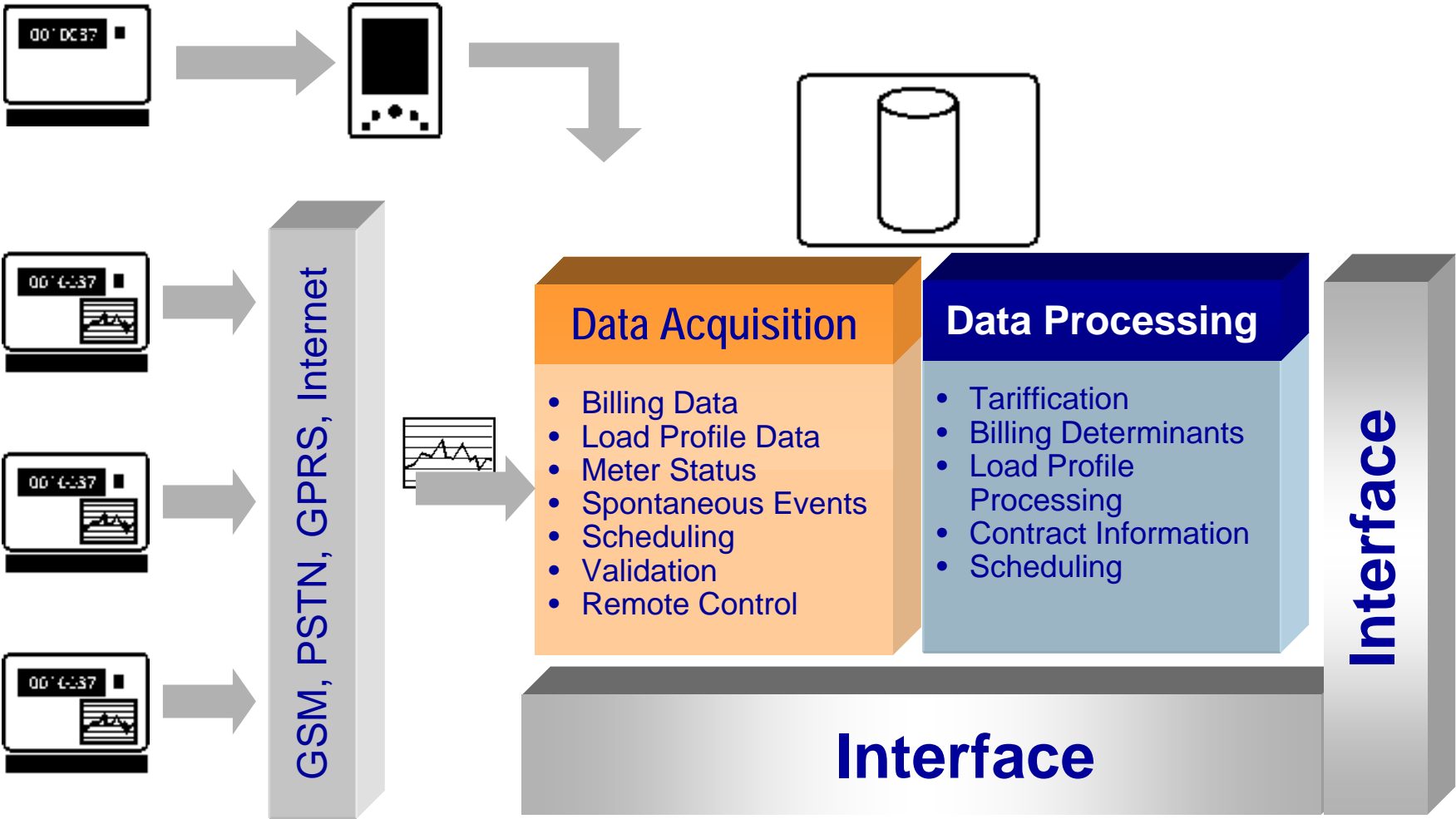




**meter2cash AG**

# Converge Short Presentation

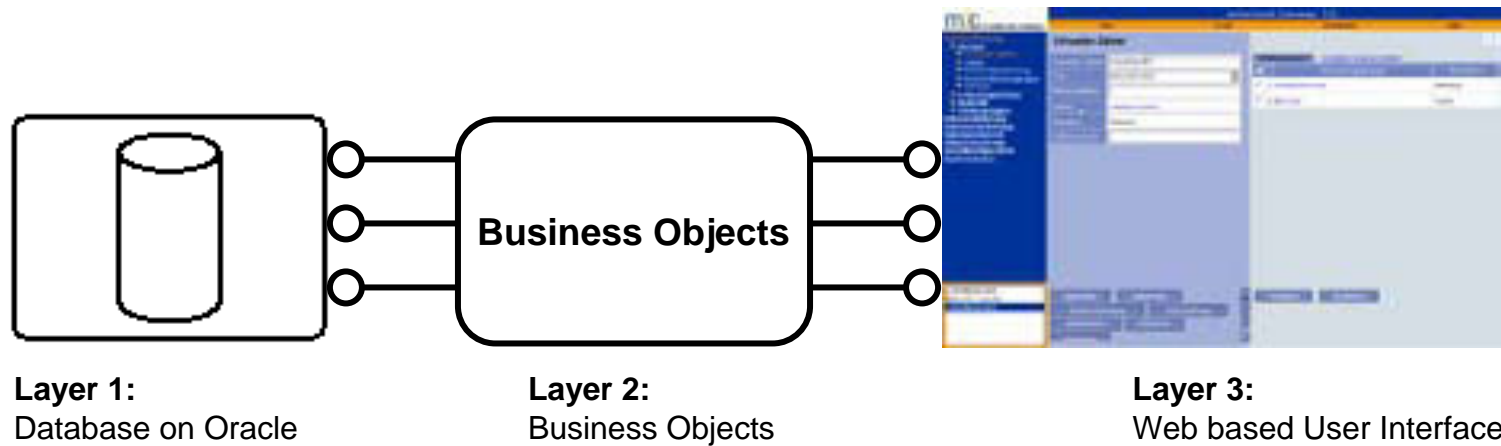
- **Converge System Overview**
- **Converge High- Lights**
- **Data Validation**
- **Data processing**
- **Scalability of Converge**
- **Market Segmentation**

