



**BENSBERG** 

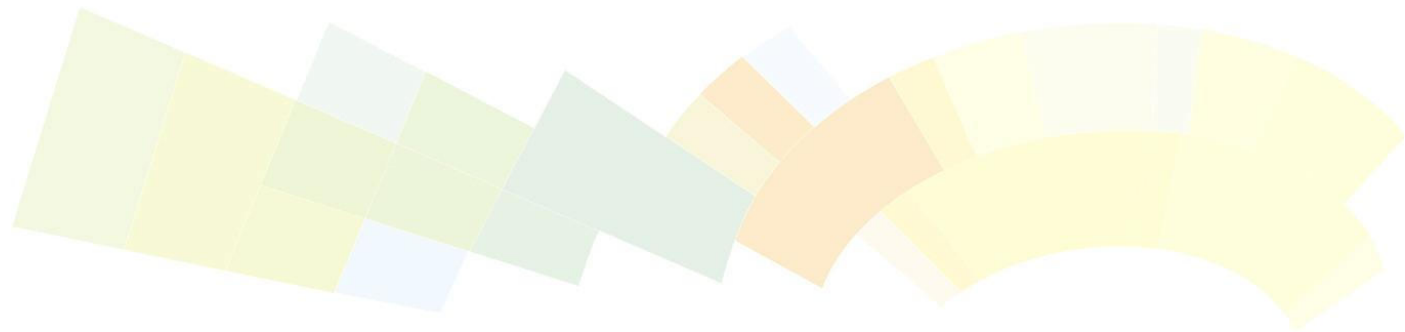
Enhancement components

DELINS – Forecast and JIT Delivery Schedules

Welcome!

Welcome to the presentation of our  
enhancement component

DELINS – Forecast and JIT delivery schedules



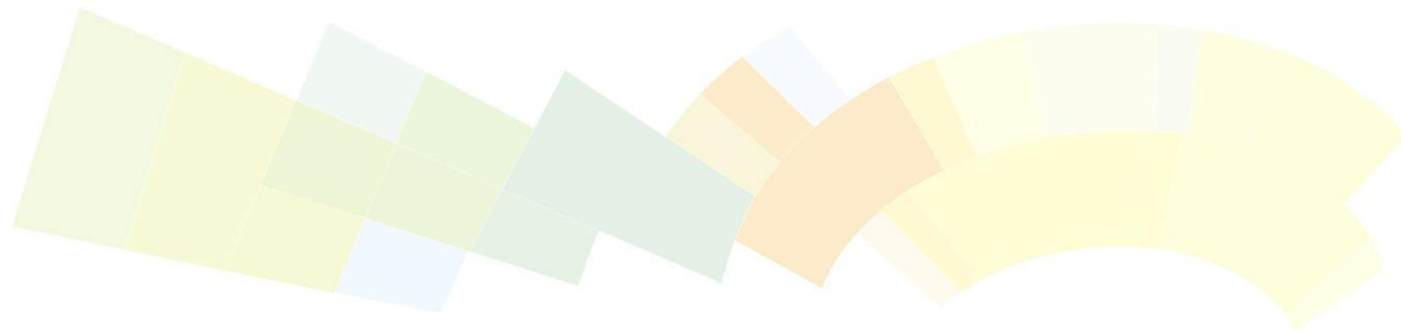
## Introduction

The application of the Bensberg component DELINS and Deadline split improves in large scale the quality of forecast and JIT delivery schedules available in the own system.

Crucial for that are the offered check procedures, by which problematic delivery schedules are already filtered in advance and thereby negative effects are avoided e.g. in respect to material planning.

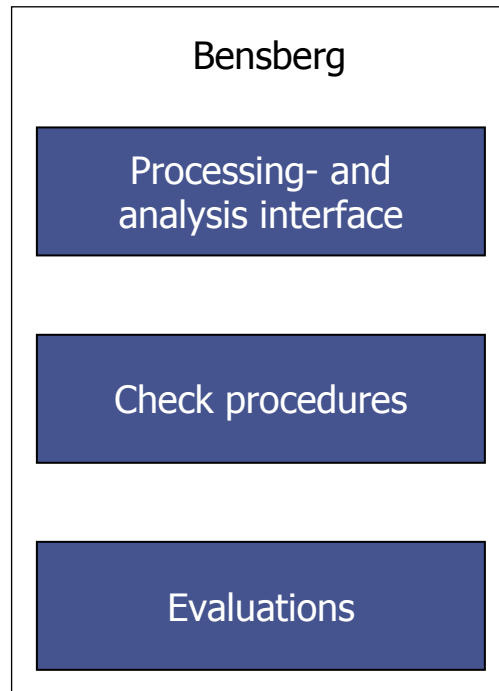
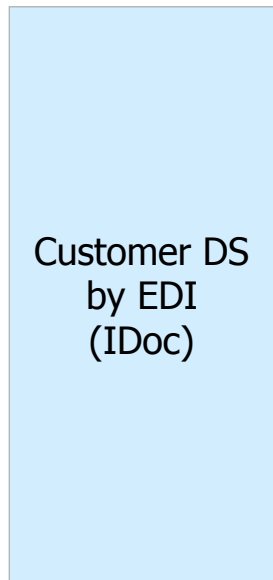
The in total improved delivery schedule quality and the possibility to defer or combine schedule lines in regard to deadlines, increases the delivery performance towards the customer, optimizes the production process and reduces the costs e.g. by avoiding unscheduled shipments.

The detailed analysis option amplify the efficiency and transparency of the processing before, during and after the electronic transfer of delivery schedules.



# Processing

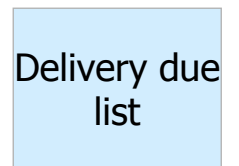
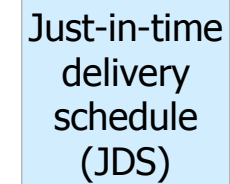
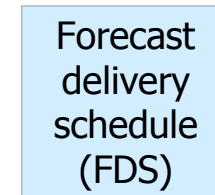
EDI-Converter



R/3



in the Standard



# Check procedures

## Check procedures

- 14 check procedures ensure, that problematic delivery schedules (IDoc) are identified
- Depending on the check procedure it can be decided, if a negative check result leads to an interruption of the posting, if the user is informed by a Mail or if the check result merely is stored for analysis purposes
- Embedded in the EDI-entry. All activated check procedures are carried out upon each posting attempt (ALE, BD87, Workflow, Bensberg-user interface.....)
- Activatable according to sold-to party and delivering plant. Transparent, when not activated, i.e. parallel use with other monitors
- Each check procedure can be set differentiated and obtains an individual analysis user interface

## Check procedure

Enhanced check procedures, activatable according to sold-to party and delivering plant:

Quantity deviation  
Forecast delivery schedule

Syntax JIT delivery schedule

Quantity deviation  
JIT delivery schedule

Order number

Global quantity deviation  
Material

Text modifications

Minimum/Maximum quantities

Received-CQ, DS number,  
Last delivery, ShAg

Backlog  
Material staging

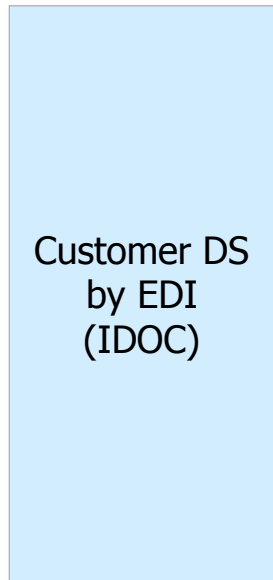
Target quantity

Delivery schedule date

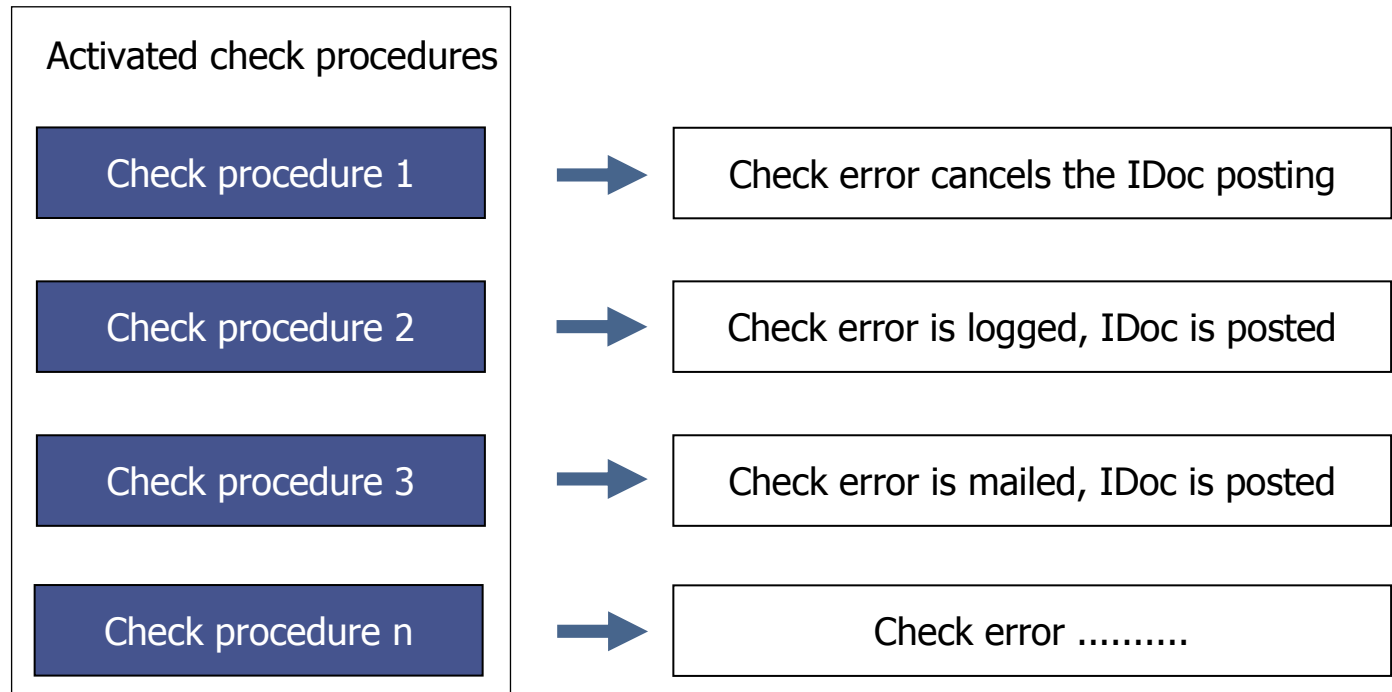
Contents of master data

# Check procedures

EDI-converter



R/3



Depending on the check procedure it can be determined, if a realized check error cancels the posting or the posting is continued with logging. Additionally an internal Mail can be transmitted to a user. With the Bensberg user interface the check error can be analyzed.



