading

1. Weighing / Batching
2. delivery change

either 9 or 11 sends truck into 'loading'

17 print delivery note Now the delivery

appears as "loaded"

on the bottom of the Delivery Monitor

1. delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

14b Change TICKET (incl. updated quantity)

1. leave plant geofence

14c update qty; substatus

„post load"

21 phone to plant

22b delivery DEL Idoc

23b Reverse Goods issue 23c delivery deletion

20 cancel after load

Dispatcher has to enter plant and handling duration for tipping

travelling

22a CANCEL TICKET telegram

23a CANCEL TICKET telegram

1. cancel delivery note
2. auto-assign returnRun

The delivery is removed from

the Delivery Monitor

Truck will be idle after both

arrive plant (29) and

finish unload (34)

1. DISCHARGE telegram

29 arrive plant

32 start unload

34 finish unload

1. DISCHARGE telegram
2. enter plant geofence 31 button "start unload"

33 button "end unload"

returning

30 tip

Returns Order process starts here

idle



Remarks:

- The action "cancel" and "cancel and divert" (edge 20) are possible during truck statuses „travelling", „wait for unload" and „unloading".

## (344) Cancel Preload after load before parking, return same day (Ag, Mo, Ce)

#### With Returns-Order

SyncroTESS / Dispatcher



Truck / Driver

SAP / Order taker

Weighbridge / Operator

Telematics / CADIS

1 order entry

2 order Idoc

Optimiser run (optional)

signed on

4d delivery processed

now the delivery appears at the top of the delivery monitor

1. delivery change (TAR)

4c delivery CRT Idoc

1. delivery TAR Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram

7 arrive plant

1. start load 11a STLOAD TICKET

4b TICKET telegram (RR) 5b TICKET telegram

6 enter plant geofence 8 button "start load" 11b STLOAD TICKET

loading

wait for load

returning / approaching

1. Weighing / Batching
2. delivery change

either 9 or 11 sends truck into 'loading'

17 print delivery note Now the delivery

appears as "loaded"

on the bottom of the Delivery Monitor

1. delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

14b Change TICKET (incl. updated quantity)

1. leave plant geofence

14c update qty; substatus

„post load"

21 phone to plant

20 cancel preload after load

Dispatcher has to enter plant and time of next availability

homeing

|  |  |
| --- | --- |
| 23b Reverse Goods issue | 22b delivery DEL Idoc |
| 23c delivery deletion |
|  |

22a CANCEL TICKET telegram

23a CANCEL TICKET telegram

24 cancel delivery note

delivery appears as "cancelled to scrap" at the bottom of the delivery monitor

Truck will be idle after both

arrive plant (29) and

finish unload (34)

25 auto-assign returnRun

returning

32 tip

Returns Order process starts here

|  |  |
| --- | --- |
| 26 DISCHARGE telegram    29 arrive plant | 27 DISCHARGE telegram |
| 28 enter plant geofence 30 button "start unload"  33 button "finish unload" |
| 31 start unload |
| 34 finish unload |
|  |

idle

## (346) Cancel Preload after load before parking, return next day (Ag, Mo, Ce)

#### With Returns-Order

Weighbridge / Operator Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

1. order entry
2. order Idoc
3. assignment
   * Loading
   * SignOff
   * SignOn

Optimiser run (optional)

* + Unloading

signed on

4d delivery processed

now the delivery appears at the top of the delivery monitor

1. delivery change (TAR)

4c delivery CRT Idoc

1. delivery TAR Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram

7 arrive plant

9 start load

11a STLOAD TICKET

4b TICKET telegram (RR) 5b TICKET telegram

6 enter plant geofence 8 button "start load"

11b STLOAD TICKET

returning / approaching

wait for load

loading

1. Weighing / Batching

either 9 or 11 sends truck into 'loading'

1. delivery change

17 print delivery note Now the delivery

appears as "loaded"

on the bottom of

1. delivery CHG Idoc

(incl. updated quantity) 14a Change TICKET

1. leave plant

(incl. updated quantity) 14b Change TICKET

1. leave plant geofence

14c update qty; substatus

„post load"

the Delivery Monitor

21 phone to plant

22b delivery DEL Idoc

20 cancel preload after load

Dispatcher enters time of next availability "tomorrow"

homeing

22a CANCEL TICKET telegram 23a CANCEL TICKET telegram

23b Reverse Goods issue

23c delivery deletion

25 auto-assign returnRun

26 HOME telegram

24 cancel delivery note

delivery appears as "cancelled to scrap" at the bottom of the delivery monitor

Returns Order process

to tip location

28 DISCHARGE telegram (incl. preload flag)

31 arrive parking

27 HOME telegram

1. DISCHARGE telegram to tip location

homeing

1. enter parking geofence

starts here

32 truck automatically signed off

33 sign off

Ignore message

(incl. preload flag)

35 sign off message

### Next Day

34 sign off message

signed off

38 sign on message

37 sign on message

36 sign on

Truck will be idle after both

arrive plant (43) and

finish unload (48)

39 truck on duty

40 SignOn ACK message

43 arrive plant

45 start unload

48 finish unload

41 SignOn ACK message

returning

42 enter plant geofence 44 button "start unload"

47 button "finish unload"

46 tip



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Weighbridge / Operator

SyncroTESS / Dispatcher

Truck / Driver

1 order entry

Telematics / CADIS

SAP / Order taker

2 order Idoc

3 assignment

* Loading
* SignOff

Optimiser run (optional)

* SignOn
* Unloading

signed on

4d delivery processed

now the delivery appears at the top of the delivery monitor

10 delivery change (TAR)

4c delivery CRT Idoc (incl. preload flag)

11 delivery TAR Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram (incl. preload flag) 7 arrive plant

9 start load 11a STLOAD TICKET

4b TICKET telegram (RR) 5b TICKET telegram

6 enter plant geofence 8 button "start load" 11b STLOAD TICKET

returning / approaching

wait for load loading

12 Weighing / Batching

13 delivery change

either 9 or 11 sends

truck into 'loading'

17 print delivery note load and delivery

date to be printed on ticket

14 delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

21 arrive parking

14b Change TICKET (incl. updated quantity) 15 leave plant geofence

20 enter parking geofence

14c update qty; substatus

„plus load"

22 truck automatically signed off

homeing

signed off

26 cancel preload after load

27 phone to plant

30 cancel delivery note

Returns Order process starts here

Dispatcher enters time of next availability "tomorrow"

28a CANCEL TICKET telegram

|  |  |
| --- | --- |
| 29b Reverse Goods issue | 28b delivery DEL Idoc |
| 29c delivery deletion |
|  |

31 auto-assign returnRun

32 DISCHARGE telegram

to tip location (incl. preload flag)

### Next Day

36 sign on message

35 sign on message

34 sign on

37 truck on duty

38 SignOn ACK message

39 SignOn ACK message

returning

Truck will be idle after both

arrive plant (42) and

finish unload (47)

42 arrive plant

44 start unload

47 finish unload

40 DISCHARGE telegram to tip location

41 enter plant geofence 43 button "start unload"

46 button "finish unload"

45 tip

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2

SyncroTESS / Dispatcher Truck / Driver



Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

1 order entry

2 order Idoc

signed on

Optimiser run (optional)

4d delivery processed

now the delivery appears at the top of the delivery monitor

1. delivery change (TAR)

4c delivery CRT Idoc (incl. preload flag)

1. delivery TAR Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram

(incl. preload flag) 7 arrive plant

9 start load

4b TICKET telegram (RR) 5b TICKET telegram

6 enter plant geofence

returning / approaching

wait for load

8 button "start load"

11a STLOAD TICKET

11b STLOAD TICKET

loading

1. Weighing / Batching

either 9 or 11 sends truck into 'loading'

1. delivery change

17 print delivery note

1. delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

14b Change TICKET (incl. updated quantity)

14c update qty; substatus

„plus load"

16 leave plant

1. leave plant geofence

21 phone to plant

22b delivery DEL Idoc



20 divert after load

Dispatcher has to enter the estimated time of arrival at the new customer

travelling

22a CANCEL TICKET telegram

|  |  |
| --- | --- |
| 23b Reverse Goods issue |  |
| Delivery appears as "deleted" at the bottom of the Delivery Monitor |

23a CANCEL TICKET telegram

25b delivery CRT Idoc



24 auto-assign new delivery 25a TICKET telegram

26b Reissue material to new customer (incl. delivery number

and ERP ticket number

travelling

(start *travelling*)

26a TICKET telegram

Delivery appears as "loaded" at the bottom of the Delivery Monitor

of diverted delivery)

(start *travelling*)

Returns Order process starts here

from here follow standard scenario (10)

Remarks:

- The action "cancel" and "cancel and divert" (edge 20) are possible during truck statuses „travelling", „wait for unload" and „unloading"..