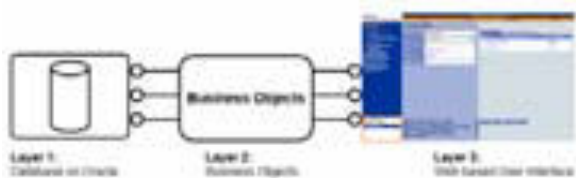




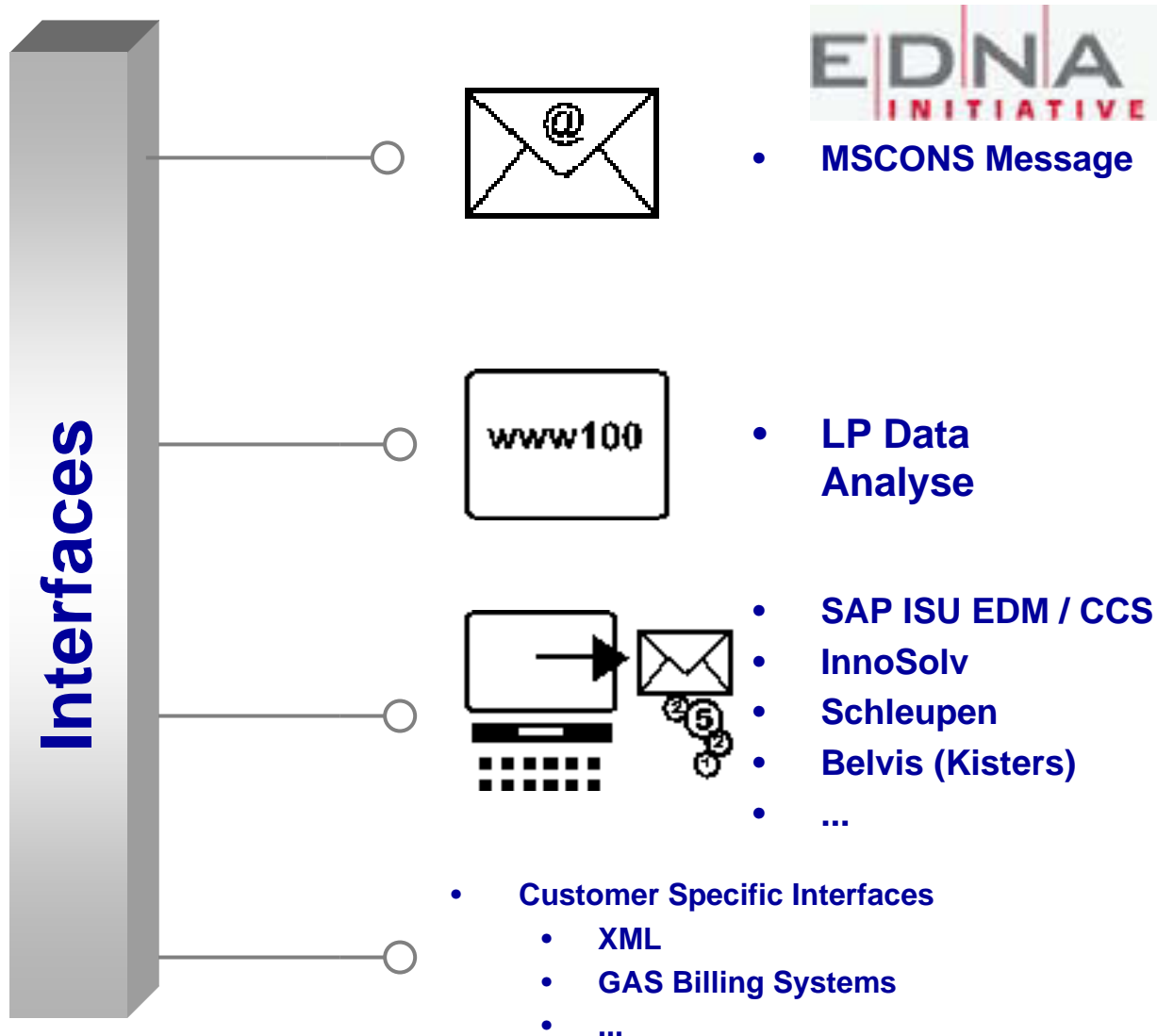
# Supported communication protocols

Protocol	Meter type / family	Meter Producer	Read user profile	Read billing data	Time operation	Read	Read historical values	Meter Study	Read current register values	Read previous register value	Functions	Support Meterless Events
Datacon	FW900/ FW1600	Datacon										
DIN 19244	POREG 2 (P25)	Iskraemeco										
DLMS	Z D4xx	Landis+Gyr										
	E600	Enemtel										
	E700	Enemtel										
	ZMQ	Landis+Gyr										
	SL7000	Actaris										
DSFG	MRO2200	Karl Wieser										
	MRO21000	Karl Wieser										
	MRO2201	Karl Wieser										
	RMG Messtechnik 9104T											
	RMG Messtechnik ERZ2200											
	RMG Messtechnik GC9000 Stream											
EDM Genius	EDM Mx5	EDM										
FNP	ENC200	Görlitz										
	ENC400	Görlitz										
IEC1107	Z B4xx	Landis+Gyr										
	Siemens 7E 62/63	Siemens										
	LZM	EMH										
	K302 Volume Corrector	Tritschler										
SCTM	Malcom 3	Landis+Gyr										
	Malcom 2	Landis+Gyr										
	EKM 540	Landis+Gyr										
	FAP	Landis+Gyr										
	FAD	Landis+Gyr										
	FBC	Landis+Gyr										
	FCL	Landis+Gyr										
	Siemens 7E 62/63	Siemens										
	EPG	Enemtel										
	DLX	Actaris										
Spectra	Alce Spectra	Schneider										



