



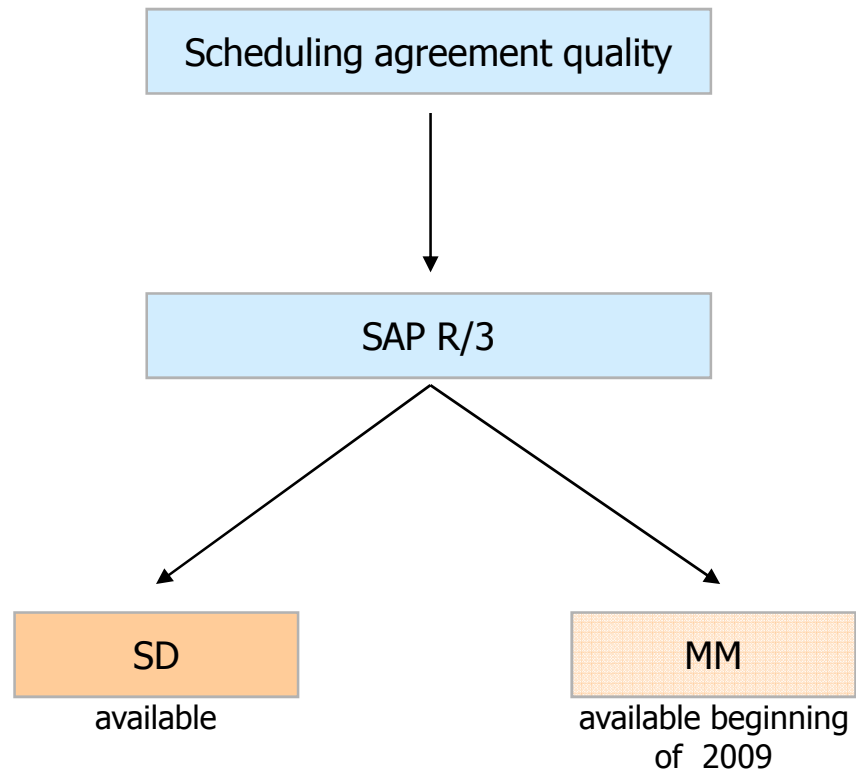
**BENSBERG** 

Enhancement components

Scheduling agreement quality

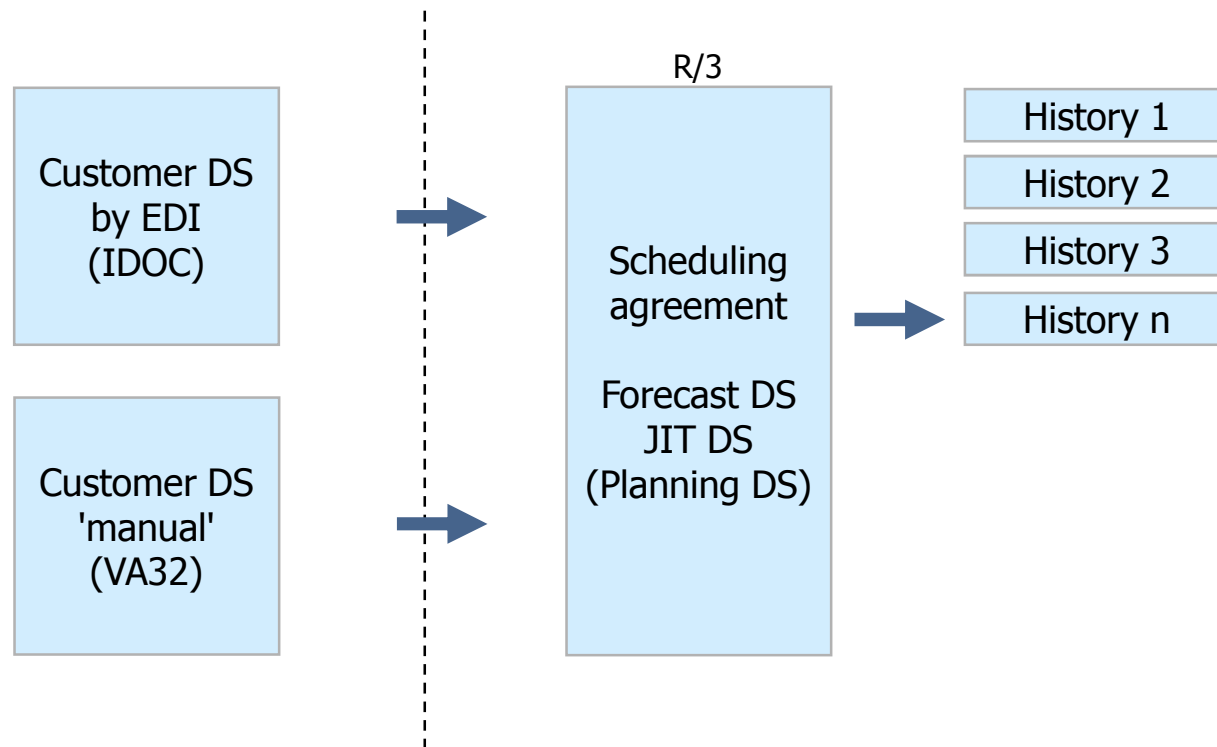
Copyright 2007  
Bensberg Unternehmensberatung GmbH

# Placement



## Delivery schedules (DS)

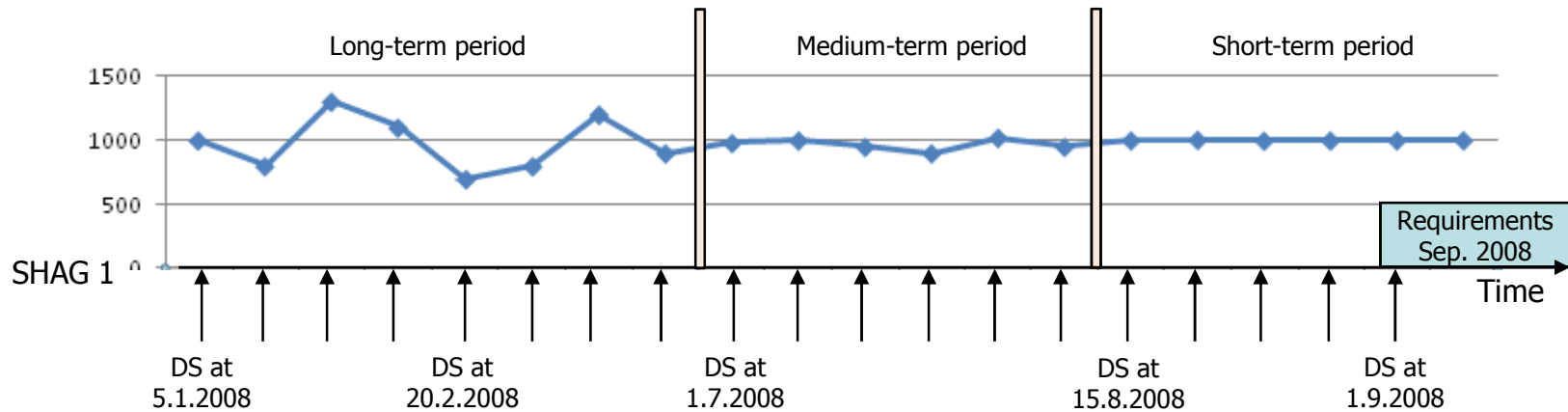
- Customers transmit their requirement quantities as delivery schedules, which are saved in delivery schedule histories in the SAP-system:



The histories of the delivery schedules are the basis of the analysis and evaluation options introduced in the course of this presentation:

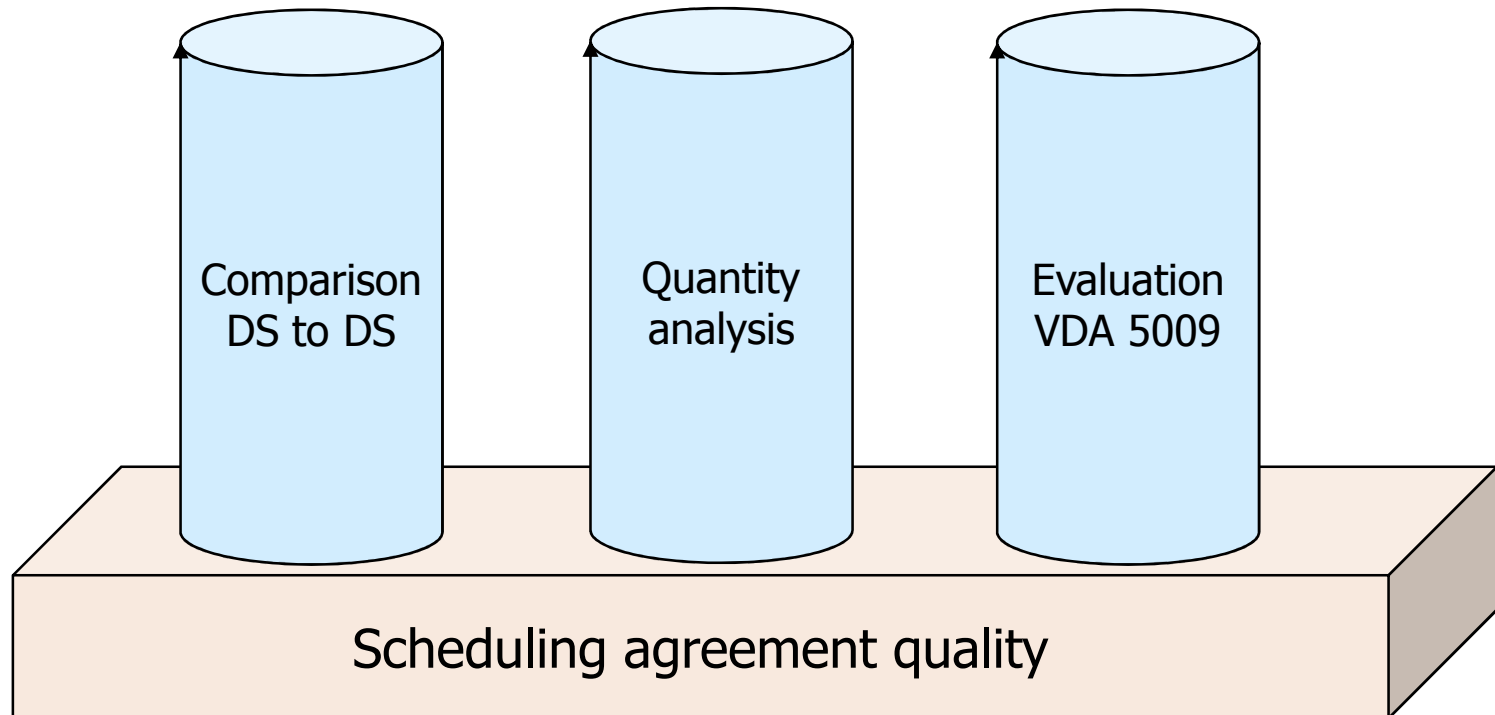
## Requirements fluctuations

- The requirements for a deadline may change with each incoming delivery schedule