## Check procedures

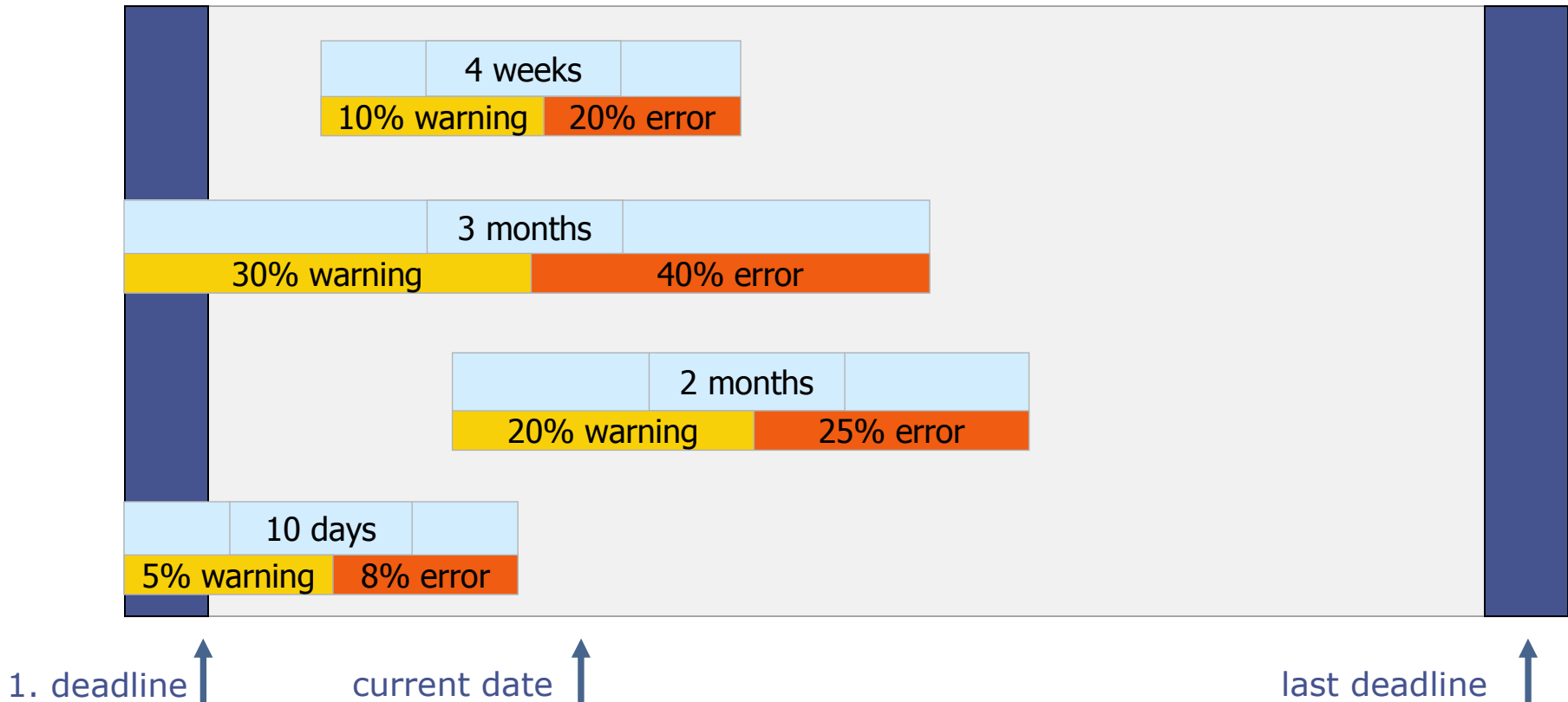
e.g. Check procedure 'Quantity deviation'

- Definition of time windows
  - Any number of
  - Days, Weeks and Months
  - Any time period and item, overlappings allowed
  - Max. deviation in % or piece with warning/error
  
- Specification according to sales area, plant, or sales group
  - global
  - according to customer
  - according to material
  - according to customer and material

## Check procedure 'Example Quantity Deviation – Time window'

Schedule lines DS 'old' in scheduling agreement

Schedule lines DS 'new' in IDoc



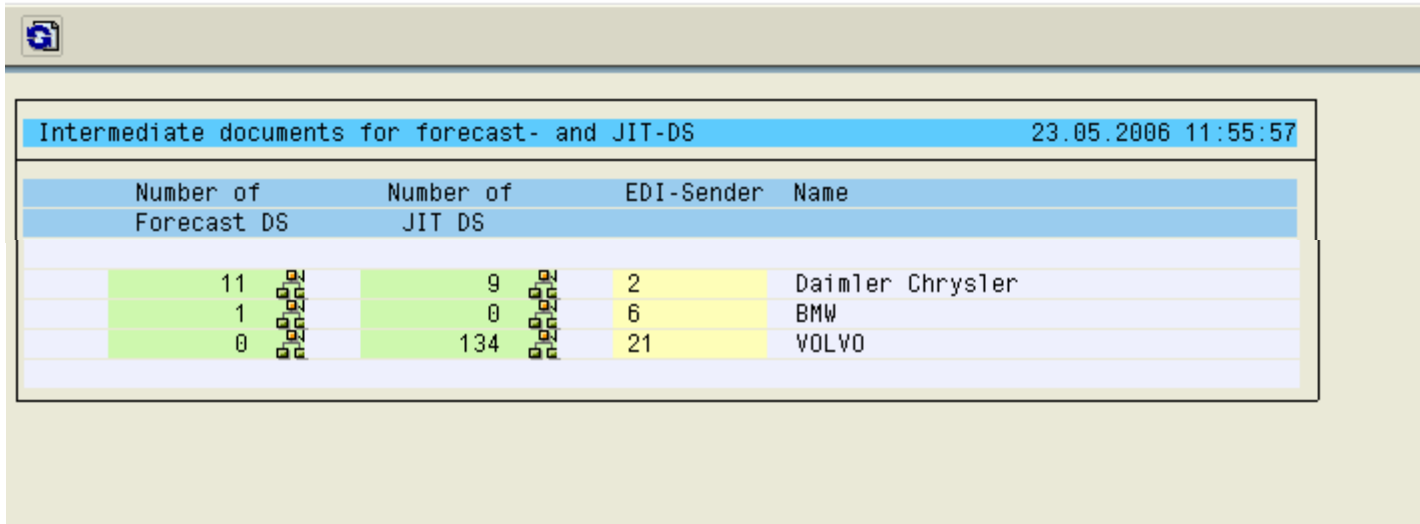
# User interface of the Bensberg component

(Overview with selected screen prints)

## Bensberg user interface

Display of the available forecast and JIT delivery schedules according to EDI-sender:

### *IDOC's for forecast- and JIT-delivery schedules*



The screenshot shows a software interface with a title bar containing a small icon. Below the title bar is a header bar with the text "Intermediate documents for forecast- and JIT-DS" and a timestamp "23.05.2006 11:55:57". The main content is a table with the following data:

Number of Forecast DS	Number of JIT DS	EDI-Sender	Name
11	9	2	Daimler Chrysler
1	0	6	BMW
0	134	21	VOLVO

## Delivery schedule according to EDI-sender

Display of the available forecast delivery schedules of the selected EDI-sender with detail and status information:

### IDOC's of selected sender

Forecast delivery schedules EDI - sender 510000 23.05.2006 12:19:37

510000 Daimler Chrysler, Stuttgart ( Sold-to party )  
 001 A-01 ( Plant / Unloading point )  
 1146001 ( Supplier number )

Customer material	Material	DS number				
<input type="checkbox"/> A6615008788	1086	02 52997D			LP	●●●
<input type="checkbox"/> A6615008788	1086	02 52998D			LP	●●●
<input type="checkbox"/> A6615008788	1086	02 53002D		⚠	LP	●●●
<input type="checkbox"/> A6615008788	1086	02 53003D			LP	●●●
<input type="checkbox"/> A6615008788	1086	02 53004D		⚠	LP	●●●
<input type="checkbox"/> A6615008788	1086	02 53012D			LP	●●●
<input type="checkbox"/> A6615008788	1086	02 53013D			LP	●●●

Result of the check procedure and scheduling agreement determination (next slide)