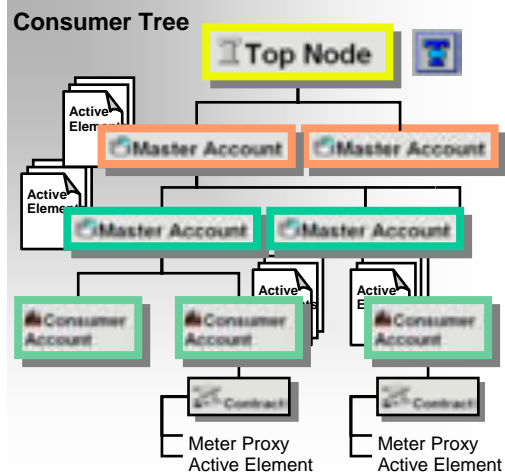
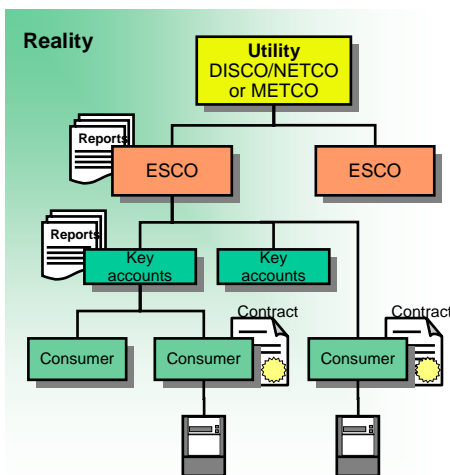


- **State of the art...**
- **Highly flexible**
  - Distributed system (LAN WAN)
  - D-COM objects are also accessible from 3rd Party programs
- **The business objects are the interfaces to the database**
  - 3rd Party programs don't need any information about the database architecture.
  - Interfaces