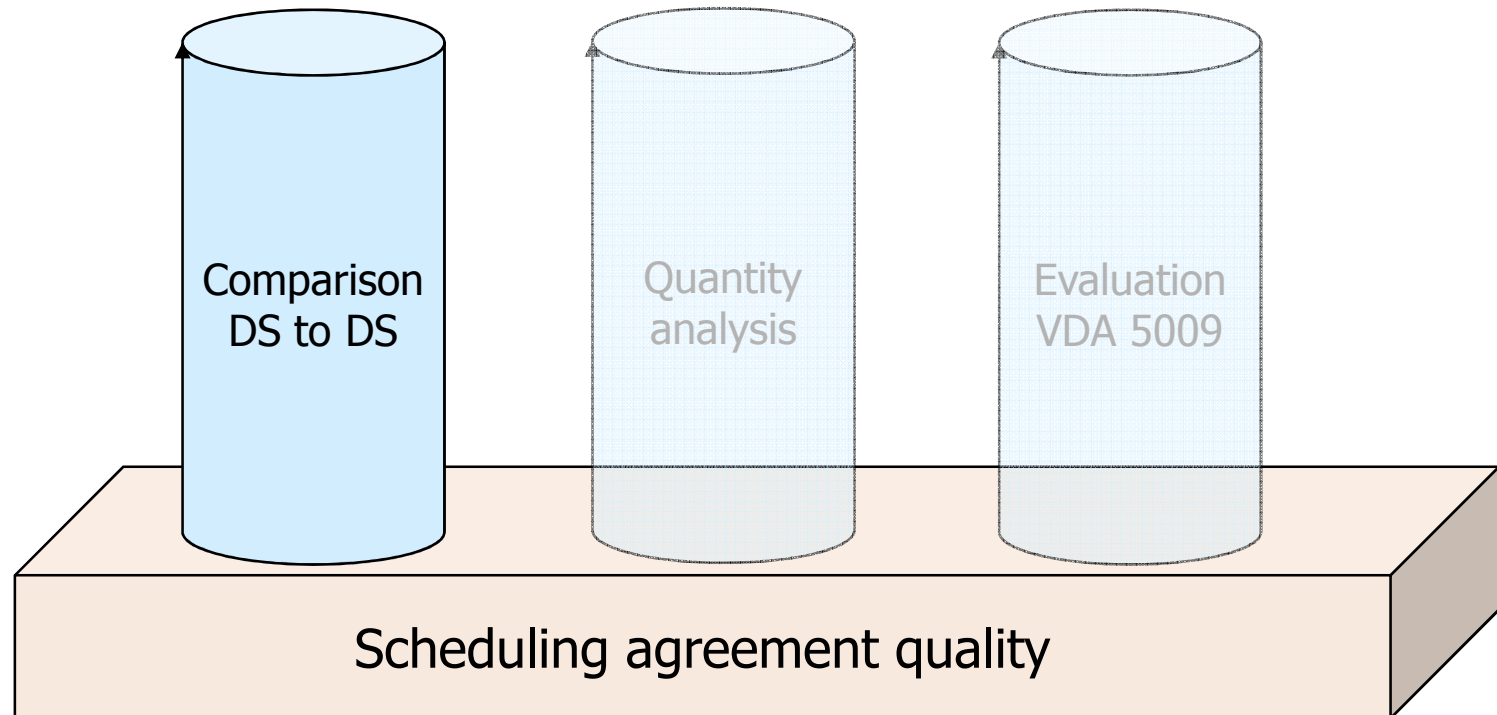


- The closer the requirements fluctuations are to the requirements deadline, the higher are the Trouble-shooting costs

## Procedures of the Scheduling agreement quality



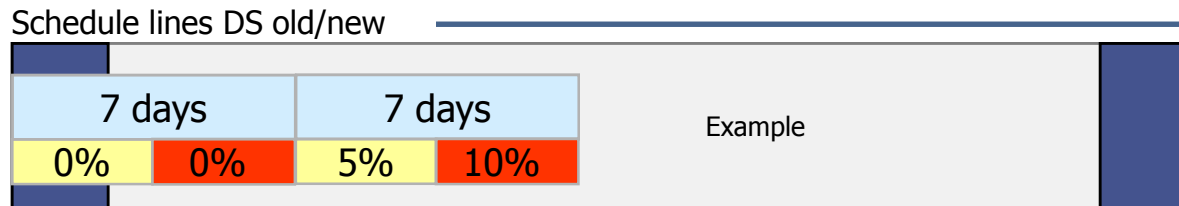
## Comparison of old Delivery schedule with new Delivery schedule



## Comparison of old Delivery schedule with new Delivery schedule

- Monitoring of the quantity deviations of a delivery schedule by regarding the respective predecessor-delivery schedule
  - Does the customer stand to the agreements (e.g. no quantity deviations within the short-term period)?

- Definition of limit values



- Example: For the first 7 days no requirements deviations are permitted, for the following days deviations from 5% obtain a warning indication and from 10% an error indication
  - Definition of limit values in days, weeks and months
  - Definition: global, according to customer, material, plant...
- Operative monitoring if necessary with objection
  - Procedure also available as IDoc-component (DELINS)

## Quantity deviations – Delivery schedule old to Delivery schedule new

- The 1st overview shows the results of the defined monitoring parameters:

Analysis according to sales area, plant and sold-to party

Customer Green Yellow Red Time window Detail information

Scheduling agreement quality according to sold-to party and scheduling agreement 09.12.2008 20:22:39  
 Day schedule Difference in Quantity Delivery schedules 01.01.2008 - 09.12.2008

Sales organization	0001	Sales Org. 001
Distribution channel	01	Distribtn Channel 01
Division	01	Product Division 01
Plant	1000	Bensberg Unternehmensberatung

Sold-to party	Number green	Number yellow	Number red	Number DS
510000 Daimler Chrysler, Stuttgart	136	2	92	
511000 Volkswagen AG, Wolfsburg	54		48	
528000 Daimler Chrysler AG, Germersheim	66		24	
610000 Daimler Chrysler AG, Stuttgart	10	1	17	
631000 AUDI AG, Ingolstadt	32	1	16	
650000 BMW AG, München	8	1	16	
801000 Ford Werke GmbH, Köln 1	35		16	
820000 SMART, Böblingen	5		16	

Parameters

1 W	1 W	1 W
10%	20%	

For this example it has been agreed that quantity deviations within 1 week obtain a warning indication (yellow) when reaching 10% and from 20% an error indication (red). Maximum monitoring period: the first 3 weeks.

The monitoring period starts with the 1st schedule line in delivery schedule, differences in cumulative quantities are considered.



## Quantity deviations – Delivery schedule old to Delivery schedule new

- The detail view shows the single deadlines of a selected sold-to party according to time unit (here week):

System Help SAP

Analysis according to sales area, plant and sold-to party

Time window Customer Material Green Red

Scheduling agreement quality according to sold-to party and scheduling agreement 09.12.2008 18:02:27

Week schedule Difference in Quantity Delivery schedules 01.01.2008 - 09.12.2008

Sales organization 0001 Sales Org. 001  
 Distribution channel 01 Distribtn Channel 01  
 Division 01 Product Division 01  
 Plant 1000 Bensberg Unternehmensberatung

Sold-to party	Material	Delivey sched	19/07	20/07	21/07	22/07	23/07	24/07	25/07	26/07	27/07	28/07
510000	30015541/10	15.05.2007	1.500-	1.500	0	0	0	1.500-	1.500	0	1.500-	1.500
510000	30015547/10	16.05.2007		22-	46-	76-	54-	34-	104-	104-	50-	71-
510000	30015549/10	15.05.2007						0				
510000	30015550/10	15.05.2007			0	0	0	0	0	0	1.400-	1.400
510000	30015553/10	15.05.2007		1.200	1.200-	0	0	1.200	1.200-	0	0	1.200
510000	30015554/10	15.05.2007	1.200-	2.400	1.200-	0	0	1.200	1.200-	0	1.200	0
510000	30015557/10	15.05.2007	3.733-	2.547	166	304-	1.078	58-	2-	72-	54	24
510000	30015558/10	15.05.2007	266-	207	130	58-	40-	31-	6	8-	16	4
510000	30015560/10	15.05.2007	4.792-	3.584	326	492-	1.080	100-	84-	2-	106	6-
510000	30015561/10	15.05.2007		220-	220	0	0	0	0	0	0	0
510000	30016641/10	16.05.2007			0	0	0	50	50	50-	50-	50
510000	30016642/10	16.05.2007					50-	50	50	0	50	0
510000	30016643/10	16.05.2007			0	0	0	0	0	200	100-	100
510000	30016644/10	16.05.2007				0	0	100-	200	100	100-	200

← Requirements week

Result:  
Deviation  
in quantity

The colored-indicated quantities are within the monitored period. A yellow indication means that the deviation for the schedule line week is > 10%, in case of a red indication > 20%.