The posting of the delivery schedules is executed by the internal call of the SAP-standard function either in the visible mode (display of all posting steps) or invisible mode (without display)

## Check result of an IDoc

Result of the active enhanced check procedures for the selected forecast delivery schedule:

The screenshot shows the 'Extended EDI - check' window with the following data:

Check Procedure	Result	Status
Extended EDI-check	0000000000209008	by categories
Time of checking	01.05.2006 12:44:50	Forecast
Quantity check forecast	Quantity difference IDOC/forecast off-limit (Error)	Warning
Check back orders MS-date	A material staging date is prior to current date (SA 30000004)	Warning
Check of cummulated quantity received in forecast	*** No problems with the cummulated quantity received ***	Success
Check of last delivery in forecast	The dlv.qty.IDOC does not correspond to the dlv. (SA 30000004)	Warning
Monitoring Min-/Max-quantities in FDS	Min/Max-exceeding Material 10021 (SA 30000004)	Warning
Monitoring field content in FDS	A field content of SAP-Data creates a message (SA 30000004)	Warning
Monitoring target quantity in FDS	*** There no problems with target quantities***	Success

Annotations on the right side of the image:

- Transmission to customer (the next but one slide)
- Detail information regarding the difference (next slide)

Toolbar at the bottom:

- ✓
- Qty.forecast
- Backlog
- Cml.qty
- Delivery
- Min./Max.
- Field contents
- Target quantity
- Print

Each check procedures obtains a separate, procedure-specific analysis user interface

## Comparison of the quantities Delivery schedule 'new/old'

Display of the delivery schedule quantity in the existing scheduling agreement and new IDoc-delivery schedule with difference and evaluation (limit values) in days, weeks or months:

Monitored periods

Checked periods (Please select)

Day		No quantity excess
Weeks		Quantity excess (Error)
Months		Quantity excess (Error)

Qty.differences IDOC/forecast DS

Actual IDOC	0000000000209008	
Actual schedule agreement	30000017	
Sold-to party	550000	BMW, 89001 München
Ship-to party	550000	BMW, 89001 München
Material	10002	AL-Connector SS1
Customer material	42 8T4 Z5R ED	
Del.sched./Date	44895-213	/ 28.04.2006
Cml.Qty.received ShAg/IDOC	1.000	/ 1.000

Analysis by week							
Scheduling- deadline	Sched.agreem.		IDOC		Difference		Difference %
	Quantity	CQ	Quantity	CQ	Quantity		
Week 18.2006	440	1.440	490	1.490	50	11,36	%
Week 19.2006	520	1.960	550	2.040	30	5,77	%
Week 20.2006	410	2.370	400	2.440	10-	2,44-	%
Week 21.2006	500	2.870	510	2.950	10	2,00	%
Week 22.2006	1.910	4.780	1.910	4.860	0		
Week 26.2006	1.450	6.230	1.450	6.310	0		
Week 31.2006	1.700	7.930	1.700	8.010	0		
Week 35.2006	1.550	9.480	1.550	9.560	0		
Week 39.2006	1.720	11.200	1.720	11.280	0		
Week 44.2006	1.455	12.655	1.455	12.735	0		
Week 48.2006	1.280	13.935	1.280	14.015	0		

yellow = Warning  
green = Okay  
red = Error  
white = Not monitored

Magnifying glass:  
Display of the  
monitoring  
parameters (time  
window)

## Message to the customer

Transmission of a proviso of acceptance respectively delivery to a customer due to unacceptable high differences (form proposal):

Transmission by printout, Fax or E-Mail:

Bensberg Unternehmensberatung GmbH

BMW München

z.Hd. Herrn Klein

Fax: 089 / 244-445

Logistik

Planner

Dietmar Bensberg

Tel. +49 (02243) 83822

Fax +49 (02243) 80502

dietmar.bensberg@bensberg.de

www.bensberg.de

Date: 01.05.2006

### **42 8T4 Z5R ED Proviso of Delivery**

Dear Mr. Klein,

with delivery schedule no. 44895-213 of 28.04.2006 you increased your demands, as specified attached, at short notice.

Currently we are checking the earliest possible delivery time.

If the shipment cannot be realized within one week, we will contact you immediately. For the time being we are not in the position to definitively confirm the availability of the items in the requested short time.

Please be so kind to consider that it is absolutely necessary to inform us before you transmit a short-termed change of your demand. Only that way we can ensure the availability of the items at the requested deadline. Special costs incurred due to short-termed changes of demand cannot be accepted on our part.

Yours faithfully

Bensberg Unternehmensberatung GmbH

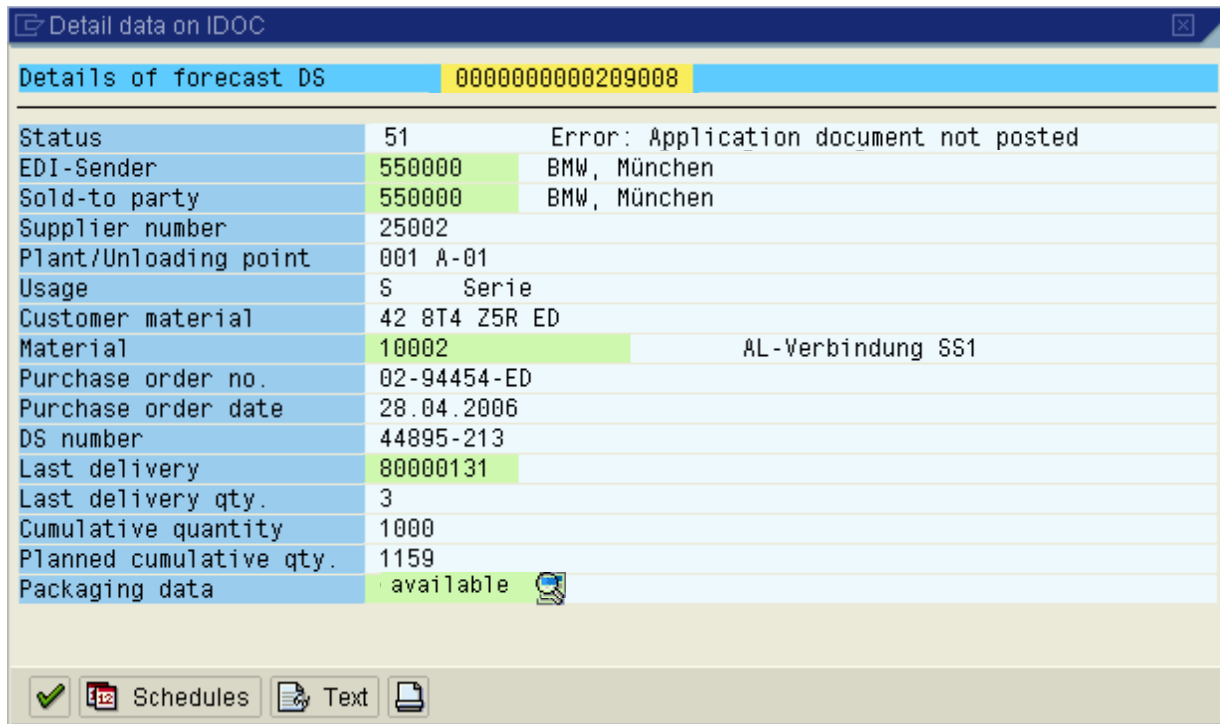
Christiane Metzler

Dietmar Bensberg




## Detail data on IDoc

Display of all detail and environment information of the new delivery schedule. Deadlines, texts and packaging data can be displayed additionally (so far available).



The screenshot shows a SAP window titled 'Detail data on IDoc'. The main content area displays 'Details of forecast DS' with the ID '0000000000209008'. Below this, a table lists various data points. The 'Packaging data' field is highlighted in green and marked as 'available' with a magnifying glass icon. At the bottom of the window, there are three buttons: a green checkmark, a calendar icon labeled 'Schedules', and a document icon labeled 'Text'.

Details of forecast DS 0000000000209008		
Status	51	Error: Application document not posted
EDI-Sender	550000	BMW, München
Sold-to party	550000	BMW, München
Supplier number	25002	
Plant/Unloading point	001 A-01	
Usage	S	Serie
Customer material	42 8T4 Z5R ED	
Material	10002	AL-Verbindung SS1
Purchase order no.	02-94454-ED	
Purchase order date	28.04.2006	
DS number	44895-213	
Last delivery	80000131	
Last delivery qty.	3	
Cumulative quantity	1000	
Planned cumulative qty.	1159	
Packaging data	available	