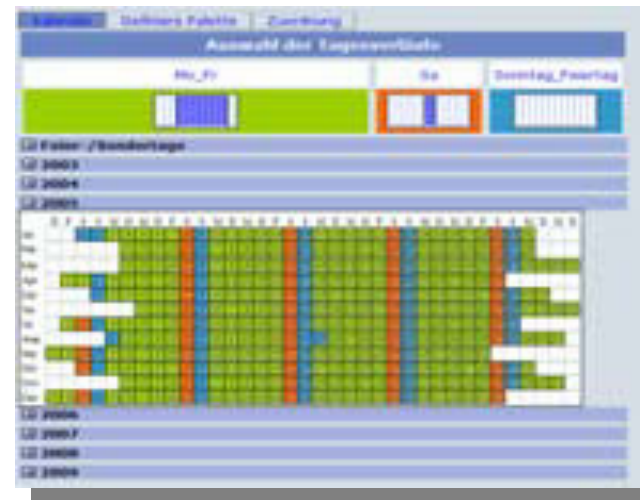


**Converge includes a highly flexible Application interface. It allows to exchange data with different other systems**

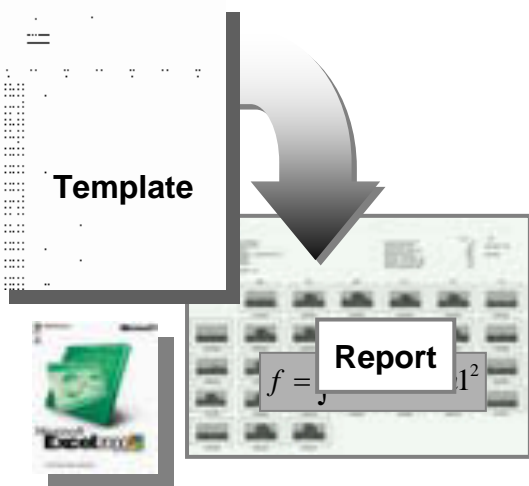
Consumer Tree



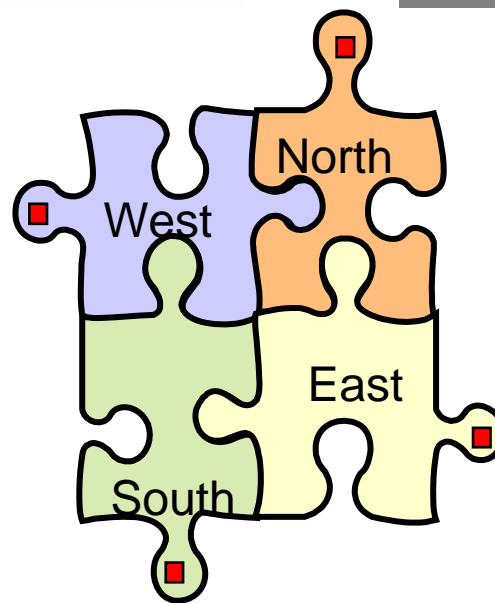
Tariff Agreements



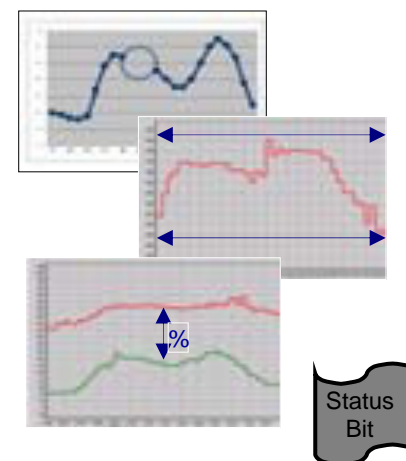
Template Management



Data Segmentation

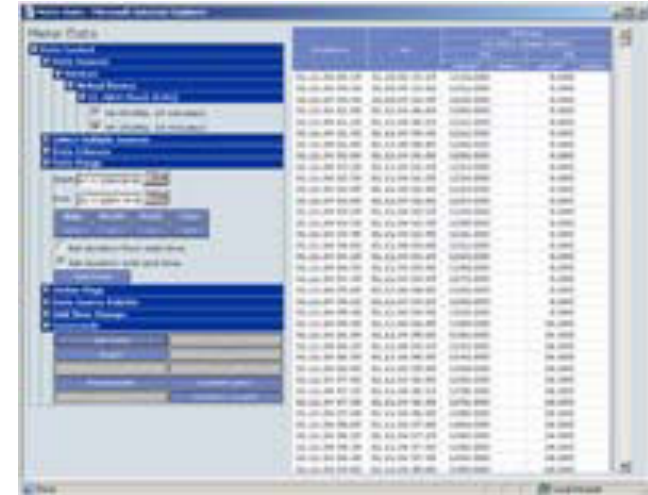


Data Validation





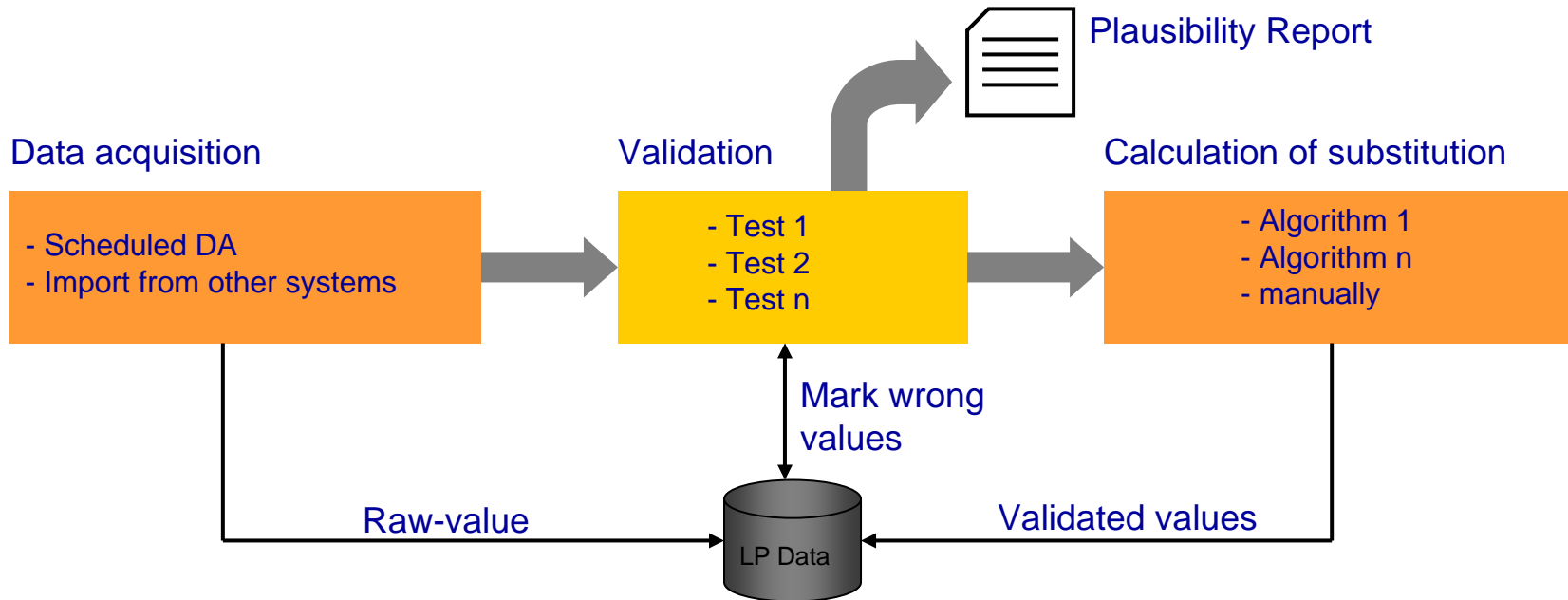
- Data collection through different communication channels and different meter protocols
- Plausibility check
- Possibility for automatic substitution of not valid data
- Scheduler with dependencies
- Meter check and meter register construction
- EDM functionalities for measured load profile data



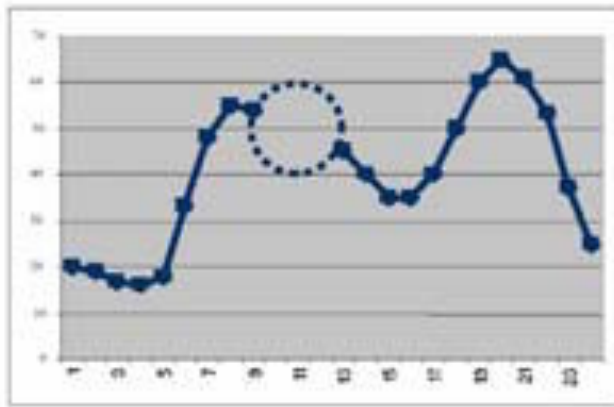
Date	Time	Value	Value	Value
2006-02-09	00:00:00	0.0000	0.0000	0.0000
2006-02-09	00:05:00	0.0000	0.0000	0.0000
2006-02-09	00:10:00	0.0000	0.0000	0.0000
2006-02-09	00:15:00	0.0000	0.0000	0.0000
2006-02-09	00:20:00	0.0000	0.0000	0.0000
2006-02-09	00:25:00	0.0000	0.0000	0.0000
2006-02-09	00:30:00	0.0000	0.0000	0.0000
2006-02-09	00:35:00	0.0000	0.0000	0.0000
2006-02-09	00:40:00	0.0000	0.0000	0.0000
2006-02-09	00:45:00	0.0000	0.0000	0.0000
2006-02-09	00:50:00	0.0000	0.0000	0.0000
2006-02-09	00:55:00	0.0000	0.0000	0.0000
2006-02-09	01:00:00	0.0000	0.0000	0.0000
2006-02-09	01:05:00	0.0000	0.0000	0.0000
2006-02-09	01:10:00	0.0000	0.0000	0.0000
2006-02-09	01:15:00	0.0000	0.0000	0.0000
2006-02-09	01:20:00	0.0000	0.0000	0.0000
2006-02-09	01:25:00	0.0000	0.0000	0.0000
2006-02-09	01:30:00	0.0000	0.0000	0.0000
2006-02-09	01:35:00	0.0000	0.0000	0.0000
2006-02-09	01:40:00	0.0000	0.0000	0.0000
2006-02-09	01:45:00	0.0000	0.0000	0.0000
2006-02-09	01:50:00	0.0000	0.0000	0.0000
2006-02-09	01:55:00	0.0000	0.0000	0.0000
2006-02-09	02:00:00	0.0000	0.0000	0.0000