This analysis can also be started as ALV.

## Quantity deviations – Delivery schedule old to Delivery schedule new

- The detail view shows the single deadlines of a selected sold-to party according to time unit (here week):

System Help SAP

Analysis according to sales area, plant and sold-to party

Customer Green Yellow Red Time window Detail information

Scheduling agreement quality according to sold-to party and scheduling agreement 09.12.2008 18:07:26

Week schedule Difference in Percent Delivery schedules 01.01.2008 - 09.12.2008

Sales organization	0001	Sales Org. 001
Distribution channel	01	Distribtn Channel 01
Division	01	Product Division 01
Plant	1000	Bensberg Unternehmensberatung

Sold-to party	Material	Delivey sched	19/07	20/07	21/07	22/07	23/07	24/07	25/07	26/07	27/07	28/07	
510000	30015541/10	15.05.2007	100-	50	0	0	0	33-	50	0	33-	50	←
510000	30015547/10	16.05.2007		100-	100-	100-	100-	100-	100-	100-	52-	99-	
510000	30015549/10	15.05.2007						0					
510000	30015550/10	15.05.2007			0	0	0	0	0	0	50-	100	
510000	30015553/10	15.05.2007		100	50-	0	0	100	50-	0	0	100	
510000	30015554/10	15.05.2007	100-	100	50-	0	0	100	50-	0	100	0	
510000	30015557/10	15.05.2007	100-	26	1	3-	12	0	0	1-	0	0	
510000	30015558/10	15.05.2007	100-	14	7	5-	3-	1-	0	0	1	0	
510000	30015560/10	15.05.2007	100-	53	3	7-	19	1-	1-	0	1	0	
510000	30015561/10	15.05.2007		50-	25	0	0	0	0	0	0	0	
510000	30016641/10	16.05.2007			0	0	0	0	20	20	17-	20	
510000	30016642/10	16.05.2007					100-	17	25	0	20	0	
510000	30016643/10	16.05.2007			0	0	0	0	0	40	17-	20	
510000	30016644/10	16.05.2007				0	0	14-	50	20	17-	50	

Requirements week

Result:  
Deviation  
in %

The colored-indicated percent values are within the monitored period. A yellow indication means that the deviation for the schedule line week is > 10%, in case of a red indication > 20%.

This analysis can also be started as ALV.

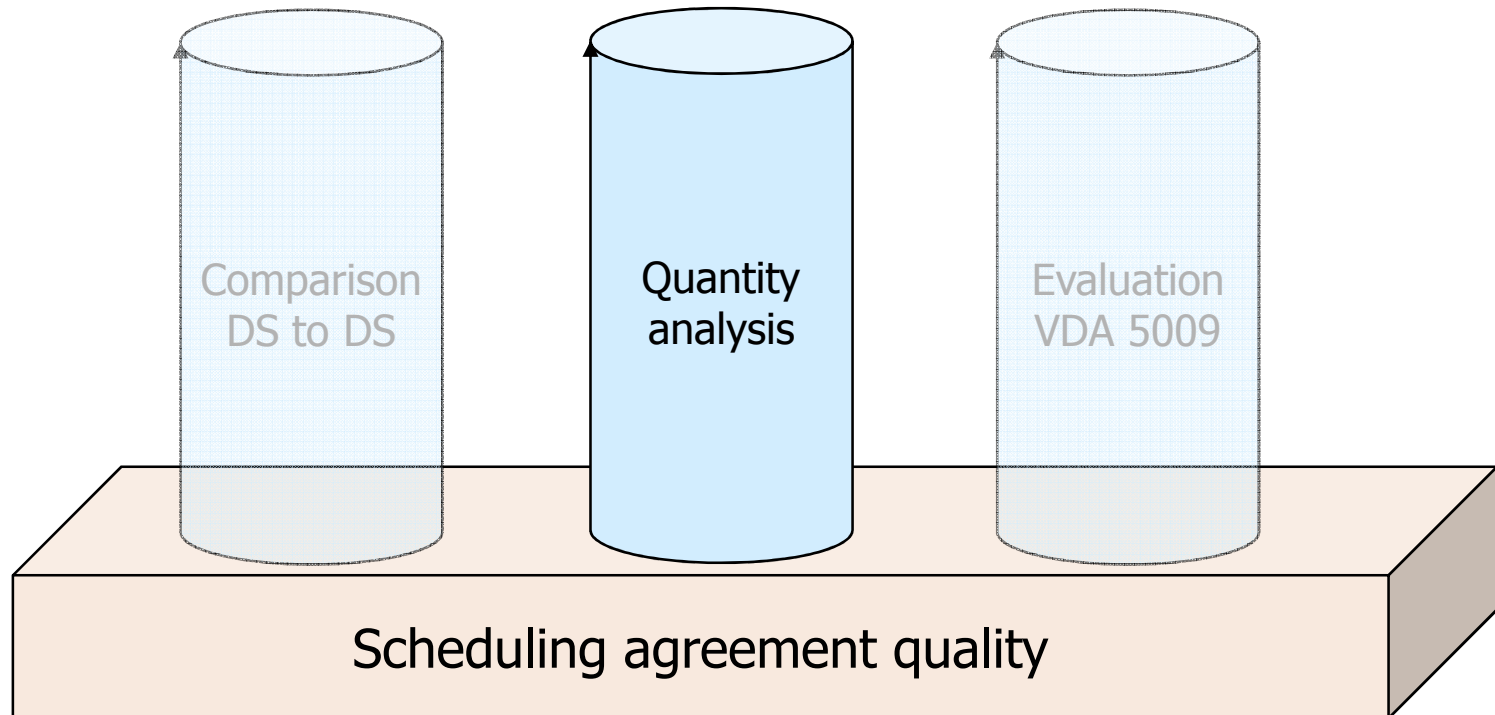
## Quantity deviations – Delivery schedule old to Delivery schedule new

- Further details in respect to the deviation:

Display of the compared delivery schedules

Quantity differences between delivery schedule old <-> new							
Scheduling agreement	30015557						
Delivery schedule new	282		15.05.2007				
Delivery schedule old	281		08.05.2007				
Sold-to party	510000	Daimler Chrysler, 70546 Stuttgart					
Material	10002	AL-Verbindung SS1					
Cumulated quantity old / new	232.835	/	248.835				
Analysis by week							
Schedule line	DS old		DS new		Difference		Difference
deadline	Quantity	CQ	Quantity	CQ	Quantity	%	
Week 19.2007	3.733	252.568	0	248.835	3.733-	Deleted	
Week 20.2007	9.792	262.360	12.339	261.174	2.547	26,01 %	
Week 21.2007	14.170	276.530	14.336	275.510	166	1,17 %	
Week 22.2007	10.482	287.012	10.178	285.688	304-	2,90- %	
Week 23.2007	9.052	296.064	10.130	295.818	1.078	11,91 %	
Week 24.2007	13.524	309.588	13.466	309.284	58-	0,43- %	
Week 25.2007	14.814	324.402	14.812	324.096	2-	0,01- %	
Week 26.2007	14.522	338.924	14.450	338.546	72-	0,50- %	
Week 27.2007	14.354	353.278	14.408	352.954	54	0,38 %	
Week 28.2007	14.518	367.796	14.542	367.496	24	0,17 %	
Week 29.2007	13.996	381.792	13.984	381.480	12-	0,09- %	
Week 30.2007	12.160	393.952	12.134	393.614	26-	0,21- %	
Week 31.2007	10.848	404.800	10.850	404.464	2	0,02 %	
Week 32.2007	11.097	415.897	11.100	415.564	3	0,03 %	
Week 33.2007	11.095	426.992	11.100	426.664	5	0,05 %	
Week 34.2007	11.095	438.087	11.100	437.764	5	0,05 %	
Week 35.2007	11.095	449.182	11.098	448.862	3	0,03 %	
Week 36.2007	14.300	463.482	14.305	463.167	5	0,03 %	
Week 37.2007	14.300	477.782	14.305	477.472	5	0,03 %	
Week 38.2007	14.300	492.082	14.305	491.777	5	0,03 %	