# Listing of an IDoc

Administration and environment data

Packaging data

Deadlines and quantities of delivery schedule

Header and item texts

Result of the determination of the scheduling agreement

Results of the enhanced check procedures

Forecast delivery schedules		EDI - sender	550000	23.05.2006 14:49:47		
550000	BMW, München			( Sold-to party )		
001 A-01				( Plant / Unloading point )		
<b>IDOC</b>	0000000000209008					
Status	51	Error: Application document not posted				
EDI-Sender	550000	BMW, München				
Sold-to party	550000	BMW, München				
Supplier number	25002					
Plant/Unloading point	001 A-01					
Usage	S	Series				
Customer material	42 8T4 Z5R ED					
Material	10002	AL-Connector SS1				
Purchase order no.	12-94454-ED					
Purchase order date	01.10.2001					
DS number	44895-206					
Last delivery	80000131					
Last delivery qty.	3					
Cumulative quantity						
Planned cumulative qty.	1159					
<b>Packaging data</b>						
	Packaging material	Material	Quantity	Description		
	2037		30			
<b>Deadline data of IDOC</b>						
	Data type	Date from	Date to	Qty.	DF line type	
	Day schedule	27.04.2003	28.04.2003	1.000		
	Day schedule	28.04.2003	28.04.2003	7.739		
	Day schedule	14.05.2003	14.05.2003	13.202		
	Day schedule	22.05.2003	22.05.2003	21.387		
	Day schedule	02.06.2003	02.06.2003	10.838		
	Day schedule	11.06.2003	11.06.2003	13.888		
	Day schedule	23.06.2003	23.06.2003	12.113		
	Day schedule	01.07.2003	01.07.2003	12.411		
	Day schedule	10.07.2003	10.07.2003	6.162		
	Day schedule	18.07.2003	18.07.2003	5.011		
<b>Text on IDOC</b>						
	*** ATTENTION: COMPANY HOLIDAYS 23.12.2001 - 5.1.2002 ***					
<b>Assigned sched.agreements</b>						
	Sched. agr.	Type	DP	Custom.plant	Unload.point	Customer material
	30000017	LZ	S	001	A-01	42 8T4 Z5R ED
<b>Extended Checks</b>						
Error	Quantity difference IDOC/forecast off-limit (Error)					
Error	Cm1.qty received in IDOC is less than in forecast (SA 30000017 )					
Error	The dlv.qty.IDOC does not correspond to the dlv. (SA 30000017 )					
Error	A material staging date is prior to current date (SA 30000017 )					
Error	Min/Max-exceeding Material 10002 (SA 30000017 )					
Error	A field content of SAP-Data creates a message (SA 30000017 )					
Warning	A field content of SAP-Data creates a message (SA 30000017 )					

## Selection transaction

Additional selection screen for the detailed start of the Bensberg user interface

Selection option according to IDoc contents and environment data

Selection key according to check procedure

### Bensberg GmbH - SD/402102/Delins

Field	Value	to	Value	Action
EDI-Sender				↔
IDOC				↔
Creation date				↔
Sold-to party				↔
Ship-to party				↔
Sales organization				↔
Distribution channel				↔
Division				↔
Sales office				↔
Sales group				↔
Supplier number				↔
Customer plant				↔
Unloading point				↔
Customer material				↔
Material				↔
Shipping plant				↔
Scheduling agreement				↔
Order type				↔
DS number				↔
DS date				↔
Message-MESCOD				↔
Message-MESFCT				↔

Delivery schedule type	
Delivery schedule type	<input type="checkbox"/> Forecast DS <input type="checkbox"/> JIT DS

Check errors / warnings			
<input type="checkbox"/> Qty.forecast	<input type="checkbox"/> Qties.JDS	<input type="checkbox"/> Qties.Material	<input type="checkbox"/>
<input type="checkbox"/> Syntax JIT	<input type="checkbox"/> Backlog	<input type="checkbox"/> CQ-received	<input type="checkbox"/>
<input type="checkbox"/> DS number	<input type="checkbox"/> Last delivery	<input type="checkbox"/> Order number	<input type="checkbox"/>
<input type="checkbox"/> Text	<input type="checkbox"/> Min./Max.values	<input type="checkbox"/> Zero quantities	<input type="checkbox"/>
<input type="checkbox"/> Field content	<input type="checkbox"/> Target quantity	<input type="checkbox"/>	<input type="checkbox"/>

SHAG determination	
Determination error	<input type="checkbox"/> no SHAG <input type="checkbox"/> several SHAG

# Analyses of the Bensberg component

(Overview with selected screen prints)

# Analyses

The following analyses are available in the DELINS-environment:

'Completed' IDOC

Transfers

IDOC for scheduling agreement

Left- / Right parts

Differences

# 'Completed IDOC'

Selection of already posted IDoc

## Bensberg GmbH - SD/402102/Delins

IDOC			
IDOC		to	
EDI-Sender		to	
Sold-to party		to	
Supplier number		to	
Customer plant		to	
Unloading point		to	
Customer material		to	
Material		to	
Shipping plant		to	

Time of execution			
Date	16.05.2006	to	23.05.2006
Time	00:00:00	to	00:00:00

Selection			
Delivery schedule type	<input checked="" type="checkbox"/> Forecast DS	<input checked="" type="checkbox"/> JIT DS	
Check result	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Warning	<input checked="" type="checkbox"/> Error

Check errors / warnings			
Qty.forecast	<input type="checkbox"/>	Qties.JDS	<input type="checkbox"/>
Syntax JIT	<input type="checkbox"/>	Backlog	<input type="checkbox"/>
DS number	<input type="checkbox"/>	Last delivery	<input type="checkbox"/>
Text	<input type="checkbox"/>	Min./Max.values	<input type="checkbox"/>
Field content	<input type="checkbox"/>	Target quantity	<input type="checkbox"/>
		Qties.Material	<input type="checkbox"/>
		CQ-received	<input type="checkbox"/>
		Order number	<input type="checkbox"/>
		Zero quantities	<input type="checkbox"/>

Editing		
Interface	<input checked="" type="radio"/>	List
	<input type="radio"/>	



Selection key according to check error

## User interface 'completed IDoc'

For the display of already posted IDoc the same user interface is used as for the active, still to be posted IDoc. Each procedure and display option introduced there are also offered in this case:





























### Settled IDOC's of selected sender

Reactivation of a posted IDoc by copying a new IDoc

 Reactivation
 IDOC

Settled forecast schedules	EDI - sender 550000	23.05.2006 17:44:45
550000	BMW, München	( Sold-to party )
001 A-01		( Plant / Unloading point )
25002		( Supplier number )

Customer material	Material	DS number					
<input checked="" type="checkbox"/> A6615008788	1086	02 53001D		LP			
<input type="checkbox"/> A6615008788	1086	02 53002D		LP			
<input type="checkbox"/> A6615008788	1086	02 53002D		LP			
<input type="checkbox"/> A6615008788	1086	02 53005D		LP			
<input type="checkbox"/> A6615008788	1086	02 53009D		LP			
<input type="checkbox"/> A6615008788	1086	02 53005D		LP			
<input type="checkbox"/> A6615008899	1096	41 117062		LP			

Upon the posting of an IDoc all relevant information are 'frozen' in order to enable the here-shown display:

# 'Transfers'

Selection screen for the display of EDI-transfers DELINS

Program Edit Goto System Help

**Bensberg GmbH - SD/402102/Delins**

EDI-Sender [ ] to [ ]

Time of transmission

Date	16.05.2006	to	23.05.2006
Time	00:00:00	to	00:00:00

Selection

DS type  Forecast DS  JIT DS



## User interface 'Transfers'

### Transmitted IDOC's for forecast and JIT-delivery schedules

Transmissions for forecast- and JIT-delivery schedules						23.05.2006 18:21:28
Date of transmission	Number of forecast	Number of JIT	EDI-Sender	Name		
05.02.2002	0	12	510000	VOLKSWAGEN AG		
05.02.2002	4	0	3001300	DaimlerChrysler AG		
04.02.2002	26	11	510000	VOLKSWAGEN AG		
04.02.2002	2	0	3001300	DaimlerChrysler AG		
03.02.2002	10	0	3000300	BAYERISCHE MOTORENWERKE		
02.02.2002	0	9	510000	VOLKSWAGEN AG		
02.02.2002	5	0	3000300	BAYERISCHE MOTORENWERKE		
02.02.2002	2	0	3001300	DaimlerChrysler AG		
01.02.2002	27	0	1881000	ADAM OPEL AG		
01.02.2002	1	11	510000	VOLKSWAGEN AG		
01.02.2002	11	0	3000300	BAYERISCHE MOTORENWERKE		
01.02.2002	3	0	3001300	DaimlerChrysler AG		

Display of the transfers according to day and EDI-sender

## 'IDoc for scheduling agreement'

Selection of the IDoc posted to a single scheduling agreement:

The screenshot displays the SAP 'IDoc for scheduling agreement' configuration screen. The window title is 'Bensberg GmbH - SD/402102/Delins'. The main area shows a scheduling agreement with ID '30000017'. Below this, the 'Time of execution' section is expanded, showing a date range from '17.05.2005' to '01.05.2006' and a time range from '00:00:00' to '00:00:00'. The 'Selection' section is also expanded, showing two checked options: 'Forecast DS' and 'JIT DS'. The interface includes a menu bar (Program, Edit, Goto, System, Help) and a toolbar with various icons for navigation and actions.

Scheduling agreement	30000017		
<b>Time of execution</b>			
Date	17.05.2005	to	01.05.2006
Time	00:00:00	to	00:00:00
<b>Selection</b>			
DS type	<input checked="" type="checkbox"/> Forecast DS	<input checked="" type="checkbox"/> JIT DS	

## User interface 'IDoc for scheduling agreement'

For the display of the IDoc posted into a scheduling agreement the same user interface is used as for the active still to be posted IDoc. Each procedure and display described there are also offered in this case:

*Executed IDOC's for forecast- and JIT-delivery schedules*

Documents assigned to schedule 30000017 24.05.2006 12:24:45

Date of processing	Number of Forecast DS	Number of JIT DS	EDI-Sender	Sender's name
01.05.2006	3	0	550000	BMW
18.12.2005	3	0	550000	BMW
10.12.2005	1	0	550000	BMW
14.08.2005	2	0	550000	BMW
24.07.2005	1	0	550000	BMW
26.05.2005	1	0	550000	BMW

Display of the postings  
for the scheduling  
agreement per day

## 'Left- / Right parts'

Analysis of IDoc-transfers of 'related' materials. 2 – n materials can be defined as a unit:

Maximum permitted period expressed in calendar days, in which the transmission of related IDoc is allowed to deviate from each other

The screenshot shows the SAP SD/402102/Delins interface. The menu bar includes Program, Edit, Goto, System, and Help. The title bar displays 'Bensberg GmbH - SD/402102/Delins'. The main area contains several input fields and checkboxes:

- Sold-to party:** Two empty text boxes with a right-pointing arrow button.
- Customer material:** Two empty text boxes with a right-pointing arrow button.
- Time window Selection:** A text box containing '90'.
- Time window Pair format:** A text box containing '90'.
- Display schedules (until horiz):** A checked checkbox followed by a text box containing '30' and the word 'Days'.