## Concept:



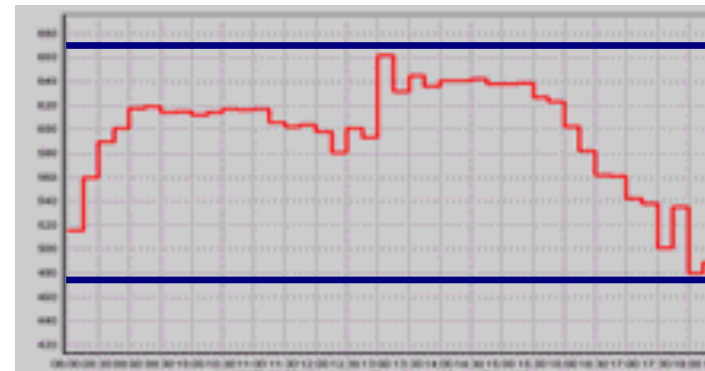
## Gap check



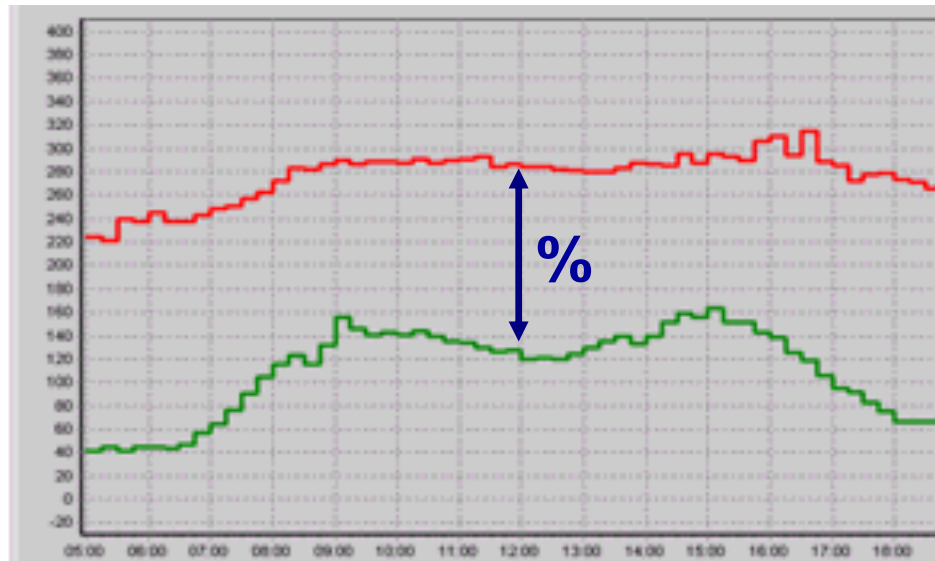
## Status check

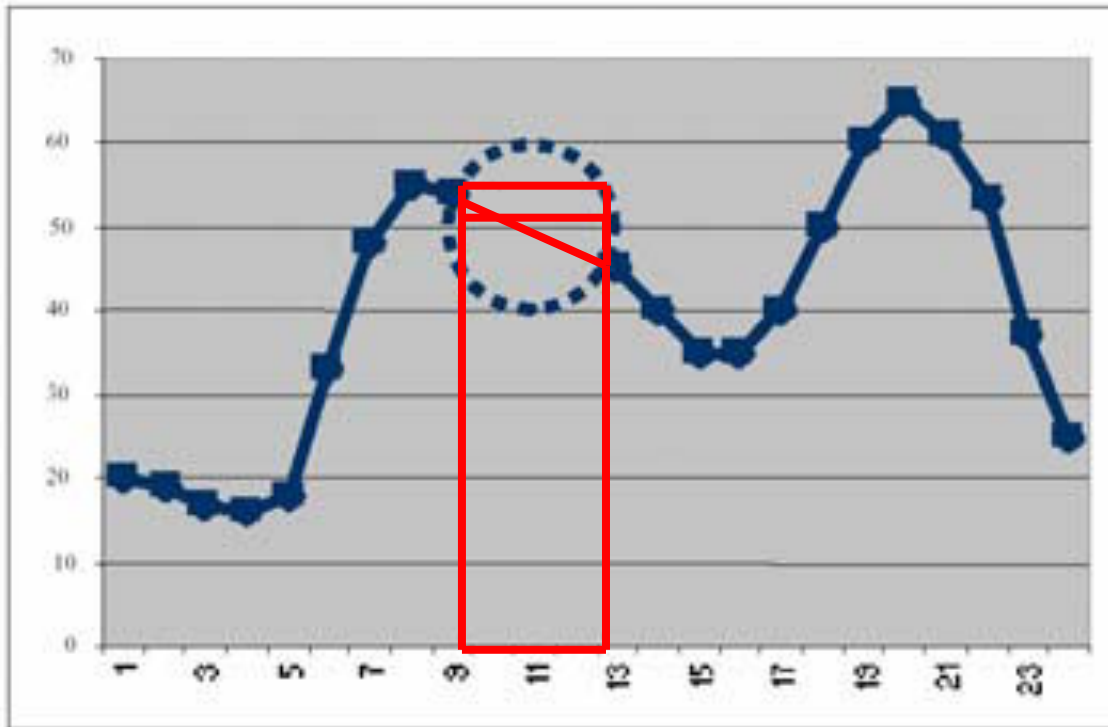


## Limit check



## Main and check meter





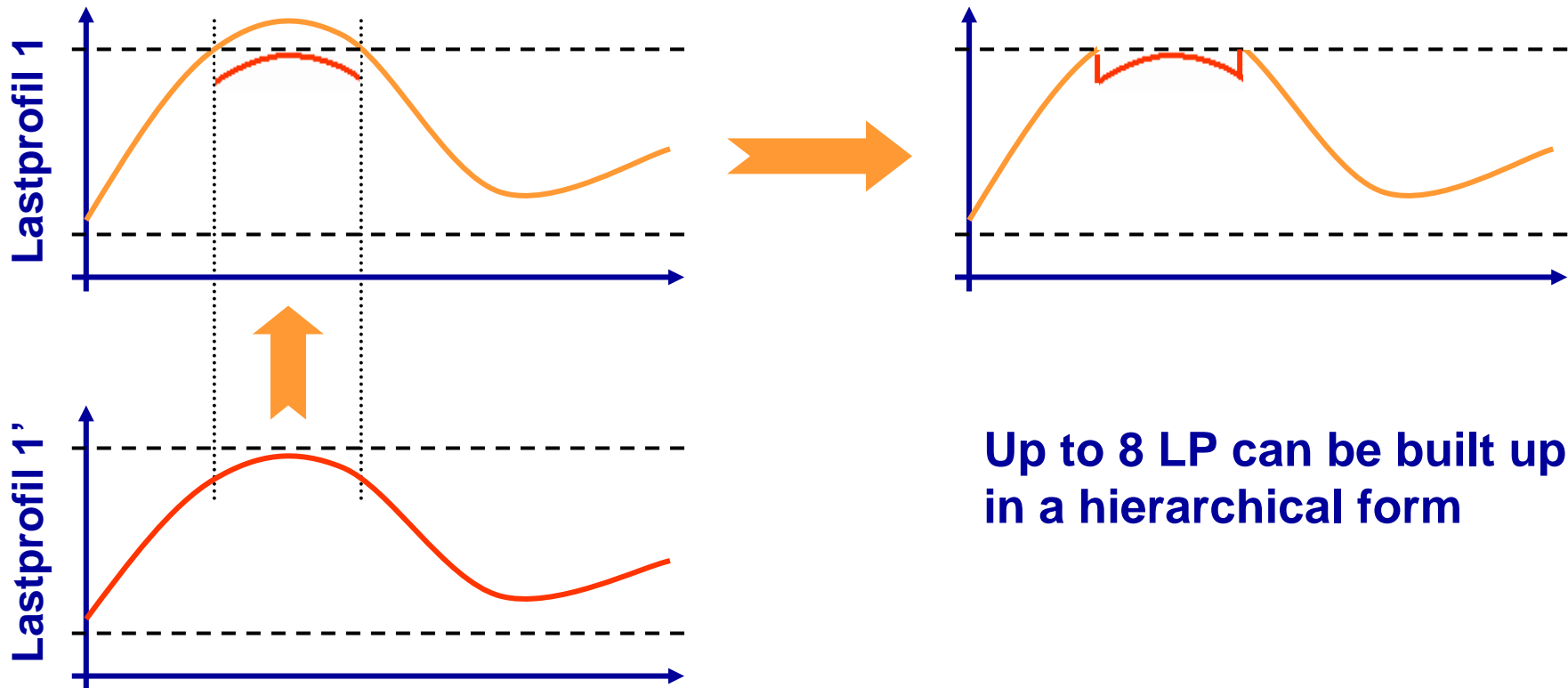
➔ Last valid Value

➔ Mean Value

➔ Linear Interpolation

➔ Zero Values

Wrong values can be replaced through a value from another Meter. Here an example from a limit check



**Up to 8 LP can be built up in a hierarchical form**

### Zählerdaten

- ☐ Daten anzeigen
  - ☐ Daten Quellen
    - ☐ Virtuelle Zähler