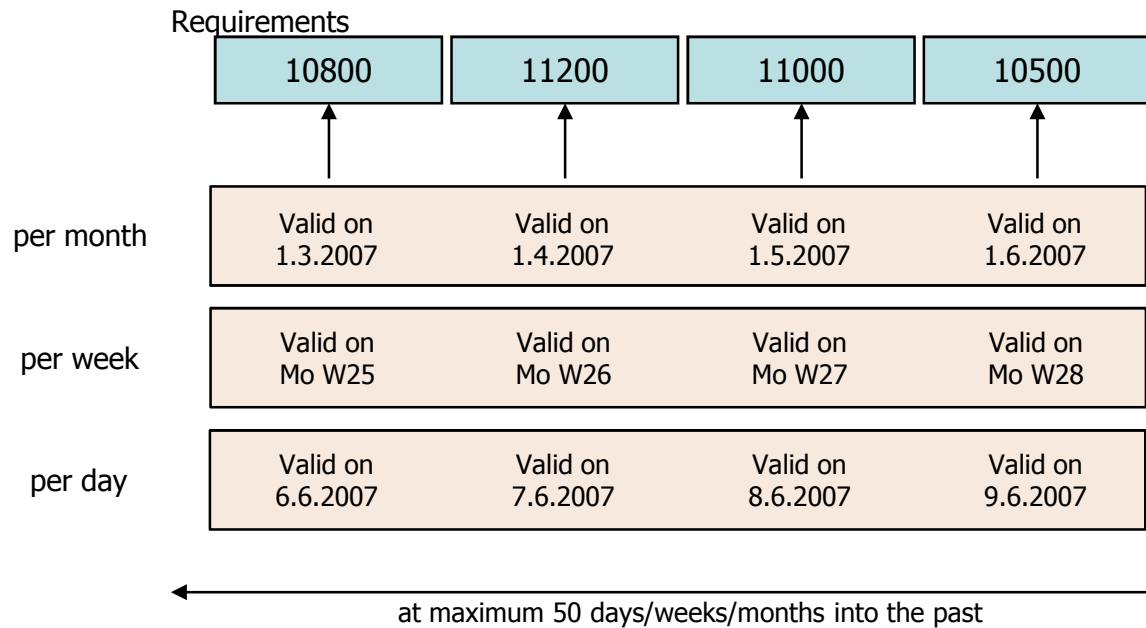
## Quantity analysis



## Quantity analysis

- Display of the requirements development and their fluctuations
  - Which requirements were/are available at the defined points in time
  - Analysis of day, week and month deadlines (with harmonization)
  - Results:
    - Absolute quantities
    - Average quantity of all delivery schedules within a time unit (day, week, month)
    - Difference in respect to the predecessor as quantity and in %
    - Delivery quantity of the time unit
    - JIT quantities of the time unit
    - Evaluation key figure according to VDA 5009
    - Value (standard price or net value of the scheduling agreement)

# Quantity analysis



## Analysis requirements for

Day	Week	Month
1.6.2007	Week 26/2007	June 2007
2.6.2007		
3.6.2007		
4.6.2007	Week 27/2007	
5.6.2007		
6.6.2007		
...	Week 28/2007	
28.6.2007		
29.6.2007		
30.6.2007	Week 29/2007	

- If necessary day, week and month quantities are distributed/ cumulated and assigned to the respective time unit by considering the calendars
- It is possible to parallel analyze several requirements deadlines
- By a dynamic monitoring period either the current or an arbitrary situation of the past can be analyzed
- An offsetting of FDS against JDS is possible

## Quantity analysis – Example month

- Example:  
Analysis of the quantity development of all schedule lines for month 07.2008, 6 months into the past starting on 31.07.2008 each time at the 1st of the month:

Selection:

Basis date of the analysis

---

Total quantity for the schedule line period

Month   to

Months back  Months

Day of the month (1-31)

Result with complete aggregation:

**Analysis Quantity development of schedule line period**

Comparison

Analysed schedule line period for month, Basis date 31.07.2008

Period	01.02.2008	01.03.2008	01.04.2008	01.05.2008	01.06.2008	01.07.2008
07.2008	26.413	22.140	28.734	27.745	27.178	28.434

## Quantity analysis – Example month

Same result:  
Result with aggregation  
to customer and material:

Analysed schedule line period for month, Basis date 31.07.2008									
Period	Sold-to pt	Material	01.02.2008	01.03.2008	01.04.2008	01.05.2008	01.06.2008	01.07.2008	
07.2008	510000	A7-96043	4.800	4.800	4.400	5.310	5.000	4.950	
07.2008		AX-84562	6.804	5.832	6.696	7.149	6.719	6.200	
07.2008		IU-38721	1.360	1.360	1.632	1.636	1.904	1.904	
07.2008		JU-12234	60	60	60	60	60	60	
07.2008		LH-98875	439	351	350	350	350		
07.2008		LK-78885	60	60	60	60	60	60	
07.2008		MN-98995	60	60	60	60	60	60	
07.2008		NV-77834	204	204	204	95	95	108	
07.2008		OI-78342	438	438	438	438	350	498	
07.2008		OP-56335	1.185	1.185	1.395	1.384	1.373	1.422	
07.2008		PU-89994	60	60	60				
07.2008		RT-89345				30			
07.2008		TZ-56534	4.000	3.200	3.200	4.000	4.000	4.000	
07.2008		UU-98972	1.600	1.200	1.500	1.501	1.500	1.700	
07.2008		VE-19887	1.500	1.500	1.500	1.502	1.502	1.500	
07.2008		VH-29996	2.000	1.500	1.500	1.508	1.510	1.500	
07.2008		YY-85946			144	162	162	162	
07.2008	ZZ-78771	1.600	1.250	1.500	1.450	1.450	1.650		

Columns for additional criterions can be activated (Layout)



## Quantity analysis – Example month

- Each result cell is interactive and branches to the display of the single schedule lines in the delivery schedule:

Analysed schedule line period for month, Basis date 31.07.2008

Period	01.02.2008	01.03.2008	01.04.2008	01.05.2008	01.06.2008	01.07.2008
07.2008	26.413	22.140	28.734	27.745	27.178	28.434

Detail data for the moment of valuation

Detail data for the schedule line period: M 07.2008 - until: 01.07.20

Period	Sold-to pt	Plant	SD Doc.	Item	Div. sched.	DivSchDate	DS valid from	DS valid until	Quantity at	Order qty
07.2008	510000	1000	3000025	40	107	09.06.2008	09.06.2008	02.07.2008	01.07.2008	3.258,000
07.2008		1000	3000025	50	102	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.600,000
07.2008		1000	3000025	60	107	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.848,000
07.2008		1000	3000025	70	107	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.800,000
07.2008		1000	3000025	80	100	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.620,000
07.2008		1000	3000025	90	100	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.800,000
07.2008		1000	3000025	100	107	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.782,000
07.2008		1000	3000025	140	107	09.06.2008	09.06.2008	02.07.2008	01.07.2008	3.000,000
07.2008		1000	3000025	150	107	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.620,000
07.2008		1000	3000025	160	101	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.632,000
07.2008		1000	3000025	180	100	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.760,000
07.2008		1000	3000025	220	110	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.776,000
07.2008		1000	3000025	230	111	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.728,000
07.2008		1000	3000025	240	107	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.680,000
07.2008		1000	3000025	250	107	09.06.2008	09.06.2008	02.07.2008	01.07.2008	1.530,000
										<b>28.434,000</b>

## Quantity analysis – Example month

- Comparison of 2 values with detail analysis:

Analysed schedule line period for month, Basis date 31.07.2008

Period	01.02.2008	01.03.2008	01.04.2008	01.05.2008	01.06.2008	01.07.2008
<u>07.2008</u>	26.413	22.140	28.734	27.745	27.178	28.434

Comparison

Vergleich von Einteilungsmengen

Comparison of 2 points in time for the schedule line period: M 07.2008

Period	Sold-to pt	Plant	SD Doc.	Item	Quantity at	Order qty	Quantity at	Order qty	Differe...	Perce...
<u>07.2008</u>	510000	1000	3000002	40	01.06.2008	2.920,000	01.07.2008	3.258,000	338,000	11,575
<u>07.2008</u>		1000	3000002	50	01.06.2008	1.600,000	01.07.2008	1.600,000	0,000	0,000
<u>07.2008</u>		1000	3000002	60	01.06.2008	1.584,000	01.07.2008	1.848,000	264,000	16,667
<u>07.2008</u>		1000	3000002	70	01.06.2008	1.740,000	01.07.2008	1.800,000	60,000	3,448
<u>07.2008</u>		1000	3000002	80	01.06.2008	1.620,000	01.07.2008	1.620,000	0,000	0,000
<u>07.2008</u>		1000	3000002	90	01.06.2008	1.680,000	01.07.2008	1.800,000	120,000	7,143
<u>07.2008</u>		1000	3000002	100	01.06.2008	1.716,000	01.07.2008	1.782,000	66,000	3,846
<u>07.2008</u>		1000	3000002	140	01.06.2008	3.000,000	01.07.2008	3.000,000	0,000	0,000
<u>07.2008</u>		1000	3000002	150	01.06.2008	1.350,000	01.07.2008	1.620,000	270,000	20,000
<u>07.2008</u>		1000	3000002	160	01.06.2008	1.632,000	01.07.2008	1.632,000	0,000	0,000
<u>07.2008</u>		1000	3000002	180	01.06.2008	1.760,000	01.07.2008	1.760,000	0,000	0,000
<u>07.2008</u>		1000	3000002	220	01.06.2008	1.740,000	01.07.2008	1.776,000	36,000	2,069
<u>07.2008</u>		1000	3000002	230	01.06.2008	1.656,000	01.07.2008	1.728,000	72,000	4,348
<u>07.2008</u>		1000	3000002	240	01.06.2008	1.560,000	01.07.2008	1.680,000	120,000	7,692
<u>07.2008</u>		1000	3000002	250	01.06.2008	1.620,000	01.07.2008	1.530,000	90,000	5,556

## Quantity analysis – Displayable values

### Selection:

Display extent			
Absolute quantity	<input checked="" type="checkbox"/>	Average quantity	<input type="checkbox"/>
Dev. Predecessor quantity	<input type="checkbox"/>	Dev. Total quantity	<input type="checkbox"/>
Dev. Predecessor in %	<input type="checkbox"/>	Abw. Total in %	<input type="checkbox"/>
JIT-DS quantities	<input type="checkbox"/>	Delivery quantities	<input type="checkbox"/>
Key figure FQ	<input type="checkbox"/>	Key figure TS	<input type="checkbox"/>