Below these fields are three sections:

- Status:** A section with a tab labeled 'Status'. It contains two checkboxes: 'Posting condition of IDOC' with a checked checkbox for 'not posted' and a checked checkbox for 'posted'.
- Selection:** A section with a tab labeled 'Selection'. It contains three radio buttons: 'Delivery schedule type' with 'All' selected, 'FDS', and 'JDS'.
- Sort:** A section with a tab labeled 'Sort'. It contains two radio buttons: 'according to left parts' (selected) and 'according to right parts'.

## 'Analysis Left- / Right parts'



Comparison of the schedule lines in the IDoc of the related materials:

### Comparison left / right parts with delivery schedules

Comparison parts left/right with delivery schedules 24.05.2006 12:49:40  
 Forecasts and JIT DS  
 Time window Selection 090 Days Time window Pair format. 010 Days

Sold-to party 510000 Daimler Chrysler, Stuttgart

Date of the IDoc-  
posting

Left part				Right part			
Customer material		Date		Customer material		Date	
42 8T4 Z5R ED		31.08.2003		42 8T4 Z5R A		09.06.2003	
D	01.07.2003	1		D	10.02.2003	70 1	
D	02.07.2003	2		D	11.02.2003	60 1	
D	03.07.2003	3		D	12.02.2003	100 4	
D	04.07.2003	4		D	15.02.2003	101 4	
D	05.07.2003	5					
D	06.07.2003	6					
D	07.07.2003	7					
D	08.07.2003	8					
D	09.07.2003	9					
D	10.07.2003	10					
M	30.07.2003	101					

The magnifying glass next to the transfer date branches to the individual analysis of the delivery schedule (IDoc)

# Difference-Analysis

(Overview with selected screen prints)

## Procedure

- Each incoming forecast and JIT delivery schedule (DELINS) is compared in respect to differences with the existing delivery schedule in the scheduling agreement.
- The saved information are the basis for the here-described difference-analysis
- The difference analysis offers the possibility to define a time window (+/-), starting from a basis deadline (e.g. current day), in which existing differences shall be displayed
- For each customer deadline the 'development of the delivery schedule quantity' can be analyzed

Analysis example 1:






Comparison of the delivery schedule quantities 'scheduling agreement' and 'IDoc' according to sold-to party and material



## Selection of differences

Program Edit Goto System Help

Bensberg GmbH - SD/402102/Delins

Sold-to party  to    
 Customer material  to    
 Material  to    
 Plant  to    
 Scheduling agreement  to    
 Time window from current date  Past  Future  
 Display zero differences   
 Use only last idoc of schedule

Status

Posting condition of IDOC  not posted  posted

Selection

Delivery schedule type  Forecast DS  JIT DS  
 Deadline date type  Day  Week  Month

Sort

Customer, Material   
 Material

Time window in days weeks and months

Aggregation, here to weeks

Sort key

# Result

The differences determined in the selected period are displayed according to sold-to party, material and week:

Differences in delivery schedule comparison by customer and material							24.05.2006 13:06:23	
Forecast DS - Time window differences - 001 / + 010 Weeks								
Sold-to party		550000		BMW, München				
Date	Material	Qty. sched. agreem.	Qty. IDOC	Deviation Qty.	Deviation %			
W 17.2006	10002	864	1.296	432	50,00			
W 18.2006	10002	951	864	87-	9,15-			
W 19.2006	10002	951	1.296	345	36,28			
W 20.2006	10002	950	1.296	346	36,42			
W 21.2006	10002	950	864	86-	9,05-			
W 22.2006	10002	950	1.296	346	36,42			
W 23.2006	10002	972	1.188	216	22,22			
	10002	6.588	8.100	1.512	22,95			
W 18.2006	10021	1.380	1.150	230-	16,67-			
W 19.2006	10021	1.380	1.150	230-	16,67-			
W 20.2006	10021	1.380	2.300	920	66,67			
W 21.2006	10021	1.380	1.150	230-	16,67-			
W 22.2006	10021	1.380	1.150	230-	16,67-			
W 23.2006	10021	1.725	1.438	287-	16,64-			
	10021	8.625	8.338	287-	3,33-			
		15.213	16.438	1.225	8,05			

The magnifying glass branches to the detail analysis of the difference:

1. Display of the involved scheduling agreements
2. Comparison of schedule lines in the scheduling agreements (old) and the schedule lines IDoc (new)

## ALV-Analysis (Advanced list viewer)

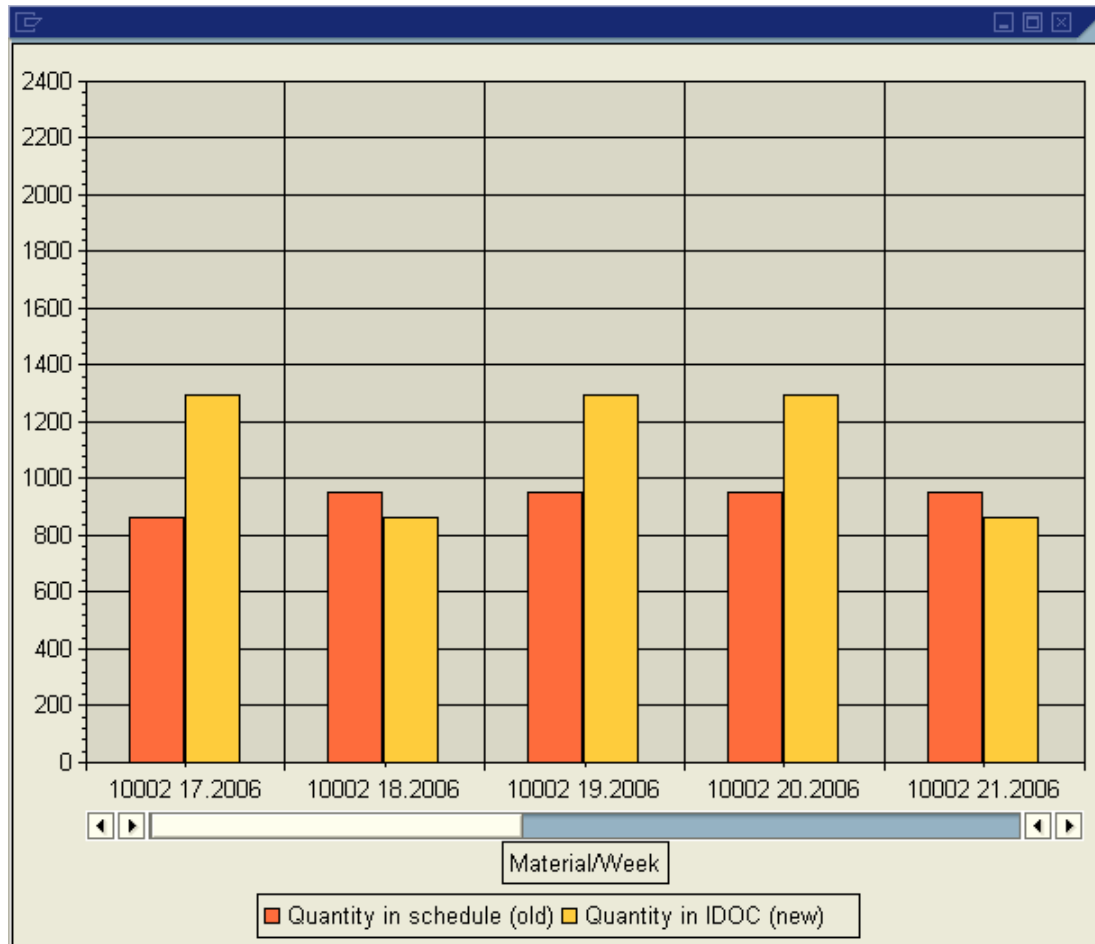
Display of the differences in a standard ALV-analysis, upon which each user obtains the possibility to structure the user interface individually (subtotals, sort keys etc.):

The screenshot shows the SAP ALV-Analysis interface. The title bar reads "System Help". Below it is a toolbar with various icons. The main title is "Bensberg GmbH - Differences IDOC-Transfer DELINS". Below the title is another toolbar with icons for filtering and sorting. The main table displays data with columns: SOrg., DChl, Dv, Sold-to pt, Ship-to, Material, Cust.material, Week, Σ Quantity in schedule (o..., Σ Quantity in IDOC (new), Σ Difference, and SU. The table is grouped by Material (10002 and 10021) and includes subtotals for each group and a grand total at the bottom.