      - ☐ Datenkanal
        - ☐ LC 16kV Main
          - ActiveEnergy (Lastprofil, 15 Min.)
          - ReactiveEnergy (Lastprofil, 15 Min.)
- ☐ Mehrfachselektion
- ☐ Datenfelder
- ☐ Datenbereich
 

Start:

Ende:

Tag Monat Woche Jahr

-- - - --

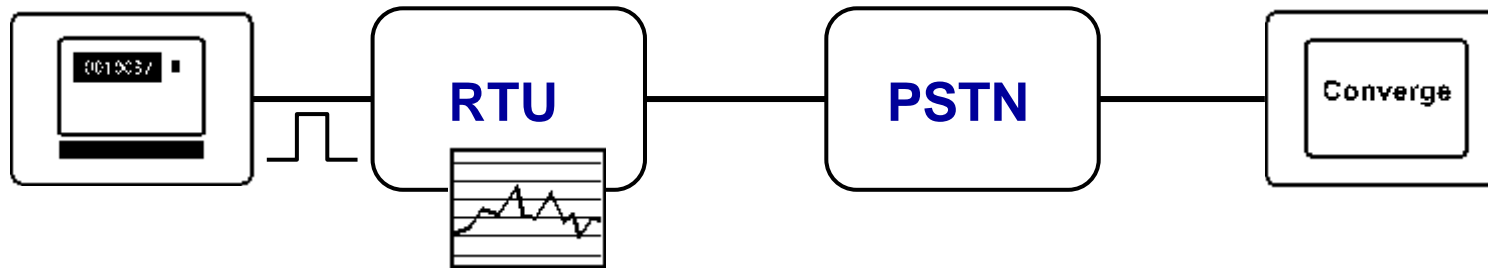
Berechne Dauer ab Startzeit  
 Berechne Dauer bis zur Endzeit
- ☐ Status Bits
- ☐ Datenquellen zusammenstellen
- ☐ Füge Zeitstempel hinzu
- ☐ Befehle
 

Daten holen	Zustimm
Graphische Darstellung	Stimmen/Ändern
Kopieren	Kopieren
Neu Berechnen	Prev. bestätigen
Änderungsgeschichte	Ungültige bestätigen