Analysed schedule line period for month, Basis date 31.07.2008

Period	Val.type	01.02.2008	01.03.2008	01.04.2008	01.05.2008	01.06.2008	01.07.2008
07.2008	Absolute quantity	26.413	22.140	28.734	27.745	27.178	28.434
07.2008	Average quantity	25.537,85	23.880	28.007,74	27.373	28.050	25.749,19
07.2008	Dev. Predecessor quan		4.273-	6.594	989-	567-	1.256
07.2008	Dev. Predecessor in %		16,18-	29,78	3,44	2,04	4,62
07.2008	Dev. Total quantity						2.021,00
07.2008	Dev. Total in %						7,65
07.2008	Key figure FQ		7,11	14,63	10,10	8,18	7,43
07.2008	Key figure TS		1-	1-	0,93-	0,94	0,94
07.2008	JIT-DS quantities	0	0	0	0	0	0
07.2008	Delivery quantities	0	0	0	0	0	28.373
07.2008							

## Quantity analysis – VDA 5009

07.2008	Absolute quantity	26.413	22.140	28.734	27.745	27.178	28.434
07.2008	Key figure FQ		7,11	14,63	10,10	8,18	7,43
07.2008	Key figure TS		1-	1-	0,93-	0,94-	0,94-


### Detail information for VDA-evaluation

Bedarf am	Berechnung	Ref.-date	Rqmt. CQ	Ref.rqmt.	Difference	Diff.abs..	Number = 1
01.02.2008	Difference Requirement-Reference quantity	01.07.2008	26.413	28.434	2.021-	2.021	1
01.03.2008	Difference Requirement-Reference quantity	01.07.2008	22.140	28.434	6.294-	6.294	1
01.04.2008	Difference Requirement-Reference quantity	01.07.2008	28.734	28.434	300	300	1
01.05.2008	Difference Requirement-Reference quantity	01.07.2008	27.745	28.434	689-	689	1
01.06.2008	Difference Requirement-Reference quantity	01.07.2008	27.178	28.434	1.256-	1.256	1
	Result 1 = Sum of the absolute differences					10.560	5
	Result 2 = Reference rqmt. * Number Measur.point			142.170			
	Result 3 = Result 1 / Result 2					0,07	
	FQ - Key figure in %					7,43	
	Sum Differences and Sum Differences absolute				9.960-	10.560	
	TS - Key figure					0,94-	

## Quantity analysis – Several requirements deadlines

- It is possible to also analyze several deadlines at the same time, here 7 months:

Selektion:

Month  06.2007 to 12.2007 

Months back  Months

Day of the month (1-31)

Result with complete aggregation:

### Analysis Quantity development of schedule line period

Period	01.01.2007	01.02.2007	01.03.2007	01.04.2007	01.05.2007	01.06.2007
06.2007	91.909,00	91.831,00	78.809,00	102.151,00	101.138,00	101.852,00
07.2007	94.521,00	97.950,00	78.297,00	91.928,00	97.035,00	96.577,00
08.2007	25.300,00	22.249,00	20.339,00	24.177,00	24.750,00	22.556,00
09.2007	90.709,00	90.587,00	76.677,00	92.391,00	94.565,00	102.559,00
10.2007	92.503,00	92.293,00	75.931,00	95.872,00	108.329,00	106.599,00
11.2007	91.227,00	85.850,00	73.891,00	81.898,00	84.640,00	84.371,00
12.2007	48.765,00	43.233,00	37.973,00	47.508,00	51.541,00	59.107,00
	534.934,00	523.993,00	441.917,00	535.925,00	561.998,00	573.621,00

Besides the complete aggregation also other aggregation levels are possible, e.g. customer and material

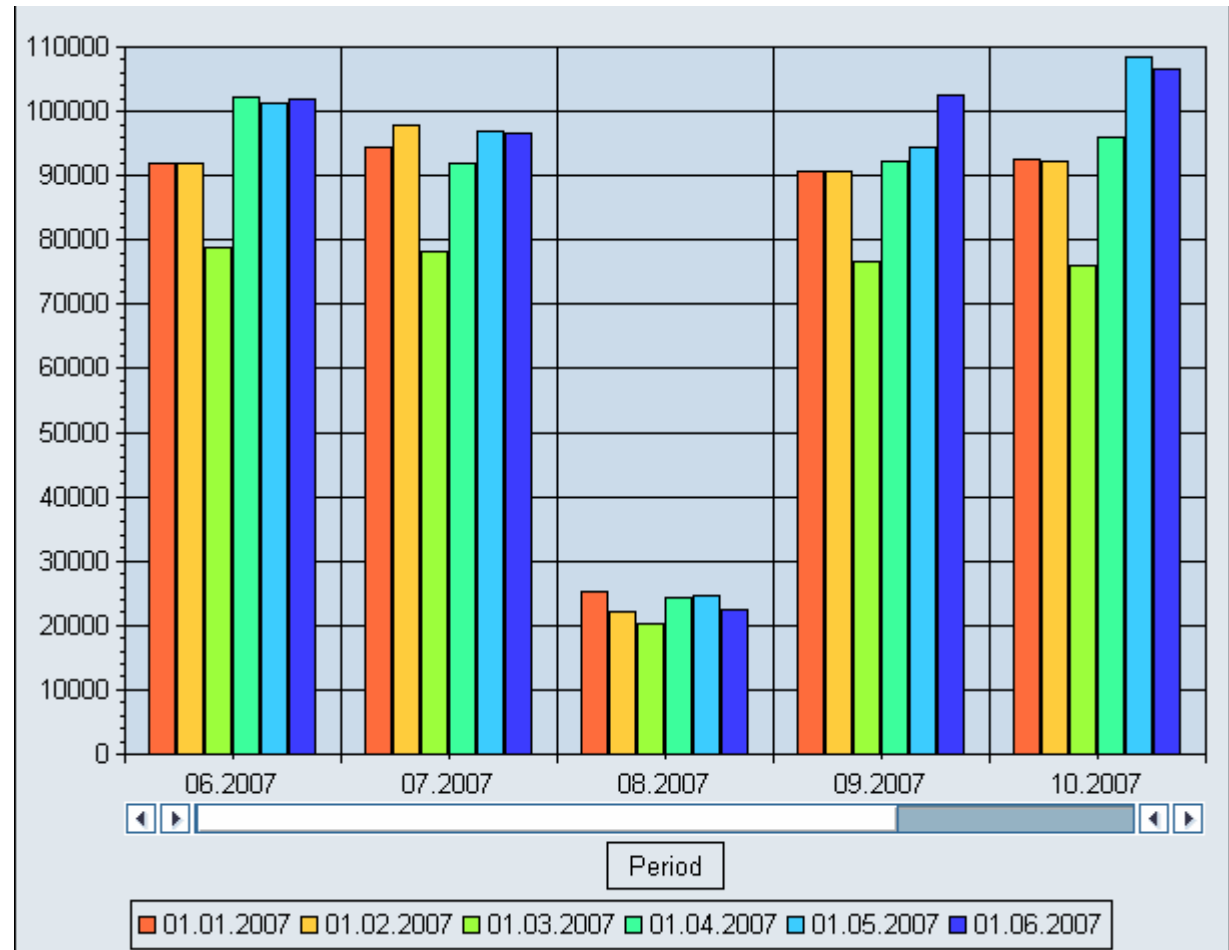
Also here the display of all values including evaluation key-figures is possible

## Quantity analysis – Several requirements deadlines as chart

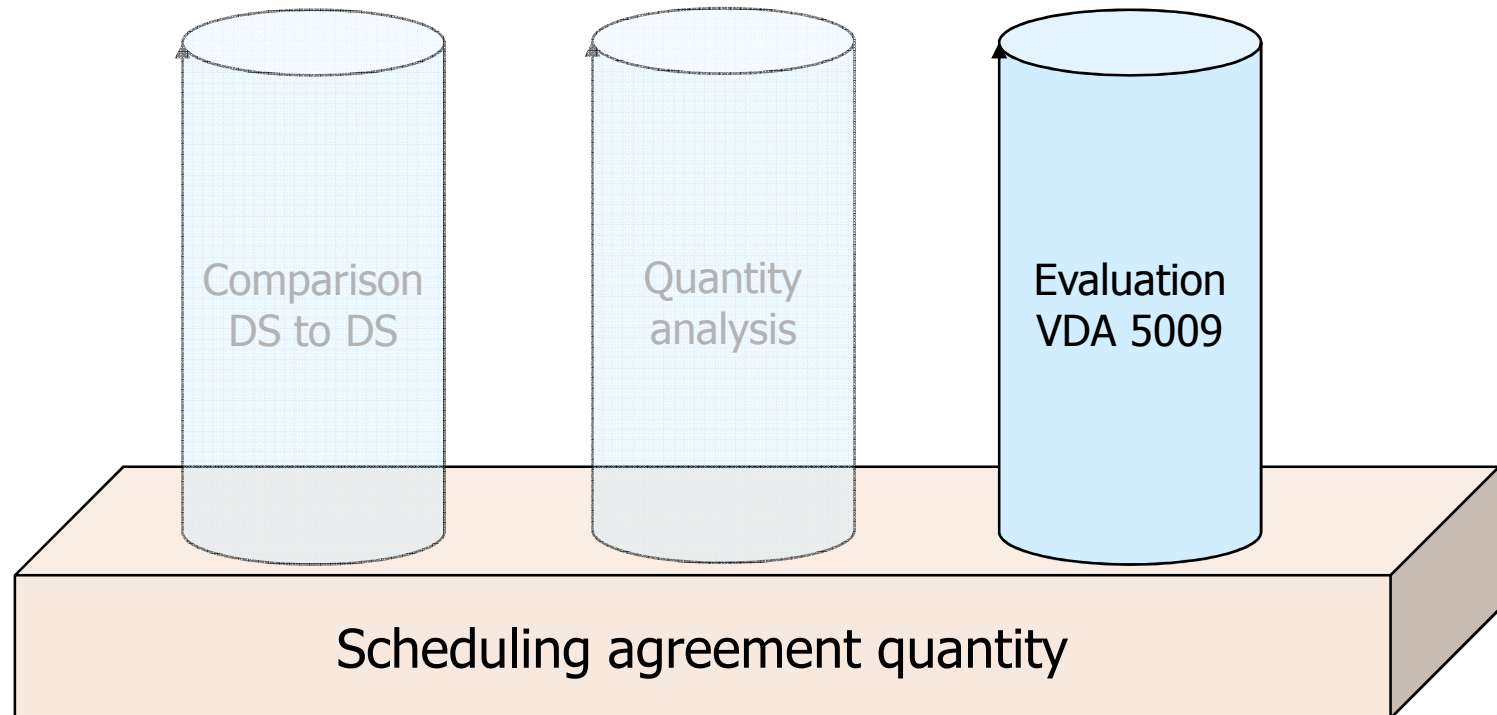
Based on the result matrix presentable charts can easily be created by means of the ALV-technics.