#### Physically batched, not ticketed (Truck in Loading Status), with Returns-Order

m



SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1. order entry
2. order Idoc

signed on

4d delivery processed

4c delivery CRT Idoc

3 assignment

4a TICKET telegram (RR)

4b TICKET telegram (RR)

5a TICKET telegram

5b TICKET telegram

now the delivery

appears at the top of the delivery monitor

7 arrive plant

6 enter plant geofence

returning /

approaching

10 delivery change (TAR)

wait for load

11 delivery TAR Idoc

9 start load

8 button "start load"

loading

12 Weighing / Batching

either 9 or 11 sends

truck into 'loading'

19 phone to plant

18 cancel and divert

20a CANCEL TICKET telegram 21a CANCEL TICKET telegra 22 auto-assign new delivery

23a TICKET telegram

(start *travelling*)

24a TICKET telegram

24b Reissue material to new customer

Delivery appears as "batched" at the bottom of the Delivery Monitor

Incoming

'leave plant' will be ignored

26 leave plant

(start *travelling*)

25 leave plant geofence

Returns Order process

starts here

SAP / Order taker

Optimiser run (optional)

Weighbridge / Operator

travelling



|  |  |
| --- | --- |
| 21b Reverse Goods issue | 20b delivery DEL Idoc |
| 21c delivery deletion |  |
| Delivery appears |  |
| as "deleted" at |  |
| the bottom of the  Delivery Monitor | 23b delivery CRT Idoc |

SAP / Order taker

Weighbridge / Operator

SyncroTESS / Dispatcher

Truck / Driver

1. order entry

Telematics / CADIS

1. order Idoc
2. assignment

* Loading
* SignOff

Optimiser run (optional)

* SignOn
* Unloading

signed on

4d delivery processed

now the delivery appears at the top of the delivery monitor

10 delivery change (TAR)

4c delivery CRT Idoc (incl. preload flag)

11 delivery TAR Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram (incl. preload flag)

7 arrive plant

1. start load

4b TICKET telegram (RR) 5b TICKET telegram

6 enter plant geofence 8 button "start load"

returning / approaching

wait for load

12 Weighing / Batching

loading

11a STLOAD TICKET

either 9 or 11 sends truck into 'loading'

11b STLOAD TICKET

13 delivery change

17 print delivery note load and delivery

date to be printed on ticket

14 delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

14b Change TICKET (incl. updated quantity)

15 leave plant geofence

14c update qty; substatus

„plus load"

homeing

20 divert preload

Allocator enters time of delivery tomorrow

21b phone to plant

22b delivery DEL Idoc

21a voice call to driver

22a CANCEL TICKET telegram

23a CANCEL TICKET telegram

23b Reverse Goods issue

The delivery appears as "deleted" at the bottom of the Delivery Monitor

25b delivery CRT Idoc

24 auto assign new delivery

25a TICKET telegram

26b Reissue Material to new customer (incl. delivery number

and ERP ticket number

(incl. preload flag, start *homeing*)

26a TICKET telegram

(incl. preload flag, start *homeing*)

homeing

The delivery appears

as "loaded" at the bottom of the Delivery Monitor

of diverted delivery)

28 arrive parking

27 enter parking geofence

29 truck automatically signed off

31 sign off message

30 sign off

Ignore message

32 sign off message

signed off



from here follow scenario 270

Weighbridge / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1 order entry

2 order Idoc

3 assignment

* Loading
* SignOff

Optimiser run (optional)

* SignOn
* Unloading

signed on

4d delivery processed

now the delivery appears at the top of the delivery monitor

1. delivery change (TAR)

4c delivery CRT Idoc (incl. preload flag)

1. delivery TAR Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram (incl. preload flag)

7 arrive plant

9 start load

11a STLOAD TICKET

4b TICKET telegram (RR) 5b TICKET telegram

6 enter plant geofence 8 button "start load"

11b STLOAD TICKET

returning / approaching

wait for load

loading

1. Weighing / Batching
2. delivery change

either 9 or 11 sends truck into 'loading'

17 print delivery note load and delivery

date to be printed on ticket

1. delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

1. leave plant

14b Change TICKET

(incl. updated quantity) 15 leave plant geofence

14c update qty; substatus

„plus load"

20 divert preload

divert means: delete the old delivery and substitute by a new delivery

homeing

Allocator enters time of delivery today

21b phone to plant

22b delivery DEL Idoc

21a voice call to driver

22a CANCEL TICKET telegram

23b Reverse Goods issue

The delivery appears as "deleted" at the bottom of the Delivery Monitor

25b delivery CRT Idoc

23a CANCEL TICKET telegram

24 auto assign new delivery

26a TICKET telegram

(start *travelling*)

26b Reissue Material to new customer (incl. delivery number

and ERP ticket number

25a TICKET telegram 28 arrive customer

(start *travelling*)

27 enter site geofence

travelling

The delivery appers

as "loaded" at the bottom of the Delivery Monitor

of diverted delivery)

30 start unload

32 finish unload

29 "button start unload" 31 button "finish unload"

unloading

wait for unloading

33 auto-assign returnRrun

The ReturnRun will lead to a plant not to the truck's parking

|  |  |
| --- | --- |
| 34 RETURN telegram    37 leave customer | 35 RETURN telegram |
| 36 leave site geofence |
|  |



39 shipment Idoc

38 delivery is 'completed'

returning

SyncroTESS / Dispatcher Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

1. order entry
2. order Idoc
3. assignment

* Loading
* SignOff

Optimiser run (optional)

* SignOn
* Unloading

signed on

4d delivery processed

now the delivery appears at the top of the delivery monitor

10 delivery change (TAR)

4c delivery CRT Idoc (incl. preload flag)

11 delivery TAR Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram (incl. preload flag)

7 arrive plant

9 start load 11a STLOAD TICKET

4b TICKET telegram (RR) 5b TICKET telegram

returning / approaching

6 enter plant geofence

8 button "start load" 11b STLOAD TICKET

wait for load

loading

12 Weighing / Batching

either 9 or 11 sends truck into 'loading'

13 delivery change

17 print delivery note load and delivery

date to be printed on ticket

14 delivery CHG Idoc

14a Change TICKET

(incl. updated quantity) 16 leave plant

21 arrive parking

14b Change TICKET (incl. updated quantity) 15 leave plant geofence

20 enter parking geofence

14c update qty; substatus

„post load"

homeing

22 truck automatically signed off

signed off

26 divert preload

27b phone to plant

28b delivery DEL Idoc

divert means:

delete the old delivery and substitute by a new delivery

27a voice call to driver's home

28a CANCEL TICKET telegram

The delivery appears as "deleted" at the bottom of the Delivery Monitor

29b Reverse Goods issue

32b Reissue Material to new customer

31b delivery CRT Idoc

(incl. delivery number and ERP ticket number of diverted delivery)

30 auto assign new delivery 31a TICKET telegram

(incl. preload flag, start *travelling*)

The delivery appers as "loaded" at the bottom of the Delivery Monitor

Next Day

36 sign on message

35 sign on message

34 sign on

37 truck on duty

38 SignOn ACK message

39 SignOn ACK message

40 CANCEL TICKET telegram



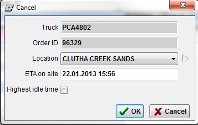
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41 TICKET telegram

(incl. preload flag, start *travelling*)

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Weighbridge / Operator



1 delete ReturnRun

this includes entering of a new ReturnTo location

3 CANCEL RETURN telegram

1. auto-assign new ReturnRun
2. RETURN telegram
3. RETURN telegram

returning

to new location

returning

Truck / Driver

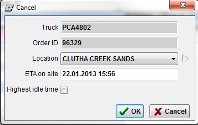
2 CANCEL RETURN telegram

SyncroTESS / Dispatcher

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator



Truck / Driver

1 delete ReturnRun

this includes entering of a new ReturnTo location

3 CANCEL RETURN telegram

1. auto-assign new ReturnRun
2. DISCHARGE telegram
3. DISCHARGE telegram

8 arrive plant

7 enter plant geofence

Truck will be idle

after both arrive plant (8) and

finish unload (13)

10 start unload

9 button "start unload"

11 tip

13 finish unload

12 button "finish unload"

idle

returning

to new location

returning

2 CANCEL RETURN telegram

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker



1 order Idoc

order has got

"plusload flag" set

2 increase quantity

3 order change Idoc (increase quant., prio 0)

4 change and highlight order

order is highlighted

in red in the ordergrid

5 highlight proposed truck

the truck which gets the plus load proposal is highlighted in red in the truckgrid

6 assign proposal

7b deliver CRT Idoc

7a TICKET telegram

8 TICKET telegram

9 de-highlight truck and order

Continue as per scenario 10

Optimiser run

Order on „hold"

Deliveries processed as described; delivered quantity reaches min. ordered quantity

Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator

Weighbridge / Operator Truck / Driver

SyncroTESS / Dispatcher

Telematics / CADIS

SAP / Order taker

1 order entry (2 orders)

2 order Idoc (2 orders)

signed on

Optimiser run (optional)

5c 1st delivery CRT Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram

4b TICKET telegram (RR) 5b TICKET telegram

5d 1st delivery processed 5f 2nd delivery processed

10a 1st delivery change (TAR) 10b 2nd delivery change (TAR)

5e 2nd delivery CRT Idoc

loading mode "pars pro toto"

11a 1st delivery TAR Idoc 11d 2nd delivery TAR Idoc

7 arrive plant (1x) 9 start load (1x)

11b 1st STLOAD TICKET

11e 2nd STLOAD TICKET

returning / approaching

6 enter plant geofence (1x) 8 button "start load" (1x)

wait for load

loading

11c 1st STLOAD TICKET

11f 2nd STLOAD TICKET

12 Weighing / Batching (2x)

13a 1st delivery change

either 9 or 11a (first TAR Idoc) sends truck into 'loading'

13b 2nd delivery change

14a 1st delivery CHG Idoc 14b 2nd delivery CHG Idoc

14c Change TICKET (2x)

14d Change TICKET (2x)

17 print 2 delivery notes

(incl. updated quantity)

16 leave plant (1x)

(incl. updated quantity) 15 leave plant geofence (1x)

wait for unloading

travelling

14e update qty (2x) substatus

„post load" (1x)

19 arrive customer (1x)

18 enter site geofence (1x)

21 start unload (1x)

20 button "start unload" (1x

unloading mode "pars pro toto"

28 ePOD RFC (1x)

24 finish unload (1x) 26 ePOD telegram (1x)

23 button "finish unload" (1x 25 ePOD telegram (1x)

22 'sign on glass' (1x); substatus

)

unloading

„cleaning"

)

27 auto-assign returnRun (1x)

|  |  |
| --- | --- |
| 29 RETURN telegram (1x)    32 leave customer (1x) | 30 RETURN telegram (1x |
|  |
|  |

)

34 1st shipment Idoc

35 2nd shipment Idoc

31 leave site geofence (1x)

33 deliveries are 'completed' (2x)

returning



Remarks:

* the messages sent to CADIS in step 4a will contain a unique key common to all parts of the split load
* the messages sent to CADIS in step 4a will contain a drop sequence for the split load parts
* the same logic applies for more than two deliveries. The are up to 9 parts of a splitload allowed.