Lokalzeit	Zeit UTC	Virtuelle Zähler	
		LD 16kV Main	ActiveEnergy
		Formwert	Status
08.05.2005 00:15	07.05.2005 22:15	1044.000	
08.05.2005 00:30	07.05.2005 22:30	1032.000	
08.05.2005 00:45	07.05.2005 22:45	1044.000	
08.05.2005 01:00	07.05.2005 23:00	1056.000	
08.05.2005 01:15	07.05.2005 23:15	1056.000	
08.05.2005 01:30	07.05.2005 23:30	1068.000	
08.05.2005 01:45	07.05.2005 23:45	1020.000	
08.05.2005 02:00	08.05.2005 00:00	1044.000	
08.05.2005 02:15	08.05.2005 00:15	1044.000	
08.05.2005 02:30	08.05.2005 00:30	1044.000	
08.05.2005 02:45	08.05.2005 00:45	1056.000	
08.05.2005 03:00	08.05.2005 01:00	1032.000	
08.05.2005 03:15	08.05.2005 01:15	1056.000	
08.05.2005 03:30	08.05.2005 01:30	1008.000	
08.05.2005 03:45	08.05.2005 01:45	1056.000	
08.05.2005 04:00	08.05.2005 02:00	1056.000	
08.05.2005 04:15	08.05.2005 02:15	1044.000	
08.05.2005 04:30	08.05.2005 02:30	1037.000	CS
08.05.2005 04:45	08.05.2005 02:45	1044.000	
08.05.2005 05:00	08.05.2005 03:00	1032.000	
08.05.2005 05:15	08.05.2005 03:15	1044.000	
08.05.2005 05:30	08.05.2005 03:30	1044.000	
08.05.2005 05:45	08.05.2005 03:45	1068.000	
08.05.2005 06:00	08.05.2005 04:00	1080.000	
08.05.2005 06:15	08.05.2005 04:15	1068.000	
08.05.2005 06:30	08.05.2005 04:30	1044.000	
08.05.2005 06:45	08.05.2005 04:45	1056.000	
08.05.2005 07:00	08.05.2005 05:00	1032.000	
08.05.2005 07:15	08.05.2005 05:15	1056.000	
08.05.2005 07:30	08.05.2005 05:30	1044.000	
08.05.2005 07:45	08.05.2005 05:45	1068.000	
08.05.2005 08:00	08.05.2005 06:00	1068.000	
08.05.2005 08:15	08.05.2005 06:15	1032.000	
08.05.2005 08:30	08.05.2005 06:30	1044.000	

# Meter check and register construction

- The meter check function is another data validation form.
- The result of cumulated load profile values has to be the same like the register value from the meter itself.

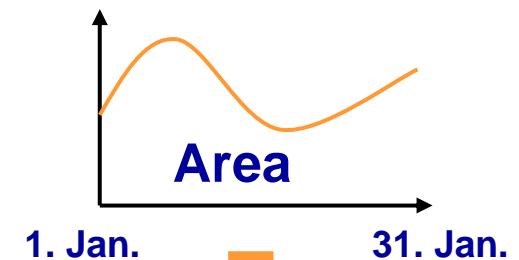


Date:	Register
1. Jan.	: 1000kWh
31. Jan.	: 2000kWh



**Consumption : 1000kWh**

=



**Area**



- Definitions of metering points, communication path etc. can be added by additional attributes.
- So Converge can be exactly adapted to the requirements from the customers
- Search and filter functions on these new attributes are included.

Virtueller Zähler

Virtueller Zähler	FAQ Haupt Nord P001
Typ	FAQ Haupt Nord
Messpunkt-Code	
Zähler	FAQ Haupt P001
Standard	Beleg
Zählername	

Zählergruppen: Virtueller

1\_FAG

2\_Einst

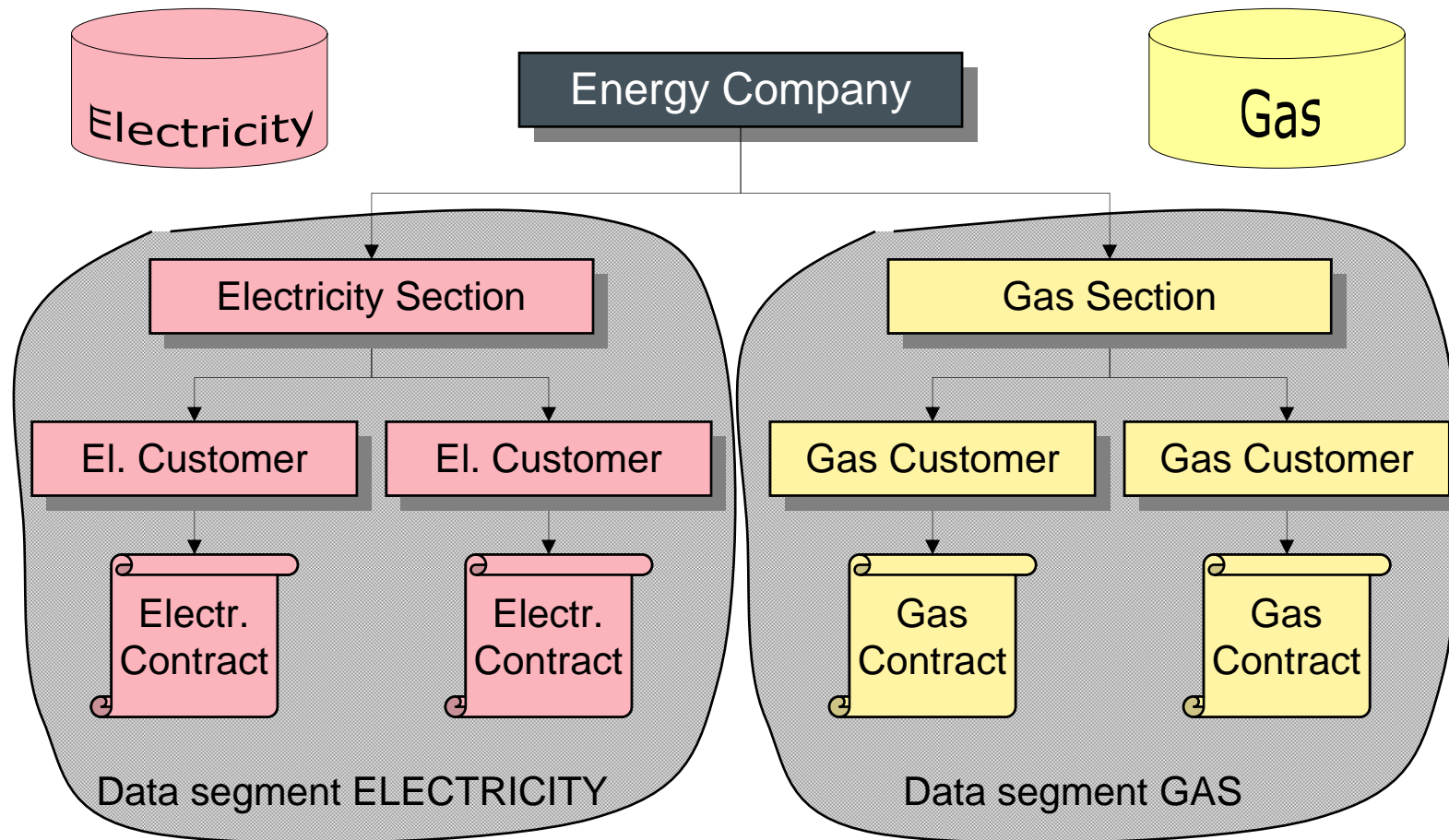
**Example: New additional attributes for a virtual meter.**