The colored bars represent the schedule line quantities of the respective month 06.2007 – 10.2007 each for a different valuation date.

In the month 08.2007 the sold-to party evaluated here had vacation close-down.

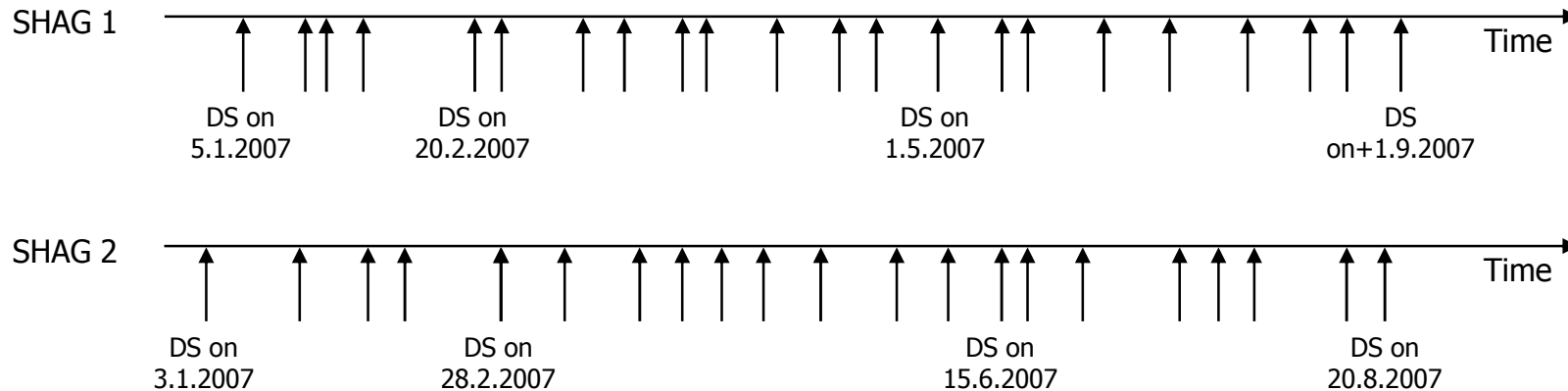


## Evaluation VDA 5009



## Evaluation VDA – Sequence of delivery schedules according to scheduling agreement

- The delivery schedule sequence for scheduling agreements is both customer and material-specific:

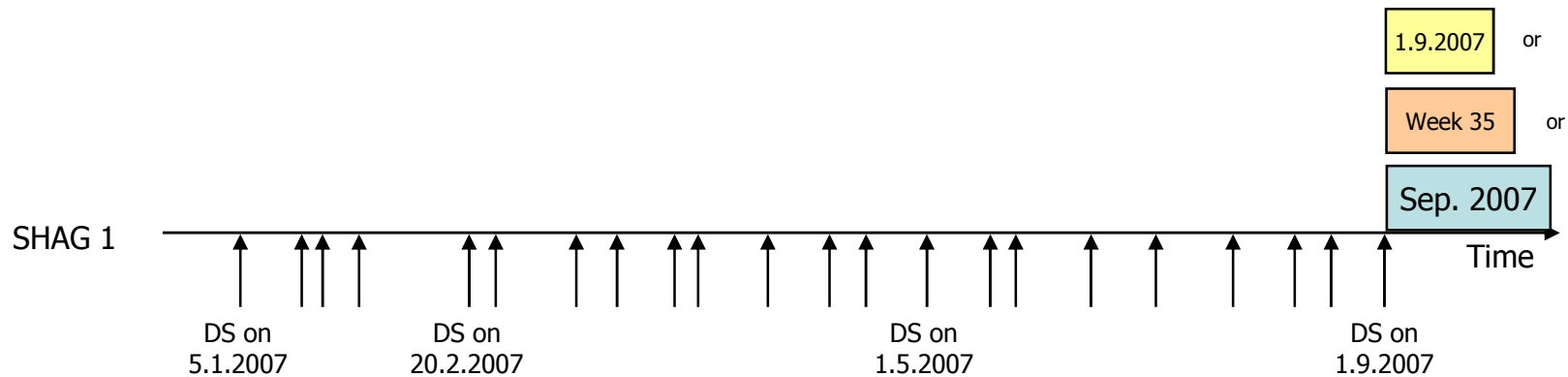


- The scheduling agreement quality is always measured according to scheduling agreement and separately for each delivery schedule type
- Each scheduling agreement obtains its individual FQ and TS-key figure
  - FQ = Forecast-Quality key figure
  - TS = Tracking-Signal



## Evaluation VDA – Requirements period

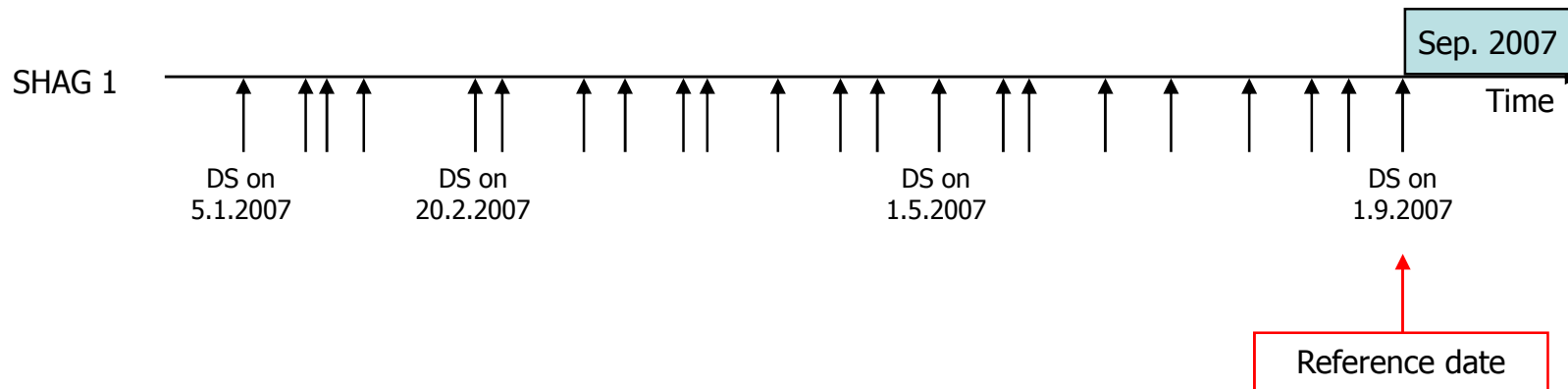
- Definition: Period, for which requirements fluctuations are measured



- The requirements period represents either 1 month, 1 week or 1 day
- The schedule lines within this period are 'harmonized' (distributed or cumulated)
- The analysis can be started parallel for exactly 1 period or for several periods

## Evaluation VDA – Reference date

- Basis date, from which the deviations of the delivery schedule quantities of the requirements period are measured into the past

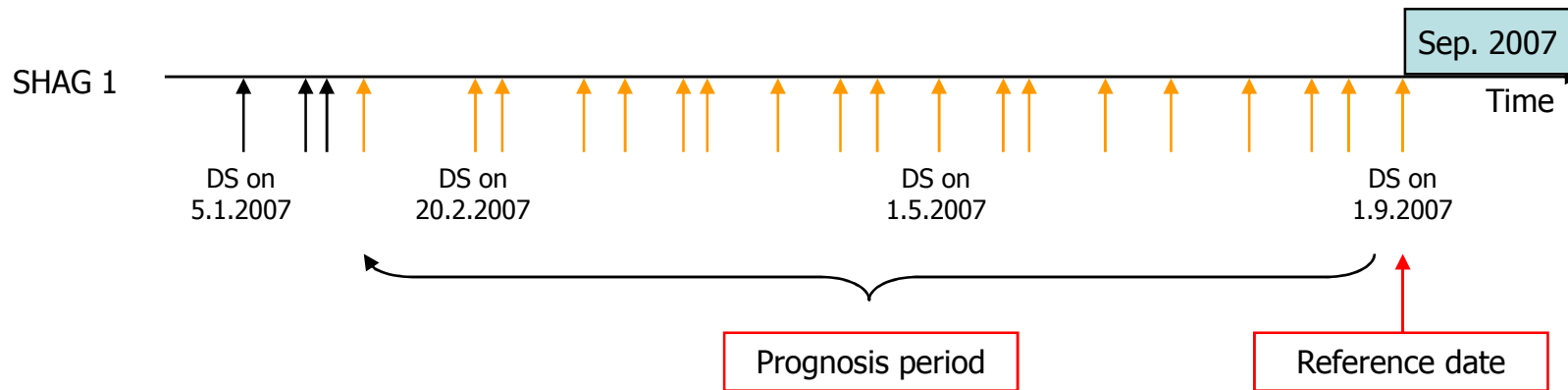


- In respect to time the reference date can lie behind/at the beginning of the requirements period = analysis instrument
- In respect to time the reference date can lie before the requirements period = control instrument
- The reference date applies to the delivery schedule valid at this moment