SOrg.	DChl	Dv	Sold-to pt	Ship-to	Material	Cust.material	Week	Σ Quantity in schedule (o...	Σ Quantity in IDOC (new)	Σ Difference	SU
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	17.2006	864	1.296	432	PC
0001	01	01	550000	550100		42 8T4 Z5R ED	18.2006	951	864	87-	PC
0001	01	01	550000	550100		42 8T4 Z5R ED	19.2006	951	1.296	345	PC
0001	01	01	550000	550100		42 8T4 Z5R ED	20.2006	950	1.296	346	PC
0001	01	01	550000	550100		42 8T4 Z5R ED	21.2006	950	864	86-	PC
0001	01	01	550000	550100		42 8T4 Z5R ED	22.2006	950	1.296	346	PC
0001	01	01	550000	550100		42 8T4 Z5R ED	23.2006	972	1.188	216	PC
								<b>6.588</b>	<b>8.100</b>	<b>1.512</b>	<b>PC</b>
0001	01	01	550000	550100	10021	41 8T3 Z22 F4	18.2006	1.380	1.150	230-	PC
0001	01	01	550000	550100		41 8T3 Z22 F4	19.2006	1.380	1.150	230-	PC
0001	01	01	550000	550100		41 8T3 Z22 F4	20.2006	1.380	2.300	920	PC
0001	01	01	550000	550100		41 8T3 Z22 F4	21.2006	1.380	1.150	230-	PC
0001	01	01	550000	550100		41 8T3 Z22 F4	22.2006	1.380	1.150	230-	PC
0001	01	01	550000	550100		41 8T3 Z22 F4	23.2006	1.725	1.438	287-	PC
								<b>8.625</b>	<b>8.338</b>	<b>287-</b>	<b>PC</b>
								<b>15.213</b>	<b>16.438</b>	<b>1.225</b>	<b>PC</b>

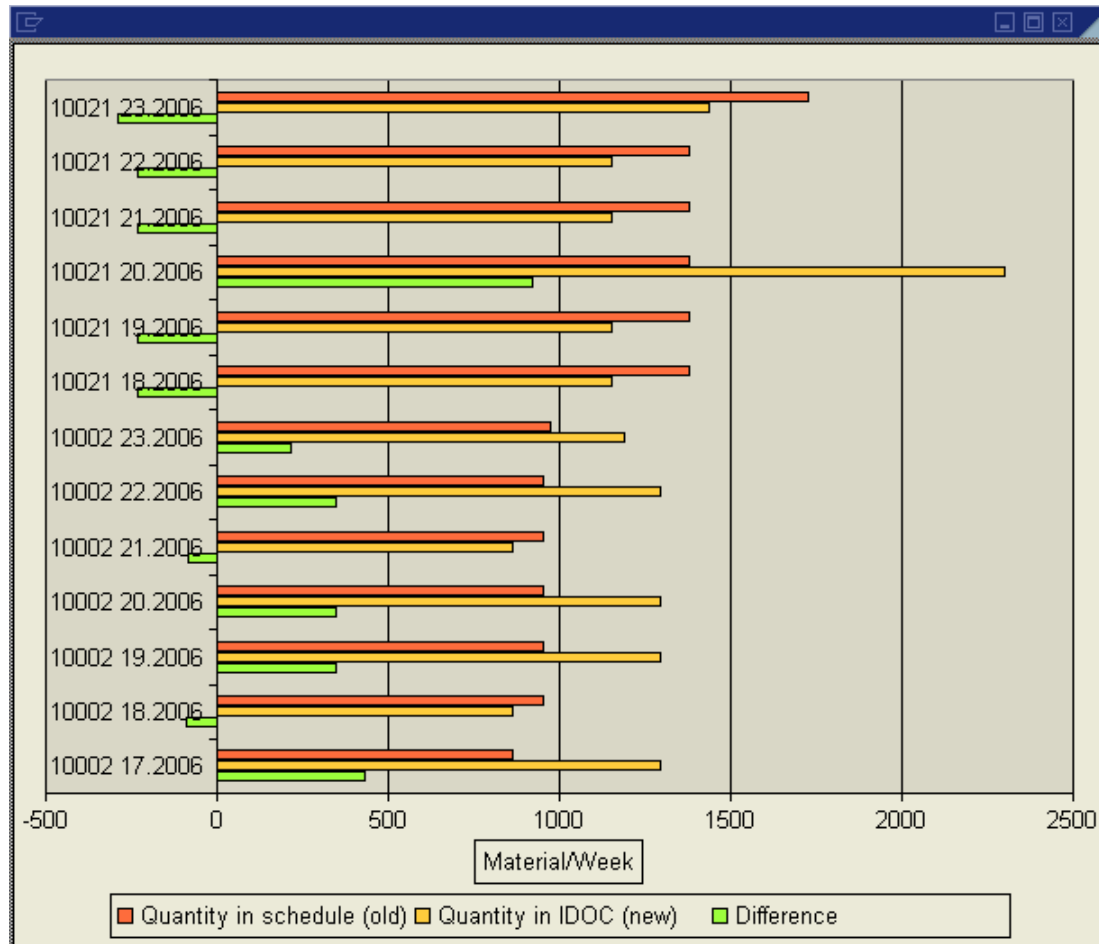
## Graphic based on the ALV-Analysis

Example of a graphic based on the ALV-analysis, in this case according to material and weeks: red = quantity in scheduling agreement (old), yellow = quantity in IDoc (new):



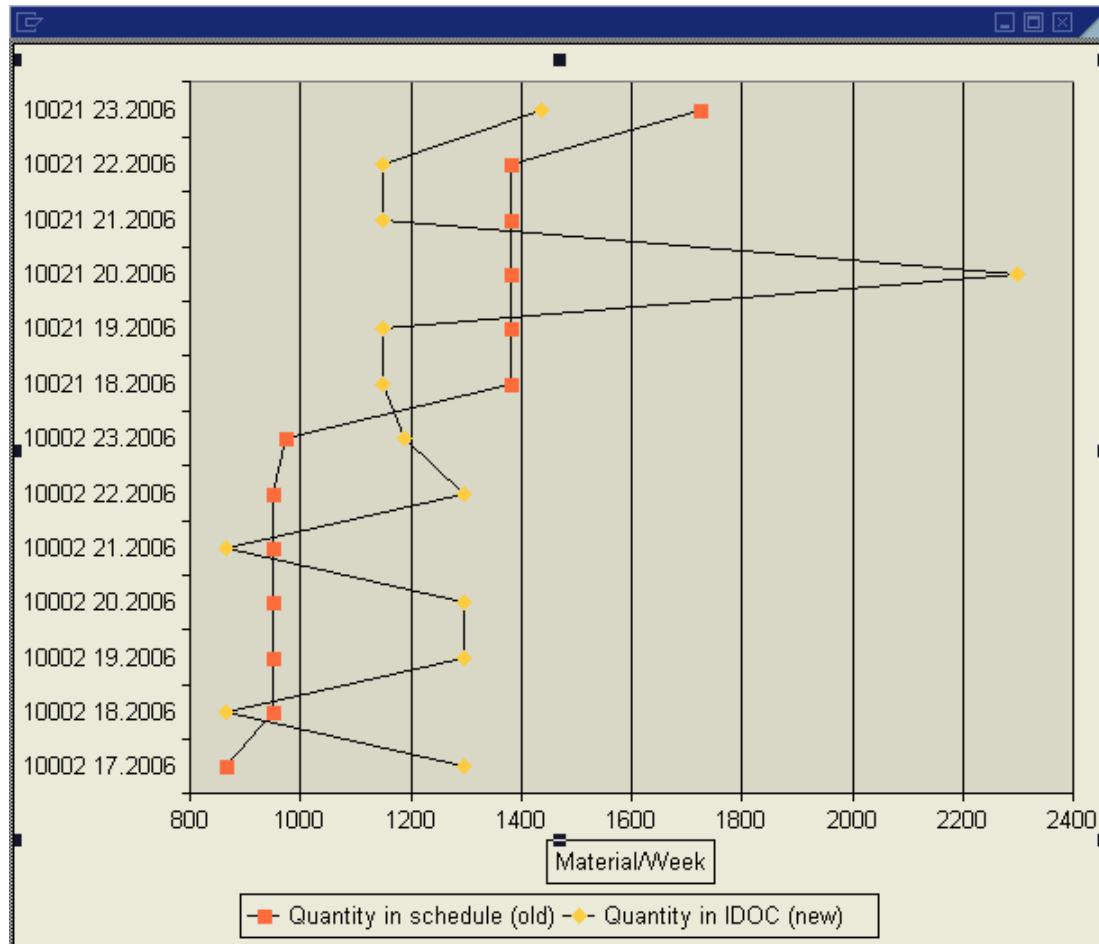
## Graphic based on the ALV-Analysis

A further example of a graphic, in this case additionally displaying the difference (+/-) (green):