## (405) Splitload, drops at different sites

SyncroTESS / Dispatcher

Weighbridge / Operator

SAP / Order taker

Telematics / CADIS

Truck / Driver

1 order entry (2 orders)

2 order Idoc (2 orders)

signed on

Optimiser run (optional)

(incl. splitload flag)

5d 1st delivery processed 5e 2nd delivery processed

10a 1st delivery change (TAR) 10b 2nd delivery change (TAR)

4c 1st delivery CRT Idoc

5c 2nd delivery CRT Idoc

loading mode "pars pro toto"

11a 1st delivery TAR Idoc

11b 2nd delivery TAR Idoc

3 assignment 4a TICKET telegram (RR)

5a TICKET telegram

7 arrive plant (1x)

9 start load (1x) 11b 1st STLOAD TICKET

11e 2nd STLOAD TICKET

4b TICKET telegram (RR)

5b TICKET telegram (incl. splitload flag)

returning / approaching

6 enter plant geofence (1x)

8 button "start load" (1x) 11c 1st STLOAD TICKET

wait for load

loading

12 Weighing / Batching (2x) 13a 1st delivery change

either 9 or 11b

(first TAR Idoc) sends truck into 'loading'

11f 2nd STLOAD TICKET

13b 2nd delivery change

14a 1st delivery CHG Idoc 14b 2nd delivery CHG Idoc

14c Change TICKET (2x)

14d Change TICKET (2x)

17 print 2 delivery notes

(incl. updated quantity)

16 leave plant (1x)

(incl. updated quantity) 15 leave plant geofence (1x)

14e update qty (2x)

substatus

„post load"

either 16 or 14b (second CHG Idoc) sends truck

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | | travelling |
| 18 enter 1st site geofence | |  | |
| 0 1st button "start unload" |  | | wait for unloading |

into 'travelling'

19 arrive 1st customer

21 1st start unload 23 1st finish unload

2

22 1st button "finish unload

"

unloading

27 ePOD RFC

26 ePOD telegram 29 leave 1st customer

travelling

25 ePOD telegram

28 leave 1st site geofence

24 'sign on glass'

31 1st shipment Idoc

30 1st delivery is 'completed'

32 enter 2nd site geofence

33 arrive 2nd customer

wait for unloading

35 2nd start unload

37 2nd finish unload

34 2nd button "start unload"

36 2nd button "finish unloa

d"

unloading

Remarks:

* the messages sent to CADIS in step

returnRun assignment on

38 auto-assign returnRun (1x)

4a will contain a unique key common

to all parts of the split load

* the messages sent to CADIS in step 4a will contain a drop sequence for the split load parts
* there can be more than two sites in a splitload

completion of last drop only

44 ePOD RFC

39 RETURN telegram (1x)

43 ePOD telegram 46 leave 2nd customer

40 RETURN telegram (1x)

42 ePOD telegram

45 leave 2nd site geofence

returning

41 'sign on glass'

* the returnRun creation and assignment (step 40) is only performed for the last site of the splitload



48 2nd shipment Idoc

47 2nd delivery is 'completed'



SAP / Order taker SyncroTESS / Dispatcher

1. order entry
2. order Idoc

3 assignment of late order

4a TICKET telegram (RR)

4b TICKET telegram (RR)

5d delivery processed

5c deliver CRT Idoc

5a TICKET telegram

5b TICKET telegram

order displays yellow

in ordergrid

5e order displays yellow

1. enter plant geofence
2. arrive plant

10 delivery change (TAR)

11 delivery TAR Idoc

9 start load

11a STLOAD TICKET

8 button "start load"

11b STLOAD TICKET

12 Weighing / Batching

either 9 or 11 sends

truck into 'loading'

13 delivery change

14 delivery CHG Idoc

14a Change TICKET

14b Change TICKET

17 print delivery note

(incl. updated quantity)

(incl. updated quantity)

14c update qty

substatus

„post load"

16 leave plant

15 leave plant geofence

18 reset colour in order grid

loading

wait for load

returning / approaching

signed on

Truck / Driver

order becomes late: "!!!" and orange in ordergrid

Telematics / CADIS

Weighbridge / Operator

travelling

SAP / Order taker



Weighbridge / Operator

SyncroTESS / Dispatcher

Truck / Driver

1. order entry

Telematics / CADIS

1. order Idoc

(incl. x/y for customer)

signed on

Optimiser run (optional)

5b delivery processed

4b delivery CRT Idoc

1. assignment 4a TICKET telegram (incl. x/y from order)

5a TICKET telegram

returning

10 delivery change (TAR)

11 delivery TAR Idoc

7 arrive plant

9 start load 11a STLOAD TICKET

6 enter plant geofence 8 button "start load" 11b STLOAD TICKET

wait for load loading

12 Weighing / Batching

13 delivery change

either 9 or 11 sends truck into 'loading'

17 print delivery note

14 delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

14b Change TICKET (incl. updated quantity) 15 leave plant geofence

14c update qty; substatus

„post load"

The arrive customer (20/21) may not happen if the original coordinates are not good enough

28 ePOD RFC

(incl. x'/y' from 1st

19 arrive customer

21 start unload (incl. x'/y' at

unload location)

23 finish unload

26 ePOD telegram

(incl. x'/y' from 1st unload location)

18 enter site geofence

20 button "start unload" (incl. x'/y' at

unload location)

22 button "finish unload"

25 ePOD telegram

(incl. x'/y' from 1st unload location)

travelling

wait for unloading

unloading

24 'sign on glass'; substatus

„cleaning"

unload location)

27 auto-assign returnRun

29 RETURN telegram

30 RETURN telegram

1. leave customer

32 leave site geofence

returning

1. shipment Idoc
2. delivery is 'completed'
3. store new coordinates x'/y' for ship-to

39b delivery processed

38b delivery CRT Idoc

1. next assignment 38a TICKET telegram

(incl. x'/y' for customer)

39a TICKET telegram

poll" is initiated f yncroTESS GUI

" S

SAP / Order taker



2b GPS POLL telegram

1. GPS x/y
2. GPS x/y
3. enter x/y into truck record

Telematics / CADIS



Weighbridge / Operator

|  |  |  |
| --- | --- | --- |
| SyncroTESS / Dispatcher | |  |
| rom | 1 GPS poll 2a GPS poll | |
|  | |

working

Truck / Driver



2 event M (not N)

1 event M (not N)

3 highlight truck

4 event N

1. event N
2. de-highlight truck

7 process event N

Truck / Driver

Telematics / CADIS

Expects truck to send N

SyncroTESS / Dispatcher

...

Weighbridge / Operator

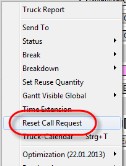
SAP / Order taker

out-of-sequence is highlighted as '?' in the x-column in the truck grid

## (450) Call request / Cancel call request (Ag, As, Co, Mo, Ce)

#### request a call

Weighbridge / Operator



1b call request

1a call request

Highlight:

* by colour
* number in x-column

2 highlight truck

3a call request

3b call request

4 increase number in x-column

1. phone call to driver
2. reset call request

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

working

Truck / Driver

1. cancel call request

Weighbridge / Operator

|  |  |  |
| --- | --- | --- |
|  | Telematics / CADIS | |
| 1b call request | |  |
| 2 highlight truck  3b cancel call | |
| 4 reset highlight | |

Truck / Driver



Highlight:

* by colour
* number in x-column

SyncroTESS / Dispatcher

SAP / Order taker

1a call request

3a cancel call

working

Weighbridge / Operator

SAP / Order taker

Telematics / CADIS

Truck / Driver



1. notify driver



essage'

ssage

4 send message to truck

signed on

|  |  |  |
| --- | --- | --- |
| SyncroTESS / Dispatcher | |  |
|  | 1. select 'send m 2. enter text me 3. text message | |
|  | |

Weighbridge / Operator

SAP / Order taker

eak



SyncroTESS / Dispatcher



8 end break telegram

Continues with previous status

Truck in BREAK



2 break request

(incl. start and end time)

Truck / Driver

|  |  |  |
| --- | --- | --- |
|  | Telematics / CADIS | |
| 3 break request | |  |
| (incl. start and end time)  4 highlight truck  5 truck in break  9 end break telegram | |
| 10 truck out of br | |

1 request break (incl. start and end time)

1. end break

1 truck in breakdown



3 breakdown message

2 breakdown message

3a ACK/NACK message

1. highlight truck
2. truck in breakdo

9 end breakdown telegram

9a ACK/NACK message

eakdown

Remarks:

* as long as the truck in in breakdown no optimiser proposals will be made against that truck
* manual assignments are still possible
* not in SyncroTESS statistical database

Continues with previous status

10 truck out of br

8 end breakdown telegram

Truck in BREAKDOWN

wn

Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Weighbridge / Operator

6 end breakdown

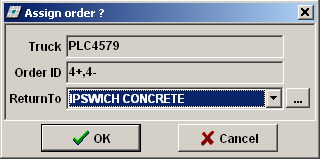
#### With preceding approach

SyncroTESS / Dispatcher

Truck / Driver

Telematics / CADIS

SAP / Order taker

1. order entry
2. order Idoc (cust. in black spot)

signed on

Optimiser run (optional)

1. assignment incl. RR assignment 4a TICKET telegram (RR)

4b TICKET telegram (RR)

4e delivery CRT Idoc (incl. RR destination)



R)

11 delivery TAR Idoc

4c TICKET telegram 5a TICKET telegram (RR)

1. arrive plant

9 start load 11a STLOAD TICKET

4d TICKET telegram

5b TICKET telegram (RR) 6 enter plant geofence

1. button "start load"

11b STLOAD TICKET

returning / approaching

wait for load

loading

Batching



either 9 or 11 sends truck into 'loading'

ery note



14 delivery CHG Idoc

14a Change TICKET

(incl. updated quantity)

14b Change TICKET

stination)

16 leave plant

(incl. updated quantity)

15 leave plant geofence

Truck leaves covered area

X 18 enter site geofence

1. button "start unload"

X

1. button "finish unload"

X

14c update qty; substatus

„post load"

travelling

wait for unloading

unloading

1. 'sign on glass'

X 22 ePOD telegram

timestamps are recorded but the plan is not updated retrospectively

32 ePOD RFC

25 arrive customer

27 start unload

29 finish unload

31 ePOD telegram

34 leave customer

X 23 leave site geofence

Truck enters covered area

24 re-send enter site geofence 26 re-send "start unload"

28 re-send "finish unload" 30 re-send ePOD telegram

33 re-send leave site geofence

returning

36 shipment Idoc

idle

35 delivery is 'completed'

38 arrive plant



|  |  |  |
| --- | --- | --- |
| Weighbridge / Operator | |  |
|  | 4f delivery processed (incl. RR destination)  10 delivery change (TA | |
| 12 Weighing /  13 delivery change | |
| 17 print deliv (incl. RR de | |
| Remarks:   * In this scenario SyncroTESS sends the return-to destination with the assignment to SAP and CADIS * the weighbridge personel will have to communicate the location to the driver (or the printed ticket contains it) * the returnRun-Destination will be pre-populated according to a heuristic but can be overwritten by the allocator   (or even left blank in which case no returnRun is assigned and communicated to SAP and CADIS at all). | | |

37 enter plant geofence

#### Without preceding approach

SAP / Order taker

SyncroTESS / Dispatcher

1. order entry

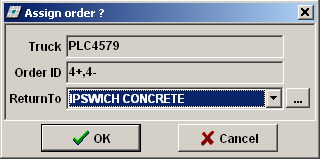
Truck / Driver

Telematics / CADIS

1. order Idoc (cust. in black spot)

Optimiser run (optional)

signed on

1. assignment incl. RR assignment

4c delivery CRT Idoc (incl. RR destination)

4a TICKET telegram 5a TICKET telegram (RR)

4b TICKET telegram 5b TICKET telegram (RR)

wait for load

R)

11 delivery TAR Idoc

1. start load

8 button "start load"

loading

/ Batching



11a STLOAD TICKET

either 9 or 11 sends truck into 'loading'

11b STLOAD TICKET

14 delivery CHG Idoc

ery note estination)



14a Change TICKET (incl. updated quantity)

16 leave plant

14b Change TICKET (incl. updated quantity) 15 leave plant geofence

Truck leaves covered area

X 18 enter site geofence

1. button "start unload"

X

1. button "finish unload"

X

14c update qty; substatus

„post load"

wait for unloading

travelling

1. 'sign on glass'

unloading

X 22 ePOD telegram

X 23 leave site geofence

Truck enters covered area

returning

timestamps are recorded but the plan is not updated retrospectively

32 ePOD RFC

25 arrive customer

27 start unload

29 finish unload

31 ePOD telegram

34 leave customer

24 re-send enter site geofence 26 re-send "start unload"

28 re-send "finish unload" 30 re-send ePOD telegram

33 re-send leave site geofence



|  |  |  |
| --- | --- | --- |
| Weighbridge / Operator | |  |
|  | 4d delivery processed (incl. RR destination)  10 delivery change (TA | |
| 12 Weighing  13 delivery change | |
| 17 print deliv (incl. RR d | |
| Remarks:   * In this scenario SyncroTESS sends the return-to destination with the assignment to SAP and CADIS * the weighbridge personel will have to communicate the location to the driver (or the printed ticket contains it) * the returnRun-Destination will be pre-populated according to a heuristic but can be overwritten by the allocator   (or even left blank in which case no returnRun is assigned and communicated to SAP and CADIS at all). | | |

36 shipment Idoc

35 delivery is 'completed'

37 enter plant geofence

38 arrive plant

idle

SyncroTESS / Dispatcher



Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

1. order entry
2. order Idoc

Optimiser run (optional)

signed on, idle at loading plant

5b delivery processed

4b delivery CRT Idoc

1. assignment 4a TICKET telegram

5a TICKET telegram

* 1. change plant master

wait for load

* 1. plant master change Idoc

assigned deliveries are NOT affected

New plant details take effect with the next optimicer run

10b delivery processed

9b delivery CRT Idoc

* 1. assignment 9a TICKET telegram

10a TICKET telegram

wait for load

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Truck / Driver

* + 1. enter mass update request

Telematics / CADIS

* + 1. mass update request Idoc
    2. collect all relevant data
    3. master data Idoc

... master data Idoc

It is possible to request mass data for

* plants
* trucks and trailers
* orders
* drivers

A mass update request can be done by dispatch group or global

Remarks:

- …..

* + Truck/Trailer mass update Trailers must be send first because Trucks refere to Trailers
  + Plants, Trailers, Trucks and Orders can only be updated per dispatch group

## (500) Send to alternate plant (Ag, As, Co, Mo, Ce)



to-assign

Idle

Truck / Driver

Telematics / CADIS

returning

Idle



|  |  |
| --- | --- |
|  | 4 RETURN telegram |
| 8 enter plant geofence |
|  |

Weighbridge / Operator

SAP / Order taker

|  |  |  |
| --- | --- | --- |
| SyncroTESS / Dispatcher | |  |
|  | 1 send-to plant  2 ReturnRun au  3 RETURN telegram | |
| 9 arrive plant | |

Batcher / Operator SyncroTESS / Dispatcher

Truck / Driver

Telematics / CADIS

SAP / Order taker

1. order entry
2. order Idoc

Optimiser run (optional)

signed on

5d delivery processed

5c Delivery CRT Idoc

1. assignment 4a TICKET telegram (RR)

5a TICKET telegram

4b TICKET telegram (RR) 5b TICKET telegram

10 delivery change (TAR)

11 delivery TAR Idoc

7 arrive plant

9 start load

11a STLOAD TICKET

6 enter plant geofence

8 button "start load" 11b STLOAD TICKET

returning / approaching

loading

wait for load

12 Weighing / Batching

13 delivery change

either 9 or 11 sends

truck into 'loading'

17 print delivery note

14 delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

14b Change TICKET (incl. updated quantity) 15 leave plant geofence

|  |  |  |  |
| --- | --- | --- | --- |
| 18 enter site geofence |  | | travelling |
|  |  |  |

14c update qty substatus

„post load"

19 arrive customer

21 start unload

20 button "start unload"

wait for unloading

24 phone call allocator

unloading

25 complete unload manually

Allocator has to enter leftover quantity

27 shipment Idoc

26 delivery is "completed"

Remarks:

-The assignment with reuse (step 40) is only possible if the company code of the loading plant relating to the leftover material is the same

28 highlight truck in pink

book qty and reference number on truck

29 auto-assign ReturnRun

30 RETURN telegram 31 RETURN telegram

as the company code of the plant, from which a newly to be assigned order is to be loaded (cf. SCR 26006-27) and if the leftover material is "pure", i.e. has not been reused for another delivery yet (cf. SCR 26006-28).

37 ePOD RFC

33 finish unload

36 ePOD telegram

39 leave customer

32 button 'finish unload'

35 ePOD telegram 38 leave site geofence

34 sign on glass; substatus

„cleaning"

42b delivery processed (incl. re-use quantity)

41b Delivery CRT Idoc (incl. re-use quantity

returning

40 assign with re-use 41a TICKET telegram

42a TICKET telegram

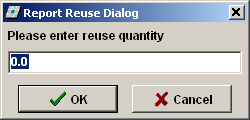
Returns Order process starts here

and reference to

cancelled delivery)

43 de-highlight truck 44 enter plant geofence 45 arrive plant

From here continue as per standard scenario 10



Batcher / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1. order entry
2. order Idoc

signed on

Optimiser run (optional)

5d delivery processed

5c Delivery CRT Idoc

1. assignment 4a TICKET telegram (RR)

5a TICKET telegram

4b TICKET telegram (RR) 5b TICKET telegram

10 delivery change (TAR)

11 delivery TAR Idoc

7 arrive plant

9 start load 11a STLOAD TICKET

6 enter plant geofence

8 button "start load" 11b STLOAD TICKET

returning /

approaching wait for load

loading

12 Weighing / Batching

13 delivery change

either 9 or 11 sends truck into 'loading'

17 print delivery note

14 delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

14b Change TICKET

(incl. updated quantity) 15 leave plant geofence

14c update qty; substatus

„post load"

travelling

19 arrive customer

wait for unloading

18 enter site geofence

1. start unload

20 button "start unload"

28 ePOD RFC

1. finish unload

26 ePOD telegram

1. button "finish unload"

25 ePOD telegram

1. 'sign on glass'; substatus

unloading

„cleaining

27 auto-assign returnRun

Remarks:

-The assignment with reuse (step 39) is only possible if the company code of the

29 RETURN telegram

32 leave customer

returning

30 RETURN telegram

31 leave site geofence

loading plant relating to the leftover material is the same

34 shipment Idoc

33 delivery is "completed"

as the company code of the plant, from which a newly to be assigned order is to be

36 arrive plant

35 enter plant geofence

loaded (cf. SCR 26006-27) and if the leftover material is "pure", i.e. has not been reused for another delivery yet (cf. SCR 26006-28).