## Evaluation VDA – Prognosis period

- Definition: Period, in which the requirements fluctuations of the requirements period are measured:

There were which fluctuations in the delivery schedules of the **prognosis period 1.2.-1.9.** for the **requirements period September, 2007** based on the **reference quantity of 1.9.?**



- In respect to time the prognosis period lies before the reference date
- The prognosis period is classified in short, medium and long-term for days, weeks, months
- All delivery schedules within the prognosis period are used for the VDA-evaluation (measure points) by comparing them with the requirements valid at the reference date

## Evaluation VDA – Calculation example

- Example of an evaluation for the requirements period **month 09.2007**

Schedule	Requirement
01.06.2007	540
01.07.2007	510
01.08.2007	630
01.09.2007	600



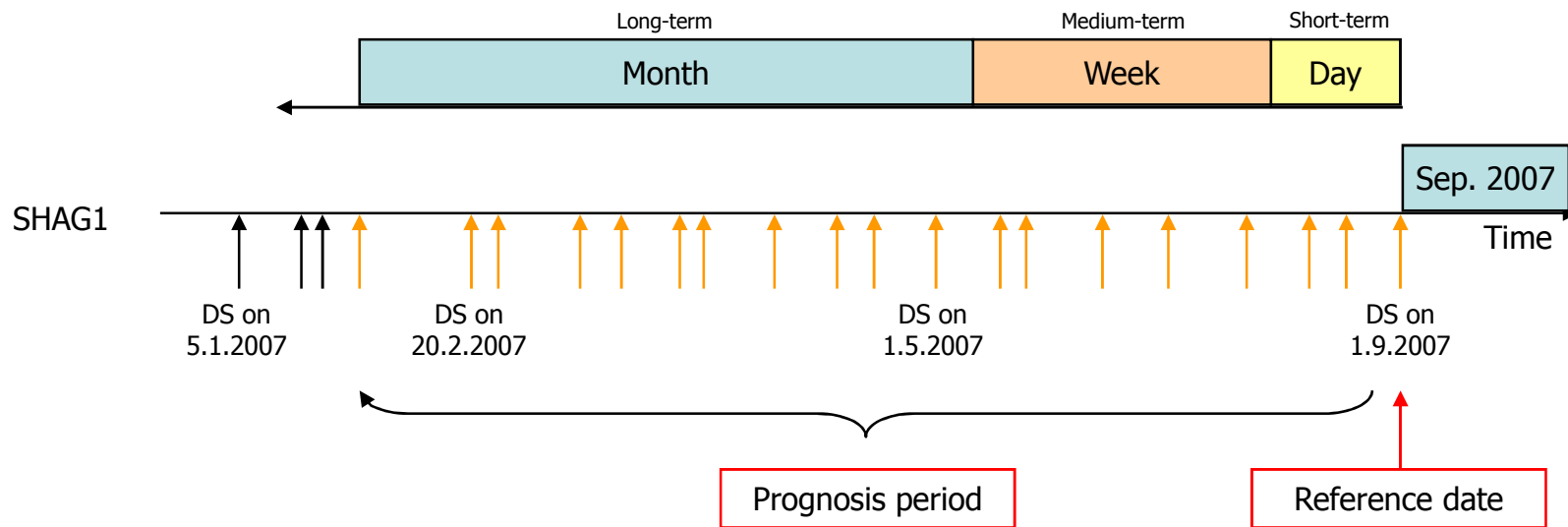
Reference  
requirement

$$FQ = \frac{|540 - 600| + |510 - 600| + |630 - 600|}{600 * 3} = \frac{60 + 90 + 30}{600 * 3} = 0,10 = 10\%$$

$$TS = \frac{(540 - 600) + (510 - 600) + (630 - 600)}{|540 - 600| + |510 - 600| + |630 - 600|} = \frac{-60 - 90 + 30}{60 + 90 + 30} = -0,667$$

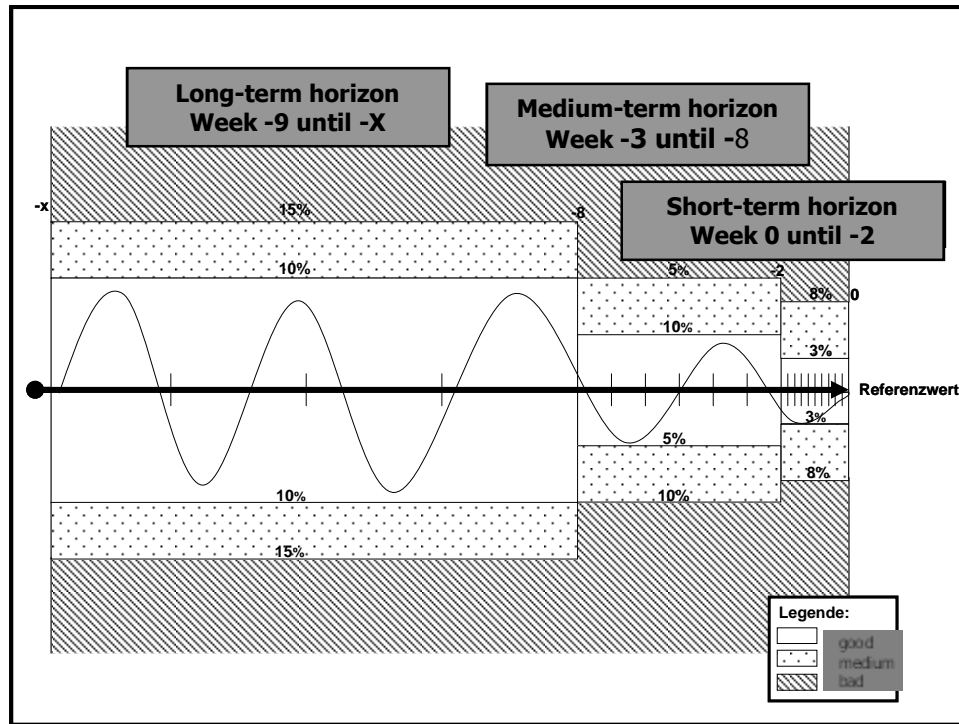
## Evaluation VDA - Dynamic prognosis horizon

- Dynamic prognosis horizon



## Evaluation VDA - Dynamic prognosis horizon

- Dynamic prognosis horizon



Source: VDA-recommendation 5009

YYFLPH Entry of dynamic prognosis horizon										
Sal...	D	D	Sold-to	Short type	W	Medm.type	W	Long type	W	
*	*	*	*	Weeks	2	Weeks	6	Weeks	20	

- For each prognosis horizon the result is displayed separately
- The parameter settings for the dynamic time horizons are defined in tables

## Evaluation VDA - Analysis

- Example of the result of an analysis

Requirements  
Reference date  
Short-term  
Medium-term  
Long-term

Month 12.2007  
1.12.2007  
7 days  
6 weeks  
3 month

System Help

Analysis Quantity development of schedule line period

VDA-Evaluation month 12.2007 according to horizon

Period	Sold-to pt	Name 1	Material	Long-term deviation	Long	Medium-term deviation	Medium	Short-term deviation	Short
12.2007	510000	Daimler Chrysler	AA-96043	68 %		62 %		42 %	
12.2007			AX-84562	7 %		4 %		0 %	
12.2007			GL-83321	45 %		0 %		0 %	
12.2007			MJ-34208	9 %		16 %		7 %	
12.2007			MV-76693	33 %		0 %		0 %	
12.2007			NI-82210	2 %		7 %		0 %	
12.2007			OA-19902	14 %		5 %		0 %	
12.2007			PI-87549	19 %		6 %		0 %	
12.2007			RT-43960	5 %		22 %		39 %	
12.2007			RV-14331	2 %		38 %		42 %	

## Evaluation VDA - Analysis

- Details for the horizons

VDA-Evaluation month 12.2007 according to horizon									
Period	Sold-to pt	Name 1	Material	Long-term deviation	Long	Medium-term deviation	Medium	Short-term deviation	Short
12.2007	510000	Daimler Chrysler	OA-19902	14 %		5 %		0 %	

K-25.11.2007	K-26.11.2007	K-27.11.2007	K-28.11.2007	K-29.11.2007	K-30.11.2007	K-01.12.2007
0	0	0	0	0	0	0
						Result short-term

← Development short-term

M-W42.2007	M-W43.2007	M-W44.2007	M-W45.2007	M-W46.2007	M-W47.2007
14,28	9,40	7,41	6,02	5,38	4,63
					Result medium-term

← Development medium-term

L-M2007.08	L-M2007.09	L-M2007.10
21,37	17,72	14,43
		Result long-term

← Development long-term



# Evaluation VDA - Analysis

- Details for the VDA-evaluation

M-W42.2007	M-W43.2007	M-W44.2007	M-W45.2007	M-W46.2007	M-W47.2007
14,28	9,40	7,41	6,02	5,38	4,63

Detail data for the schedule line period: M 12.2007 - until: 25.11.