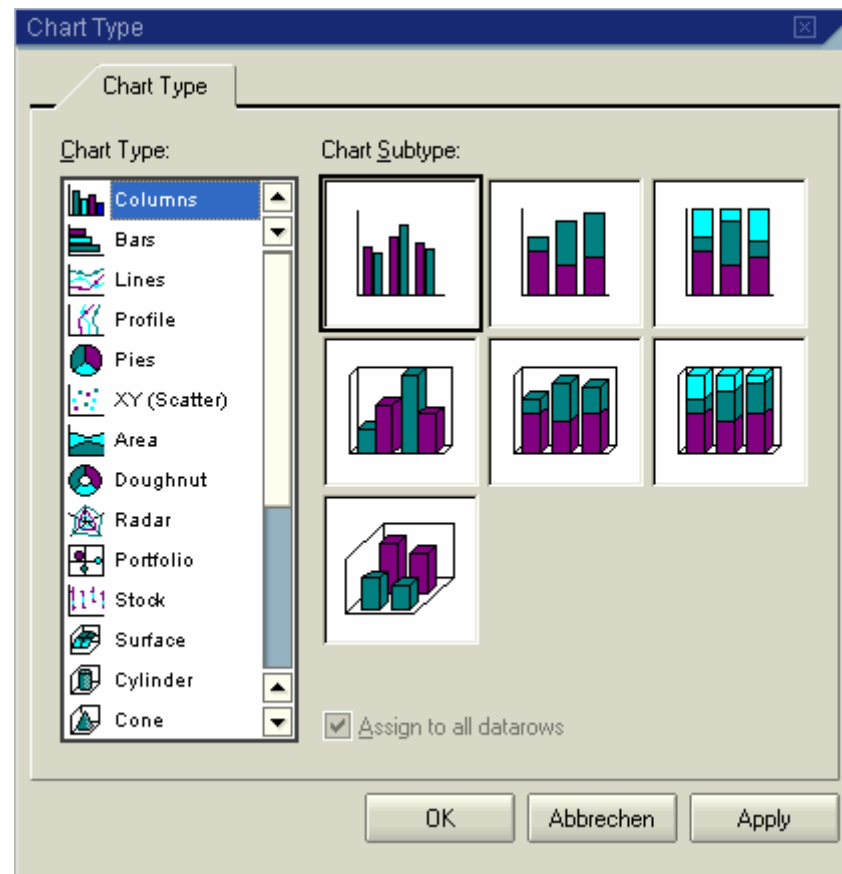
## Graphic based on the ALV-Analysis

A further example of a graphic, in this case a profile graphic:



## Graphic based on the ALV-Analysis

Further graphic options, which individually can be created by the user:



Analysis example 2:

Development of a delivery schedule quantity  
in regard to a deadline within a selectable  
period



## Quantity development of a customer deadline

Display of the delivery schedule quantities of week 17.2006 at the respective time of the transfers:

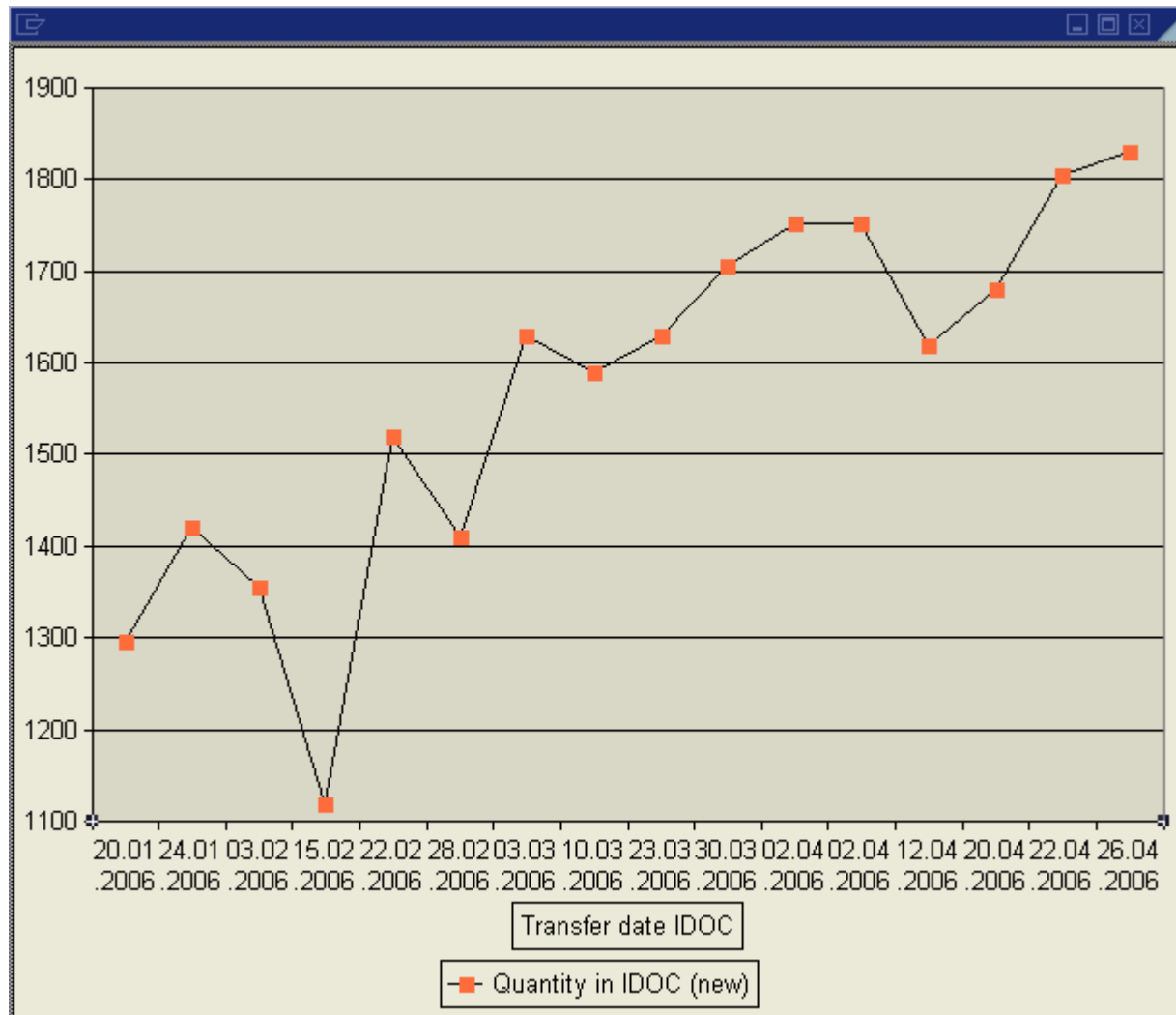
System Help

*Bensberg GmbH - Developing of customer schedule dates*

SOrg.	DChl	Dv	Sold-to party	Ship-to party	Material	Cust.material	Document	Week	Quantity in IDOC (new)	SU	Transfer date IDOC
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.296	PC	20.01.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.420	PC	24.01.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.355	PC	03.02.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.120	PC	15.02.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.520	PC	22.02.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.410	PC	28.02.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.630	PC	03.03.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.590	PC	10.03.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.630	PC	23.03.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.705	PC	30.03.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.753	PC	02.04.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.753	PC	02.04.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.620	PC	12.04.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.680	PC	20.04.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.805	PC	22.04.2006
0001	01	01	550000	550100	10002	42 8T4 Z5R ED	30022112	17.2006	1.830	PC	26.04.2006

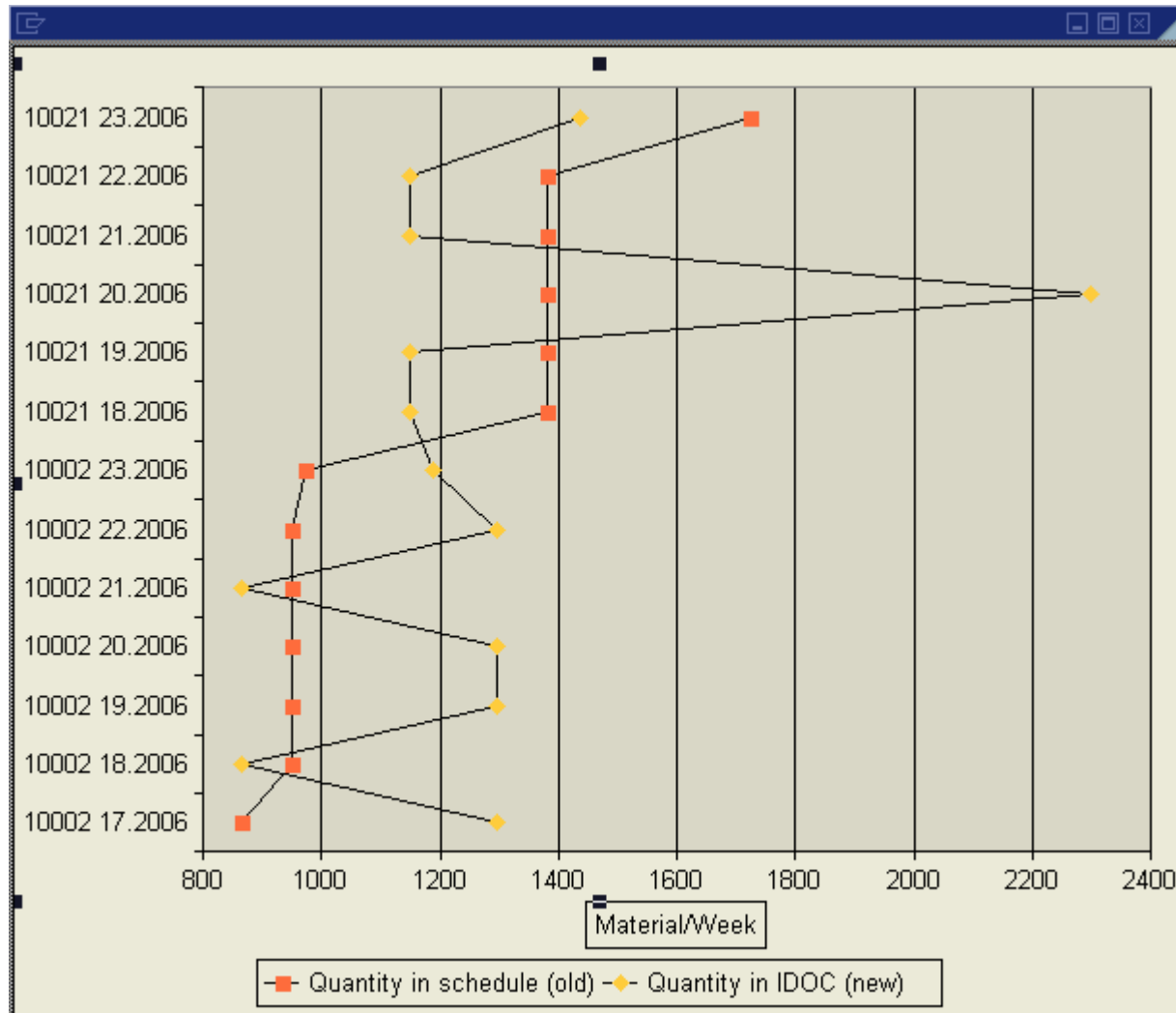
# Quantity development of a customer deadline