41b delivery processed (incl. re-use quantity)

40b Delivery CRT Idoc

(incl. re-use quantity and reference to cancelled delivery)

37 dispatcher manually enters leftover qty

38 highlight truck in pink

idle

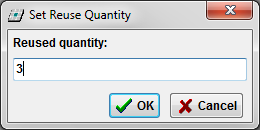
book qty and reference number on truck

39 assign with re-use 40a TICKET telegram

41a TICKET telegram

42 de-highlight truck

wait for load



Returns Order process starts here

From here continue as per standard scenario 10

#### With Returns-Order

SyncroTESS / Dispatcher Truck / Driver

Telematics / CADIS

SAP / Order taker

Batcher / Operator

1. order entry
2. order Idoc

signed on

Optimiser run (optional)

5d delivery processed

5c Delivery CRT Idoc

1. assignment 4a TICKET telegram (RR)

5a TICKET telegram

4b TICKET telegram (RR) 5b TICKET telegram

10 delivery change (TAR)

11 delivery TAR Idoc

7 arrive plant

9 start load 11a STLOAD TICKET

6 enter plant geofence

8 button "start load" 11b STLOAD TICKET

returning /

approaching wait for load

loading

12 Weighing / Batching

13 delivery change

either 9 or 11 sends truck into 'loading'

17 print delivery note

14 delivery CHG Idoc

14a Change TICKET (incl. updated quantity)

16 leave plant

14b Change TICKET

(incl. updated quantity) 15 leave plant geofence

14c update qty; substatus

„post load"

19 arrive customer

wait for unloading

travelling

18 enter site geofence

21 start unload

20 button "start unload"

unloading

(incl. leftover quantity) 24 finish unload

27 ePOD telegram

23 button "finish unload" (incl. leftover quantity)

26 ePOD telegram

22 'enter leftover'

25 sign on glass; substatus

„cleaning"

30 ePOD RFC

Remarks:

-The assignment with reuse (step 37) is only possible if the company code of the loading plant relating to the leftover material is the same as the company code of the plant, from which a newly to be assigned order is to be loaded (cf. SCR 26006-27) and if the leftover material is "pure", i.e. has not been reused for another delivery yet (cf. SCR 26006-28).

36 shipment Idoc

28 highlight truck in pink

book qty and reference number on truck

29 auto-assign returnRun

|  |  |
| --- | --- |
| 31 RETURN telegram    34 leave customer | 32 RETURN telegram |
| 33 leave site geofence |
|  |

35 delivery is "completed" 37 assign with re-use

returning

39b delivery processed (incl. re-use quantity)

38b Delivery CRT Idoc

(incl. re-use quantity and reference to cancelled delivery)

38a TICKET telegram

40 de-highlight truck

42 arrive plant

39a TICKET telegram

41 enter plant geofence

Returns Order process



starts here

#### in status „idle"

Batcher / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

Starting point of this Scenario is that the truck has Leftover quantity from:

* Cancel with reuse (334a after step 11, b after step 14)
* Manually entered leftover quantity (512 after step 38)
* partial unload (511 after step 39, 513 after step 36)

Let the originally cancelled (scenario 333, step 13) or partly delivered (scenarios 511, 512, 513) delivery be D1.

1 divert leftover

idle

Let the delivery assigned in step 4 be delivery be D2.

2 auto-assign D2

4b deliver processed (incl. re-use quantity)

4a delivery CRT Idoc

(incl. re-use quantity and reference to cancelled delivery D1)

3a TICKET telegram (start *travelling*)

3b TICKET telegram (start *travelling*)

Re-use quantity = assinged quantity

=> no loading neccessary

5 book reference to and quantity of D1 from truck on D2 (automatically)

6 de-highlight truck (automatically)

travelling

If delivery is executed, proceed with scenario 10, step 20, if delivery is cancelled again, proceed with step 20 of scenario 350.

#### in status „unloading", returnrun already assigned

Batcher / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

Leftover quantity from partial unload, status „unloading" substatus „cleaning"; Start from Scenario 511 step 37 („unloading")

* 1. divert leftover

partly delivered (scenario 511 ) delivery be D1.

* 1. auto-cancel ReturnRun

unloading

Let the delivery assigned in step 5 be delivery be D2.

3a CANCEL Return telegram

3b CANCEL Return telegram

6b deliver processed (incl. re-use quantity)

6a delivery CRT Idoc

(incl. re-use quantity and reference to cancelled delivery D1)

4 auto-assign D2 5a TICKET telegram (start *travelling*)

5b TICKET telegram (start *travelling*)

Re-use quantity = assinged qunatity

=> no loading neccessary

7 book reference to and

quantity of D1 from truck on D2 (automatically)

travelling

8 de-highlight truck (automatically)

If delivery is executed, proceed with scenario 10, step 20, if delivery is cancelled proceed with step 20 of scenario 350.

Remarks:

* Transaction „Divert Leftover" is only available after ePod has been issued (Step 37 in 511)!

#### in status „returning"

Batcher / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

Leftover quantity from partial unload, status „returning"; Start from Scenario 511 step 39 („returning")

* 1. divert leftover

partly delivered (scenario 511 ) delivery be D1.

* 1. auto-cancel ReturnRun

returning

Let the delivery assigned in step 5 be delivery be D2.

3a CANCEL Return telegram

3b CANCEL Return telegram

6b deliver processed (incl. re-use quantity)

6a delivery CRT Idoc

(incl. re-use quantity and reference to cancelled delivery D1)

4 auto-assign D2 5a TICKET telegram (start *travelling*)

5b TICKET telegram (start *travelling*)

Re-use quantity = assinged qunatity

=> no loading neccessary

7 book reference to and

quantity of D1 from truck on D2 (automatically)

travelling

8 de-highlight truck (automatically)

If delivery is executed, proceed with scenario 10, step 20, if delivery is cancelled proceed with step 20 of scenario 350.

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1 order entry

2 order Idoc

(incl. waste flag)

signed on

Optimiser run (optional)

4b delivery CRT Idoc

3 assignment 4a TICKET telegram (incl. inbound flag)

7 arrive customer

9 start load

5a TICKET telegram (incl. inbound flag)

6 enter site geofence

8 button "start load"

approaching wait for load

loading

18 ePOD RFC

17 ePOD telegram

20 leave customer

16 ePOD telegram 19 leave site geofence

15 'sign on glass'

travelling

22 arrive plant

21 enter plant geofence

vehicle gross weight noted offline

24 start unload

26 finish unload

23 button "start unload"

25 button "finish unload"

wait for unloading

unloading

29 delivery processed

28 shipment Idoc

27 delivery is 'completed'

idle

30 SAP delivery update with exact quantity

31 SAP shipment update with exact quantity

delivery CHG Idoc not sent to SyncroTESS

Remarks:

* the delivery in “yncroTE““ is always assumed to be a „full load" and is not updated with actual quantity
* SyncroTESS does not receive a delivery CHG Idoc from SAP
* there is no „auto return‘un" as truck completes the „Unload" at the plant

Weighbridge / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1. order entry (n orders)
2. Mother-Baby planning and Baby sequencing
3. order Idoc (n orders)

signed on

Optimiser run (optional)

3 assignment

Assignment of mother auto-assigns all babies

5d deliveries processed (n)

5c delivery CRT Idocs (n)

4a TICKET telegrams(RR) 4b TICKET telegrams

5a TICKET telegrams(n)

5b TICKET telegrams(n)

(incl. splitload flag

returning /

10 delivery changes (TAR) (n)

12 Batching (1x)

13 delivery changes (n)

loading mode "pars pro toto"

11 delivery TAR Idocs (n) either 9 or first

11 (TAR Idoc)

sends truck into 'loading'

14 delivery CHG Idocs (n)

and sequencing) 7 arrive plant (1x)

9 start load (1x) 11a STLOAD TICKET (n)

14a Change TICKET (n)

(incl. splitload flag

and sequencing)

6 enter plant geofence (1x)

8 button "start load" (1x) 11b STLOAD TICKET (n)

14b Change TICKET (n)

approaching

wait for load

loading

14c update qty (n);

17 print n delivery notes

either 16 or last 14 (CHG Idoc)

sends truck into 'travelling'

(incl. updated quantity) 16 leave plant (1x)

19 arrive 1st customer

21 1st start unload

(incl. updated quantity) 15 leave plant geofence (1x)