Period	Sold-to pt	SD Doc..	Pos	Ref.-date	Ref.-rqmt	1. DS date	Prog-Start	Prog-Ende	VDA-FQ	VDA-TS	DS	VDA
12.2007	510000	30000025	10	01.12.2007	567	14.10.2007	14.10.2007	25.11.2007	4.63	0.73		

Details of the VDA FQ/TS for the requirement period

Dlv.sched.	DlvSchDate	valid from	valid.until	Period	Rqmt. CQ	Ref.-date	Ref.rqmt	Diff. abs.	Differen...
000000543	25.11.2007	25.11.2007	25.11.2007	12.2007	567,000	01.12.2007	567,000	0,00	0,00
000000542	24.11.2007	24.11.2007	24.11.2007	12.2007	567,000	01.12.2007	567,000	0,00	0,00
000000541	22.11.2007	22.11.2007	23.11.2007	12.2007	567,000	01.12.2007	567,000	0,00	0,00
000000540	21.11.2007	21.11.2007	21.11.2007	12.2007	567,000	01.12.2007	567,000	0,00	0,00
000000539	20.11.2007	20.11.2007	20.11.2007	12.2007	567,000	01.12.2007	567,000	0,00	0,00
000000538	18.11.2007	18.11.2007	19.11.2007	12.2007	567,000	01.12.2007	567,000	0,00	0,00
000000537	17.11.2007	17.11.2007	17.11.2007	12.2007	567,000	01.12.2007	567,000	0,00	0,00
000000536	16.11.2007	16.11.2007	16.11.2007	12.2007	504,000	01.12.2007	567,000	63,00	63,00-
000000535	15.11.2007	15.11.2007	15.11.2007	12.2007	504,000	01.12.2007	567,000	63,00	63,00-

Details of the delivery schedule usage

Logging of the delivery schedule usage for scheduling agreement item

Scheduling agreement / Item	30000025 / 10
Requirement month	12.2007
Time of valuation (column)	47.2007 - 25.11.2007 Medium
Prognosis period	14.10.2007 - 25.11.2007
Prognosis period real (1. DS until Max.-date)	14.10.2007 - 25.11.2007
Reference date (Selection)	01.12.2007
Reference date changed to last delivery schedule	01.12.2007
Reference quantity	567
Reference DS / DS-date	000000548 of 01.12.2007
Available DS for evaluation	000000508 of 14.10.2007
	000000509 of 15.10.2007
	000000510 of 17.10.2007
	000000511 of 18.10.2007
	000000512 of 19.10.2007
	000000513 of 20.10.2007
	000000514 of 21.10.2007
	000000515 of 23.10.2007
	000000516 of 24.10.2007

## Evaluation VDA - Analysis

- Details for the VDA-evaluation

M-W42.2007	M-W43.2007	M-W44.2007	M-W45.2007	M-W46.2007	M-W47.2007
14,28	9,40	7,41	6,02	5,38	4,63

Detail data for the schedule line period: M 12.2007 - until: 25.11.

Period	Sold-to pt	SD Doc..	Pos	Ref.-date	Ref.-rqmt	1. DS date	Prog-Start	Prog-Ende	VDA-FQ	VDA-TS	DS	VDA
12.2007	510000	30000025	10	01.12.2007	567	14.10.2007	14.10.2007	25.11.2007	4.63	0.73		

Detail calculation of FQ and TS-Key figures

Dlv.sched.	DlvSchDate	Calculation	Rqmt. CQ	Ref.rqmt.	Differe...	Diff.abs.	Number ..
000000534	14.11.2007	Difference Requirement-Reference quantity(absolut)	567	567	0	0	1
000000535	15.11.2007	Difference Requirement-Reference quantity(absolut)	504	567	63-	63	1
000000536	16.11.2007	Difference Requirement-Reference quantity(absolut)	504	567	63-	63	1
000000537	17.11.2007	Difference Requirement-Reference quantity(absolut)	567	567	0	0	1
000000538	18.11.2007	Difference Requirement-Reference quantity(absolut)	567	567	0	0	1
000000539	20.11.2007	Difference Requirement-Reference quantity(absolut)	567	567	0	0	1
000000540	21.11.2007	Difference Requirement-Reference quantity(absolut)	567	567	0	0	1
000000541	22.11.2007	Difference Requirement-Reference quantity(absolut)	567	567	0	0	1
000000542	24.11.2007	Difference Requirement-Reference quantity(absolut)	567	567	0	0	1
000000543	25.11.2007	Difference Requirement-Reference quantity(absolut)	567	567	0	0	1
		Result 1 = Sum of the absolute differences				945	36
		Result 2 = Reference rqmt. * Number Measur.point		20.412			
		Result 3 = Result 1 / Result 2				0,05	
		FQ - Key figure in %				4,63	
		Sum Differences and Sum Differences absolute			693	945	
		TS - Key figure				0,73	

## Others

- Requirements and Cumulative quantities
- Harmonization of the schedule line deadlines
- Forecast delivery schedule / JIT-delivery schedule

## Requirements and Cumulative quantities

- Upon the comparison of delivery schedules the difference in the cumulative quantities received is considered

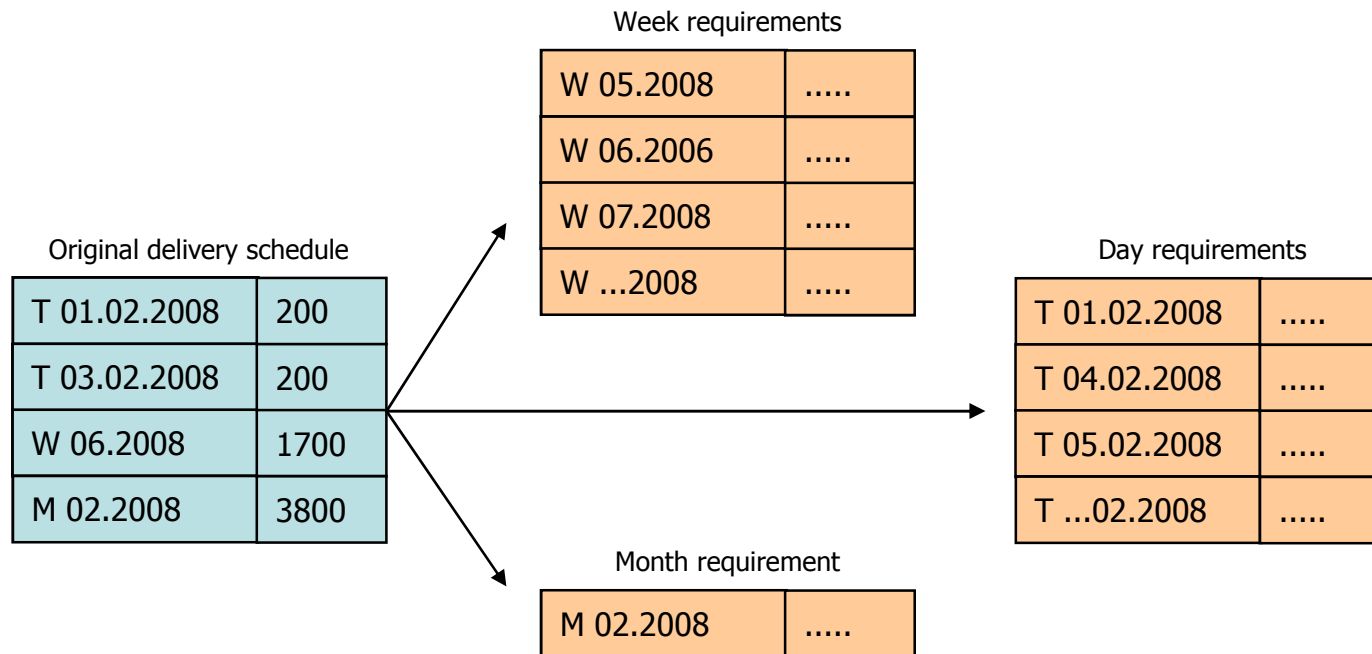
DS of 1.1.2008 CQR 100.000		DS 2 of 1.2.2008 CQR 100.500		Differences without CQ    with CQ	
02.2008	1000	02.2008	1000	0	+ 500
03.2008	1500	03.2008	1700	+ 200	+ 700
04.2008	1500	04.2008	1300	- 200	+300
05.2008	1700	05.2008	2000	+ 300	+ 800
...2008	....	...2008	....	....	....



Used for the analyses

## Harmonization of the schedule line deadlines)

- Requirements in delivery schedules are transmitted as schedule lines in month, week and/or day deadlines:



- Settings of the component
  - with distribution/cumulation of the deadlines in respect to the required requirements period (standard)
  - without distribution, on the selected deadline type is considered (D, W, M)

## Forecast delivery schedule/ JIT delivery schedule

- JIT delivery schedules influence the requirement quantities of the forecast delivery schedules:

Forecast DS		JIT DS Horizon 15.2.2008		Comparison basis		
M 02.2008	2000	T 01.02.2008	110	T 01.02.2008	110	FDS
M 03.2008	2200	T 04.02.2008	120	T 04.02.2008	120	
M 04.2008	3000	T ...02.2008	....	T ...02.2008	....	
M 05.2008	3800	T 15.02.2008	100	T 15.02.2008	100	
				M 02.2008	1000	JDS after Horizon
				M 03.2008	2200	FDS
				M 04.2008	3000	
				M 05.2008	3800	

- Analysis
  - pure contemplation of the delivery schedules  
Offsetting FDS / JDS

We thank you very much you for your time and interest.

In case you still have questions and/or need further information  
please contact us.

Bensberg Unternehmensberatung GmbH

Posthof 2

D-53783 Eitorf

Germany

Phone: 0049 (0) 2243 83822

Fax: 0049 (0) 2243 80502

[www.bensberg.de](http://www.bensberg.de)

[info@bensberg.de](mailto:info@bensberg.de)