Following functions includes the EDM module:

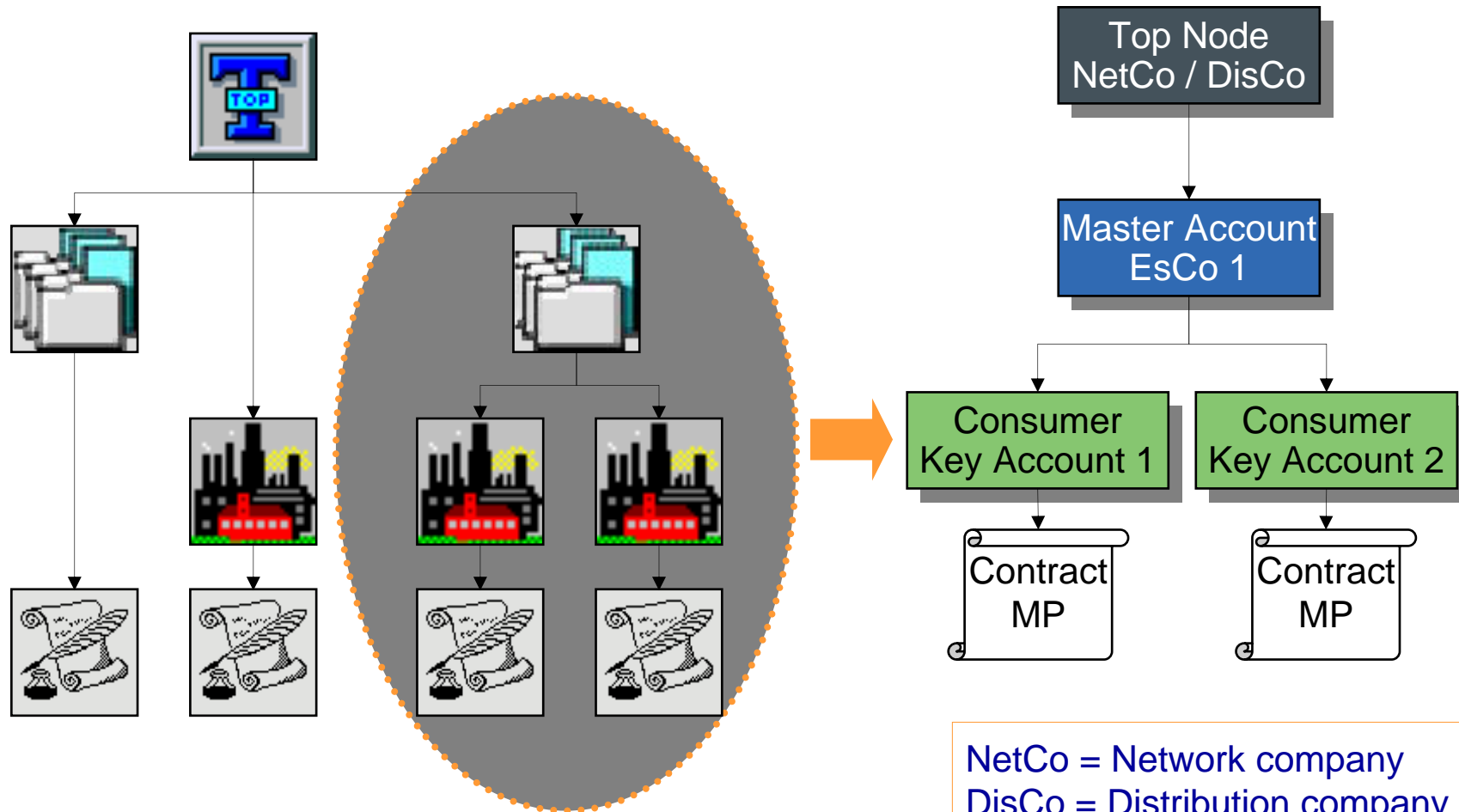
- Supplier model
- Assignment of metering points to suppliers
- Aggregation of each supplier
- Aggregation of all suppliers
- History of all assignments and metering data.

The screenshot displays a software interface for managing suppliers. On the left, a tree view under 'Lieferanten (3)' shows 'Buchkriterien', 'Buchresultate', and 'SupplierTotal'. Under 'SupplierTotal', three suppliers are listed: 'Supplier 1', 'Supplier 2', and 'Supplier 3'. An orange callout box points to 'Supplier 1' with the text 'Supplier with assigned metering points'. The main area shows the 'Eigenschaften' (Properties) tab for 'Supplier 1'. The properties include: Name (Supplier 1), Referenz, Email, Zeitzone (Mittleuropäische Zeit), Gültig von (01.01.2003 00:00), Gültig bis (01.01.2010 00:00), Aktiv (checked), Total-Aggregation (checked), and VZ-Ausgang.

Eigenschaften	
Name	Supplier 1
Referenz	
Email	
Zeitzone	Mittleuropäische Zeit
Gültig von	01.01.2003 00:00
Gültig bis	01.01.2010 00:00
Aktiv	<input checked="" type="checkbox"/>
Total-Aggregation	<input checked="" type="checkbox"/>
VZ-Ausgang	



**Build up a customer tree Create contracts and assign meterpoint on it  
Create different customer segments**



NetCo = Network company  
 DisCo = Distribution company  
 EsCo = Energy supply company  
 MP = Metering point

- Billing Determinants
- Load Profile Processing
- Analyses of the load profiles
- Tariffication

- Reports are based on Excel (highly flexible)
- Reports can be sent automatically by email as HTML, Excel, CSV
- Scheduled Execution