18 enter 1st site geofence 20 1st button "start unload"

substatus

„post load"

travelling wait for unloading

unloading

27 ePOD RFC

24 1st finish unload 26 ePOD telegram

29 leave 1st customer

23 1st button "finish unload

25 ePOD telegram

"

28 leave 1st site geofence

22 'sign on glass'

31 1st shipment Idoc

30 1st delivery is 'completed'

...

travelling

33 arrive nth customer

32 enter nth site geofence

35 nth start unload

34 nth button "start unload

wait for unloading

42 ePOD RFC

38 nth finish unload 40 ePOD telegram

37 nth button "finish unloa 39 ePOD telegram

unloading

"

36 'sign on glass'

d"

returnRun assignment on completion of

41 auto-assign returnRun (1x)

43 RETURN telegram (1x) 44 RETURN telegram (1x)

last drop only

46 leave nth customer

45 leave nth site geofence



48 nth shipment Idoc

47 nth delivery is 'completed'

returning

Weighbridge / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Truck / Driver

1. order entry



1. order Idoc
2. create scenario

Preplanning Optimiser run

1. apply scenario
2. export roster
3. roster telegram
4. store roster data
5. type in truck ID
6. request start time and location
7. start time and location
8. display roster data

#### truck still signed on

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Truck / Driver

* 1. order entry

Telematics / CADIS

* 1. order Idoc

Optimiser run (optional)

* 1. create Shunting assignment (ShAS) manually or from optimizer proposal

4a auto-assign SignOff 4b HOME telegram

working / idle

4c HOME telegram

6b sign off message

6a sign off message

5 sign off

8b delivery processed 9a delivery change (TAR)

8a delivery CRT Idoc 9b delivery TAR Idoc

6c truck off duty 7 release ShAS

Order delete not possible at this stage

signed off

Between 6c and 13 sign on requests

11 Weighing / Batching

12a delivery change

10 substatus „shunting"

are rejected.

12b delivery CHG Idoc

14 print delivery note 13 substatus „shunted"

### Next Day

17 sign on message

16 sign on message

15 sign on

18 truck on duty 19a SignOn ACK message

19b SignOn ACK message

20 auto-assign ShAS 21a TICKET telegram

(ResumeStatus = travel)

21b TICKET telegram (ResumeStatus = travel)

travelling

From here on as scenario 270a step 7 (SignOn after preload)

Remarks:

* When creating the ShAS (step 3), the SignOff for the current shift is automatically assigned (steps 4a, b, c), if not already done
* Shunting proposals can only be accepted/created and a ShAS can only be released, if the corresponding order is not locked.
* Step 5 (SignOff) may also happen after step 7 but before steps 9a/9b

#### truck already signed off

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Truck / Driver

* 1. order entry

Telematics / CADIS

* 1. order Idoc

Optimiser run (optional)

* 1. create Shunting assignment (ShAS) manually or from optimizer proposal

signed off

5b delivery processed 6a delivery change (TAR)

5a delivery CRT Idoc

6b delivery TAR Idoc

* 1. release ShAS

Order delete not possible at this stage

Between 3 and 10 sign on requests are rejected.

8 Weighing / Batching

7 substatus „shunting"

9a delivery change

9b delivery CHG Idoc

11 print delivery note

10 substatus „shunted"

### Next Day

17 sign on message

16 sign on message

15 sign on

18 truck on duty 19a SignOn ACK message

19b SignOn ACK message

20 auto-assign ShAS 21a TICKET telegram

(ResumeStatus = travel)

21b TICKET telegram (ResumeStatus = travel)

travelling

From here on as scenario 270a step 7 (SignOn after preload)

Remarks:

- Shunting proposals can only be accepted/created and a ShAS can only be released, if the corresponding order is not locked.

#### before release

Weighbridge / Operator

5 sign off



1. order entry
2. order Idoc

3 create Shunting

assignment (ShAS) manually or from optimizer proposal

4a auto-assign SignOff

4b HOME telegram

4c HOME telegram

6b sign off message

6a sign off message

6c truck off duty

7 cancel (remove ShAS)

signed off

Truck / Driver

Telematics / CADIS

SyncroTESS / Dispatcher

SAP / Order taker

Optimiser run (optional)

#### after release, before loading

5 sign off



SyncroTESS / Dispatcher

1. order entry
2. order Idoc

3 create Shunting

assignment (ShAS) manually or from optimizer proposal

4a auto-assign SignOff 4b HOME telegram

4c HOME telegram

6b sign off message

6a sign off message

6c truck off duty

7 release ShAS

8b delivery processed

8a delivery CRT Idoc

9 cancel (remove ShAS)

10a delivery DEL Idoc

10b delivery deletion

If a new ShAS is

created hereafter it will automatically be released

signed off

Truck / Driver

Telematics / CADIS

SAP / Order taker

Weighbridge / Operator

Optimiser run (optional)

Order delete not possible at this stage

Remarks:

* When creating the ShAS (step 3), the SignOff for the current shift is automatically assigned (steps 4a, b, c), if not already done
* Shunting proposals can only be accepted/created and a ShAS can only be released, if the corresponding order is not locked.

#### cancel while loading

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Truck / Driver

* 1. order entry

Telematics / CADIS

* 1. order Idoc
  2. create Shunting assignment (ShAS) manually or from optimizer proposal

Optimiser run (optional)

4a auto-assign SignOff 4b HOME telegram

4c HOME telegram

6b sign off message

6a sign off message

* 1. sign off

8b delivery processed 9a delivery change (TAR)

8a delivery CRT Idoc 9b delivery TAR Idoc

6c truck off duty 7 release ShAS

Order delete not possible at this stage

signed off

10 substatus „shunting"

12b delivery deletion

12a delivery DEL Idoc

11 cancel (remove ShAS)

13 book quantity and reference number to truck (automatically)

14 highlight truck in pink (automatically)

16b delivery processed (incl. re-use quantity)

19a delivery change (TAR)

16a Delivery CRT Idoc

(incl. re-use quantity and reference to cancelled ShAS)

19b delivery TAR Idoc

15 create ShAS with re-use

17 clear quantity and reference number from truck (automatically)

18 de-highlight truck (automatically)

22a delivery change

22b delivery CHG Idoc

24 print delivery note 23 substatus „shunted"

From here continue as per shunting scenario 550a or b (starting from step 15, SignOn)

Remarks:

-The assignment with reuse (step 15) is only possible if the company code of the loading plant relating to the leftover material is the same as the company code of the plant, from which a newly to be assigned order is to be loaded (cf. SCR 26006-27) and if the leftover material is "pure", i.e. has not been reused for another delivery yet (cf. SCR 26006-28).

#### cancel after complete loading

Weighbridge / Operator



SAP / Order taker

SyncroTESS / Dispatcher

Truck / Driver

* 1. order entry

Telematics / CADIS

* 1. order Idoc
  2. create Shunting assignment (ShAS) manually or from optimizer proposal

Optimiser run (optional)

4a auto-assign SignOff 4b HOME telegram

4c HOME telegram

6b sign off message

6c truck off duty

6a sign off message

signed off

5 sign off

8b delivery processed 9a delivery change (TAR)

8a delivery CRT Idoc 9b delivery TAR Idoc

7 release ShAS

Order delete not possible at this stage

11 Weighing / Batching

12a delivery change

10 substatus „shunting"

12b delivery CHG Idoc

14 print delivery note 13 substatus „shunted"

16b delivery deletion

16a delivery DEL Idoc

15 cancel (remove ShAS)

16 book quantity and reference number on truck (automatically)

17 highlight truck in pink (automatically)

19b delivery processed (incl. re-use quantity)

22 delivery change

19a Delivery CRT Idoc

(incl. re-use quantity and reference to cancelled ShAS)

23 delivery CHG Idoc

18 create ShAS with re-use

20 clear quantity and reference number from truck (automatically)

21 de-highlight truck (automatically)

(with new ticket number) 25 print new delivery note

24 store new ticket number

From here continue as per shunting scenario 550a or b (starting from step 15, SignOn)

Remarks:

- To transmit the new ticket number to SyncroTESS the delivery CHG Idoc is required (steps 22 to 24)

-The assignment with reuse (step 18) is only possible if the company code of the loading plant relating to the leftover material is the same as the company code of the plant, from which a newly to be assigned order is to be loaded (cf. SCR 26006-27) and if the leftover material is "pure", i.e. has not been reused for another delivery yet (cf. SCR 26006-28).