Graphical representation of the quantity development of week 17.2006



# Quantity development of a customer deadline

Further example of a graphic:



Analysis example 3:

Comparison of an IDoc-delivery schedule with  
an arbitrary scheduling agreement history

## Available delivery schedules histories

At a time 2 delivery schedules can be selected and compared in regard to daily, weekly and monthly deadlines

System Help

**Bensberg GmbH - SD/402102/Delins**

Day schedule Week schedule Month schedule

Customer material	Material	Weight/Unit	Stock	Safety stock
42 8T4 Z5R ED	10002	10,0 KG	1.108.225 ST	1.000 ST
AL-Connector SS1				

ShAg	30000017	Order no.	2443-22	Cust.plant 001	Unloading pt A-01
Creation time DS	IDOC	Number DS	Date DS	Cust.-CQR	
<input type="checkbox"/> 21.10.2004 15:21:22	IDOC	44895-206	01.10.2001	0	
<input type="checkbox"/> 01.05.2006 12:36:34	*	44895-212	01.10.2001	1.000	
<input type="checkbox"/> 01.05.2006 12:27:50		44895-211	01.10.2001	1.000	
<input type="checkbox"/> 18.12.2005 21:31:54		44895-210	01.10.2001	1.000	
<input type="checkbox"/> 14.08.2005 15:22:50		44895-209	01.10.2005	0	
<input type="checkbox"/> 14.08.2005 15:19:46		44895-208	01.10.2001	0	
<input type="checkbox"/> 24.07.2005 19:35:38		44895-207	01.10.2001	0	
<input type="checkbox"/> 06.05.2005 14:13:27		44895-206	01.10.2001	0	
<input type="checkbox"/> 21.10.2004 15:23:06		1	21.10.2004	0	

Available histories

IDoc = new DS

\* = current DS in scheduling agreement

others = saved history

## Comparison of 2 delivery schedules histories

Comparison of the quantities old/new (here in days) with presentation of the difference:

### Bensberg GmbH - SD/402102/Delins

<input checked="" type="checkbox"/> Day schedule <input checked="" type="checkbox"/> Week schedule <input checked="" type="checkbox"/> Month schedule							
Delivery schedule comparision				by	D A Y S		24.05.2006 14:12:25
Scheduling agreement	:	30000017 LZ					
Customer material	:	42 8T4 Z5R ED					
Material	:	10002		AL-Connector SS1			
Customer	:	550000		BMW			
Plant / Unloading point	:	001	A-01				
Purchase order data	:	00.00.0000		2443-22			
DS old	:	44895-211	of	01.10.2001	Cust.CQR	1.000	IDOC 0000209001
DS new	:	44895-212	of	01.10.2001	Cust.CQR	1.000	IDOC 0000209005
Schedule line	DS old	DS new		Difference		Difference	
deadline	Quantity	CQ	Quantity	CQ	Quantity	%	
08.05.2006	520	1.960	550	2.040	30	5,77	%
15.05.2006	410	2.370	400	2.440	10-	2,44-	%
22.05.2006	500	2.870	510	2.950	10	2,00	%
29.05.2006	410	3.280	410	3.360	0		
01.06.2006	1.500	4.780	1.500	4.860	0		
01.07.2006	1.450	6.230	1.450	6.310	0		
01.08.2006	1.700	7.930	1.700	8.010	0		
01.09.2006	1.550	9.480	1.550	9.560	0		
01.10.2006	1.720	11.200	1.720	11.280	0		
01.11.2006	1.455	12.655	1.455	12.735	0		
01.12.2006	1.280	13.935	1.280	14.015	0		

# IDOC-Separation

## IDOC-Separation

The available IDoc can be pre-grouped according to the following criteria:

Sales area

MRP-controller

Delivering plant

Sales group

Partner role

Specific solutions

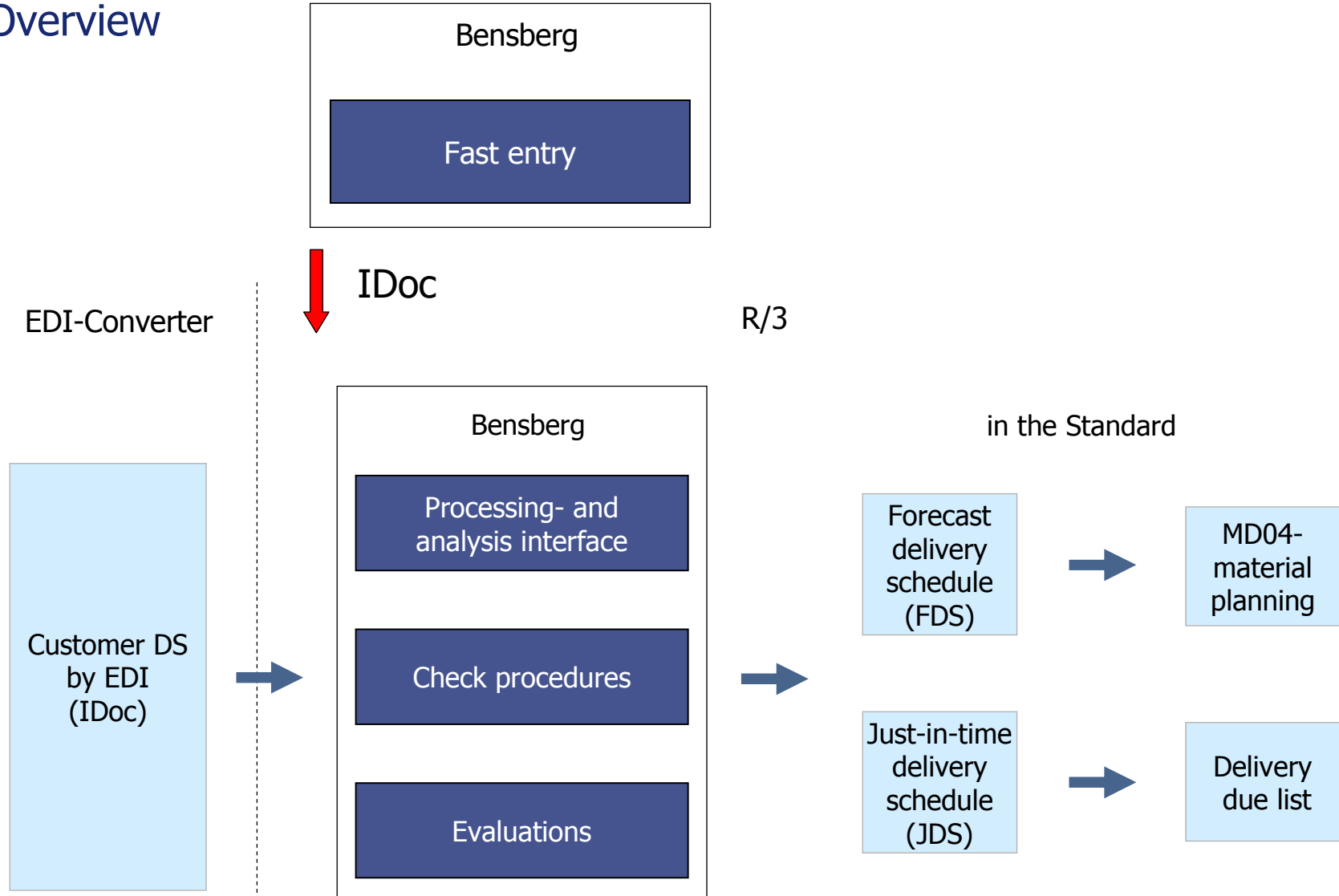


# Fast entry of delivery schedules

## Fast entry of delivery schedules

- Check procedure and analysis also for customers not in the position to transmit EDI-messages
- User interface 'similar' to VA2 with template of delivery schedule
- Creation of DELINS-IDoc

## Overview



## User interface – Fast entry

Creation of the IDoc and call of the  
Bensberg user interface

### Sched.agreem. - Fast entry

 Sched.agreem.data  Data  Distribution on  IDOC-Transfer

Data of the scheduling  
agreement and of the  
new delivery schedule

ShAg :   1 EDI-Sender :   
DS number :  DS date : 24.05.2006  
Cml.qty.rec :  Last delivery :

Schedule lines of the new  
delivery schedule, which, if  
requested, can be copied  
out of the existing delivery  
schedule (delivery  
schedule template)

Tpe	Periode	Time	Qty.	Ty
<input checked="" type="checkbox"/>				



# Technics

## Embedding of the Bensberg component in the SAP R/3

- Add-on to R/3
  - Programmed in "ABAP" (Advanced Business and Application Programming)
  - own, name range (/BEE/) assigned from SAP
  - Thus no interventions in R/3, but access on R/3-data
- Able to run under R/3-releases 4.0 - 4.0 with or without Automotive
- Automatic generation via SAP standard transport  
Language versions: D, E, F, ES

We thank very much you for your time and interest.

If you still have questions and/or need further information  
please don't hesitate to contact us.

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