#### cancel after loading and immediate reuse with FAS

Weighbridge / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Truck / Driver

* 1. order entry

Telematics / CADIS

* 1. order Idoc
  2. create Shunting assignment (ShAS) manually or from optimizer proposal

Optimiser run (optional)

4a auto-assign SignOff 4b HOME telegram

4c HOME telegram

6b sign off message

6c truck off duty

6a sign off message

signed off

5 sign off

8b delivery processed 9a delivery change (TAR)

8a delivery CRT Idoc 9b delivery TAR Idoc

7 release ShAS

11 Weighing / Batching

Order delete not possible at this stage

12a delivery change

10 substatus „shunting"

12b delivery CHG Idoc

1. print delivery note 13 substatus „shunted"

16b delivery deletion

16a delivery DEL Idoc

1. cancel (remove ShAS)
2. book quantity and reference number on truck (automatically)
3. highlight truck in pink (automatically)
4. create FAS

### Next Day

20b sign on message

20a sign on message

1. sign on

21 truck on duty 22a SignOn ACK message

signed on 22b SignOn ACK message

25b delivery processed (incl. re-use quantity)

22 delivery change

25a Delivery CRT Idoc

(incl. re-use quantity and reference to cancelled ShAS)

23 delivery CHG Idoc (with new ticket number)

23 auto-assign FAS

24a TICKET telegram 24b TICKET telegram (ResumeStatus = travel) (ResumeStatus = travel)

1. clear quantity and reference number from truck

(automatically)

1. de-highlight truck (automatically)

24 store new ticket number

travelling

25 print new delivery note



From here continue as per scenario 10

Remarks:

- To transmit the new ticket number to SyncroTESS the delivery CHG Idoc is required (steps 22 to 24)

## (556) Reuse cancelled truck shunting on the next day (Ag, Ce)

Weighbridge / Operator

SAP / Order taker

SyncroTESS / Dispatcher

Truck / Driver

1 order entry

Telematics / CADIS

2 order Idoc

3 create Shunting assignment (ShAS) manually or from optimizer proposal

Optimiser run (optional)

4a auto-assign SignOff 4b HOME telegram

4c HOME telegram

6b sign off message

6c truck off duty

6a sign off message

signed off

5 sign off

8b delivery processed 9a delivery change (TAR)

8a delivery CRT Idoc 9b delivery TAR Idoc

7 release ShAS

11 Weighing / Batching

Order delete not possible at this stage

12a delivery change

10 substatus „shunting"

12b delivery CHG Idoc

14 print delivery note 13 substatus „shunted"

16b delivery deletion

16a delivery DEL Idoc

### Next Day

15 cancel (remove ShAS)

16 book quantity and reference number on truck (automatically)

17 highlight truck in pink (automatically)

20b sign on message

20a sign on message

19 sign on

21 truck on duty 22a SignOn ACK message

signed on 22b SignOn ACK message

idle

Optimiser run (optional)

25b delivery processed (incl. re-use quantity)

25a Delivery CRT Idoc (incl. re-use quantity

23 assignment 24a TICKET telegram

(ResumeStatus = travel)

24b TICKET telegram (ResumeStatus = travel)

22 delivery change

and reference to

cancelled ShAS)

23 delivery CHG Idoc

20 clear quantity and reference number from truck

(automatically)

21 de-highlight truck (automatically)

travelling

(with new ticket number) 25 print new delivery note

24 store new ticket number



From here continue as per scenario 10

Remarks:

- To transmit the new ticket number to SyncroTESS the delivery CHG Idoc is required (steps 22 to 24)

-The assignment with reuse (step 15) is only possible if the company code of the loading plant relating to the leftover material is the same as the company code of the plant, from which a newly to be assigned order is to be loaded (cf. SCR 26006-27) and if the leftover material is "pure", i.e. has not been reused for another delivery yet (cf. SCR 26006-28).

SAP / Order taker

Telematics / CADIS

Pump / Driver

1. order entry (n orders)

SyncroTESS / Dispatcher

1. order Idoc (n orders)

Including cleaning run assignments

manual planning

1. publish plan for the next pump shift

sign on next shift

5 sign on

1. sign on telegram

6 auto assign of first published delivery

|  |  |
| --- | --- |
| including cleanin  7a TICKET telegram    7c cleaning run telegram    10 leave plant | g run  8a TICKET telegram |
| 8b cleaning run telegram |
| 13 button "ready to pump      1  including pumped quantity 20 ePOD telegram including pumped quantity |
| 12 arrive customer |
| 14 pump is ready |
| 16 start pumping |
| 19 finish pumping |
| ncluding pumped quantity  21 ePOD telegram |
| ncluding pumped quantity |

7b delivery CRT Idoc

set up

SyncroTESS will show in the Status column directly travelling.

The substatus column will show drive to customer site.

When the leave plant is recieved from CADIS the substatus column will be emptied.

Informational status in ST only

|  |  |  |
| --- | --- | --- |
| 9 leave plant geofence |  | drive to customer site |
|  |
| 11 enter site geofence | travelling |

"

i

The driver can enter the actually pumped quantity in CADIS and send it with the finish pumping and ePOD telegrams.

|  |  |  |  |
| --- | --- | --- | --- |
| 15 button "start pumping" |  |  |  |
|  | | ready to pump |
| 8 button "finish pumping" |  | | pumping  17a enter quan |

22 ePOD RFC

including pumped quantity i 24 shipment Idoc

23 delivery is 'completed'



tity 17b 'sign on glass'

26 leave customer

approaching

tear down

25 leave site geofence

28 arrive plant

27 enter plant geofence

30 finish cleaning

cleaning

29 button "finish cleaning"



31 cleaning run is 'completed'

32 auto assign next published delivery

Here the process starts with #7 again

Remarks:

* In case no plan has been published for the next shift the pump will become idle after sign on.
* With the sign on of the next shift the first published delivery is assigned.
* When finish cleaning is reported the next published delivery is auto assigned.
* No follow up assignment is made until the driver confirmes finished cleaning and no geofence-event is sent by CADIS.
* If finish cleaning is reported before a follow up assignment is published, the pump will become idle at the cleaning site.

#### Pump parked at a plant / cleaning site / parking and returning to a plant / cleaning site / parking with cleaning run assigned but no follow up assignment

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Pump / Driver

1 order entry

2 order Idoc

Including cleaning run assignment

manual planning

3 publish plan for the next pump shift

sign on next shift

1. sign on

4 Sign on telegram

7b delivery CRT Idoc

6 auto assign of published plan including cleaning run

7a TICKET telegram

7c cleaning run telegram

8 TICKET telegram

8b cleaning run telegram

10 leave plant

SyncroTESS will show in the Status column directly travelling.

The substatus column will show drive to customer site.

When the leave plant is recieved from CADIS the substatus column will be emptied.

Informational status in ST only

9 leave plant geofence

drive to customer site

12 arrive customer 14 pump is ready

11 enter site geofence

13 button "ready to pump"

travelling

set up

16 start pumping

15 button "start pumping"

ready to pump

pumping

22 ePOD RFC

The driver can enter the actually pumped quantity in CADIS and send it with the finish pumping and ePOD telegrams.

including pumped quantity

tear down

19 finish pumping including pumped quantity 21 ePOD telegram

including pumped quantity

18 button "finish pumping" including pumped quantity 20 ePOD telegram

including pumped quantity

17a enter quantity 17b 'sign on glass'

24 shipment Idoc

23 delivery is 'completed'

25 leave site geofence

26 leave customer

returning

28 arrive plant

27 enter plant geofence

30 finish cleaning

29 button "finish cleaning"

cleaning



31 cleaning run is 'completed'

idle

Remarks:

* In case no plan has been published for the next shift the pump will become idle after sign on.
* With the sign on of the next shift the first published delivery is assigned.

#### Pump parked at a plant / cleaning site / parking and cleaning at customer site allowed and follow up assignment

SyncroTESS / Dispatcher

SAP / Order taker

Telematics / CADIS

Pump / Driver

1. order entry (n orders)

Cleaning at customer site allowed flaged in the order

1. order Idoc (n orders)

Including cleaning run assignment

manual planning

1. publish plan for the next pump shift

sign on next shift

5 sign on

1. Sign on telegram

7b delivery CRT Idoc

6 auto assign of first published delivery

7a TICKET telegram

8 TICKET telegram

1. leave plant

SyncroTESS will show in the Status column directly travelling.

The substatus column will show drive to customer site.

When the leave plant is recieved from CADIS the substatus column will be emptied.

Informational status in ST only

9 leave plant geofence

drive to customer site

12 arrive customer 14 pump is ready

1. enter site geofence

13 button "ready to pump"

travelling

set up

16 start pumping

15 button "start pumping"

ready to pump

pumping

22 ePOD RFC

The driver can enter the actually pumped quantity in CADIS and send it with the finish pumping and ePOD telegrams.

With the reception of the „finish pumping" the status column will show

„tear down". The cleaning time of the pump is added to the tear down time. The status column will still show tear down until the finish cleaning telegram is recieved.

including pumped quantity

19 finish pumping including pumped quantity 21 ePOD telegram

including pumped quantity

18 button "finish pumping" including pumped quantity 20 ePOD telegram

including pumped quantity

tear down

17a enter quantity 17b 'sign on glass'

24 shipment Idoc

23 delivery is 'completed'

26 finish cleaning

25 button "finish cleaning"

28b delivery CRT Idoc

27 auto assign next published delivery 28a TICKET telegram

29 TICKET telegram

29 leave customer

Informational status behaves as above.

Informational status in ST only

28 leave site geofence

drive to customer site

travelling



Here the process starts with #11 again

Remarks:

* In case no plan has been published for the next shift the pump will become idle after sign on.
* With the sign on of the next shift the first published delivery is assigned.
* No follow up assignment is made until the driver confirmes finishe cleaning nd no Geofence-Event is sent by CADIS.

#### Pump parked at a plant / cleaning site / parking and cleaning at customer site allowed and no follow up assignment

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Pump / Driver

1 order entry

Cleaning at customer site allowed flaged in the order

2 order Idoc

manual planning

3 publish plan for the next pump shift

sign on next shift

1. sign on

4 Sign on telegram

7b delivery CRT Idoc

6 auto assign of first published delivery

7a TICKET telegram

8 TICKET telegram

10 leave plant

Informational status in ST only

SyncroTESS will show in the Status column directly travelling.

The substatus column will show drive to customer site.

When the leave plant is recieved from CADIS the substatus column will be emptied.

9 leave plant geofence

drive to customer site

1. arrive customer 14 pump is ready

11 enter site geofence

1. button "ready to pump"

travelling

set up

16 start pumping

15 button "start pumping"

ready to pump

pumping

22 ePOD RFC

The driver can enter the actually pumped quantity in CADIS and send it with the finish pumping and ePOD telegrams.

With the reception of the „finish pumping" the status column will show

„tear down". The cleaning time of the pump is added to the tear down time. The status column will still show tear down until the Finish cleaning telegram is recieved.

including pumped quantity

19 finish pumping including pumped quantity 21 ePOD telegram

including pumped quantity

18 button "finish pumping"

including pumped quantity 20 ePOD telegram

including pumped quantity

tear down

17a enter quantity 17b 'sign on glass'

24 shipment Idoc

23 delivery is 'completed'

26 finish cleaning

Above stays the same as in Scenario P20. At this step SyncroTESS will automatically assign a return run to the pumps home depot.

The substatus column will show drive to depot. The status column will show returning.

When the leave site event is recieved from CADIS the substatus column will be emptied.

25 button "finish cleaning"

27 auto assign of return run

28 return run telegram

29 return run telegram

31 leave customer

drive to depot

Informational status in ST only

30 leave site geofence



Here the process starts with #11 again

returning

Remarks:

* In case no plan has been published for the next shift the pump will become idle after sign on.
* With the sign on of the next shift the complete publish plan is assigned.
* No follow up assignment is made until the driver confirmes finishe cleaning and no Geofence-Event is sent by CADIS.

#### Cancel while pump is travelling to customer site but has not left the plant yet (no leave plant geofence event has been

recieved by CADIS) and has a published follow up assignment

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Pump / Driver

Starting point is scenario P10 after step 8b cleaning run telegram.

Dispatcher has to enter

##### if pump should continue with follow up assignment

or

##### if the pump should return to a depot

9 cancel

drive to customer site

travelling

##### Continue with follow up assignment

10b delivery DEL Idoc

Here the process starts with #7 of P10 again

10a CANCEL TICKET telegram

11 CANCEL TICKET telegram

13b delivery CRT Idoc

SyncroTESS will show in the Status column directly travelling.

The substatus column will show drive to customer site.

When the leave plant is recieved from CADIS the substatus column will be emptied.

Informational status in ST only

12 auto assign next published delivery

13a TICKET telegram 14a TICKET telegram

16 leave plant

drive to customer site

15 leave plant geofence

travelling

##### Return to depot

In case the dispatcher returns the pump to the plant location where it is still standing

(no leave plant geofence event has been recieved from CADIS)

Dispatcher has to enter plant and time of next availability

10b delivery DEL Idoc

10a CANCEL TICKET telegram

travelling

11 CANCEL TICKET telegram

the pump becomes directly idle. If a different location is choosen the process flow is as described here.

12 auto assign returnRun

1. ReturnRun telegram

13 ReturnRun telegram

returning



1. enter plant geofence
2. arrive plant

idle

Remarks:

* Published follow up assignment must be manually assigned by the dispatcher (reconfirmed) after a pump has arrived at the depot.
* The pump will become idle.
* No automatic assignment of the published follow up assignment in this case!

#### Cancel while pump is travelling to customer site and has a published follow up assignment

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Pump / Driver

Starting point is scenario P10 after step 8b cleaning run telegram.

10 leave plant

9 leave plant geofence

9 cancel

travelling

Dispatcher has to enter

1. **if** **pump** **should** **continue** **with** **follow** **up** **assignment**

or

1. **if** **the** **pump** **should** **return** **to** **a** **depot**

##### Continue with follow up assignment

10b delivery DEL Idoc

10a CANCEL TICKET telegram

11 CANCEL TICKET telegram

Here the process starts with #7 of P10 again

12 auto assign next published delivery

13b delivery CRT Idoc

travelling

13a TICKET telegram

14a TICKET telegram

Informational status in ST only

16 leave plant

drive to customer site

SyncroTESS will show in the Status column directly travelling.

The substatus column will show drive to customer site.

When the leave plant is recieved from CADIS the substatus column will be emptied.

15 leave plant geofence

##### Return to depot

Dispatcher has to enter plant and time of next availability

travelling

10b delivery DEL Idoc

10a CANCEL TICKET telegram

11 CANCEL TICKET telegram

12 auto assign returnRun

13 ReturnRun telegram

14 ReturnRun telegram

returning

16 arrive plant

15 enter plant geofence



idle

Remarks:

* Published follow up assignment must be manually assigned by the dispatcher (reconfirmed) after a pump has arrived at the depot.
* The pump will become idle.
* No automatic assignment of the published follow up assignment in this case!

#### Cancel while pump is doing set up on customer site and has a published follow up assignment

SAP / Order taker



SyncroTESS / Dispatcher

Telematics / CADIS

Pump / Driver

Starting point is scenario P10 after step 12 arrive at customer.

Dispatcher has to enter

##### if pump should continue with follow up assignment

or

##### if the pump should return to a depot

9 cancel set up

set up

##### Continue with follow up assignment

10b delivery DEL Idoc

Here the process starts with #7 of P10 again

10a CANCEL TICKET telegram

11 CANCEL TICKET telegram

12 auto assign next published delivery

13b delivery CRT Idoc

SyncroTESS will show in the Status column directly travelling.

The substatus column will show drive to customer site.

When the leave plant is recieved from CADIS the substatus column will be emptied.

13a TICKET telegram

14 TICKET telegram

Informational status in ST only

16 leave plant

drive to customer site

15 leave plant geofence

##### Return to depot

travelling

Dispatcher has to enter plant and time of next availability

10b delivery DEL Idoc

10a CANCEL TICKET telegram

1. CANCEL TICKET telegram
2. auto assign returnRun
3. ReturnRun telegram
4. ReturnRun telegram

returning

1. enter plant geofence
2. arrive plant

idle

Remarks:

* Published follow up assignment must be manually assigned by the dispatcher (reconfirmed) after a pump has arrived at the depot.
* No automatic assignment of the published follow up assignment in this case!

## (P33) Cancel while returning

#### Cancel while pump is at the ReturnRun

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Pump / Driver

Starting point is scenario P10 after step 26 leave customer.

9 cancel cleaning run

returning

Dispatcher has to enter the new depot **the** **pump** **should** **return** **to** **clean** and time of next availability

10b delivery DEL Idoc

10a CANCEL TICKET telegram

11 CANCEL TICKET telegram

12 auto assign returnRun

13 ReturnRun telegram

14 ReturnRun telegram

returning

16 arrive plant

15 enter plant geofence



idle

Remarks:

* Published follow up assignment must be manually assigned by the dispatcher (reconfirmed) after a pump has arrived at the depot.
* No automatic assignment of the published follow up assignment in this case!

#### Cancel while pump is at the status tear down, cleaning did not start yet and customer location has cleaning flag; pump

has a follow up assignment

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Pump / Driver

Starting point is scenario P21 after step 24 shipment Idoc.

tear down

Dispatcher has to

##### cancel and enter new cleaning site

or

##### cancel only – allowed in this case because customer location has cleaning flag

1. cancel assigned following cleaning run

##### cancel and enter new cleaning site

Dispatcher has to enter the new depot **the** **pump** **should** **return** **to** **clean** and time of next availability

1. CANCEL TICKET telegram
2. CANCEL TICKET telegram
3. auto assign cleaningRun

tear down

Here the process starts with #25 of P10 again

##### B) cancel only – allowed in this case because customer location has cleaning flag

10 CANCEL TICKET telegram

11 CANCEL TICKET telegram

tear down

1. finish cleaning

12 button "finish cleaning"



1. auto assign next published delivery

Here the process starts with #28a of P20 again

#### Cancel while pump is tear down, cleaning did not start yet and customer location has no cleaning flag

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Pump / Driver

Starting point is scenario P10 after step 24 shipment Idoc .

9 cancel cleaning run

tear down

Dispatcher has to enter the new depot **the** **pump** **should** **return** **to** **clean** and time of next availability

10a CANCEL TICKET telegram

11 CANCEL TICKET telegram



12 auto assign cleaningRun

Proceed with step 25 of P10

#### Cancel while pump is at the cleaning run (status returning)

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Pump / Driver

Starting point is scenario P21 after P10 after step 26 leave customer

1. cancel cleaning run

approaching

Dispatcher has to enter the new depot **the** **pump** **should** **return** **to** **clean** and time of next availability

1. CANCEL TICKET telegram
2. CANCEL TICKET telegram
3. auto assign cleaningRun
4. TICKET telegram
5. TICKET telegram



approaching

Proceed with step 27 of P10

## (P37) Cancel while ready to pump

#### Cancel while pump is ready to pump and has a published follow up assignment

SAP / Order taker

SyncroTESS / Dispatcher

Telematics / CADIS

Pump / Driver

Starting point is scenario P10 after step 14 pump is ready.

Dispatcher has to enter

##### if pump should continue with follow up assignment

or

##### if the pump should return to a depot

9 cancel set up

ready to pump

##### Continue with follow up assignment

10b delivery DEL Idoc

Here the process starts with #7 of P10 again

10a CANCEL TICKET telegram

1. CANCEL TICKET telegram
2. auto assign next published delivery

##### Return to depot

Dispatcher has to enter plant and time of next availability

10b delivery DEL Idoc

10a CANCEL TICKET telegram

1. CANCEL TICKET telegram
2. auto assign returnRun
3. ReturnRun telegram
4. ReturnRun telegram



returning

1. enter plant geofence
2. arrive plant

idle

Remarks:

* Published follow up assignment must be manually assigned by the dispatcher (reconfirmed) after a pump has arrived at the depot.
* No automatic assignment of the published follow up assignment in this case!