B97

Customer Presentation - IMS Tools Migration
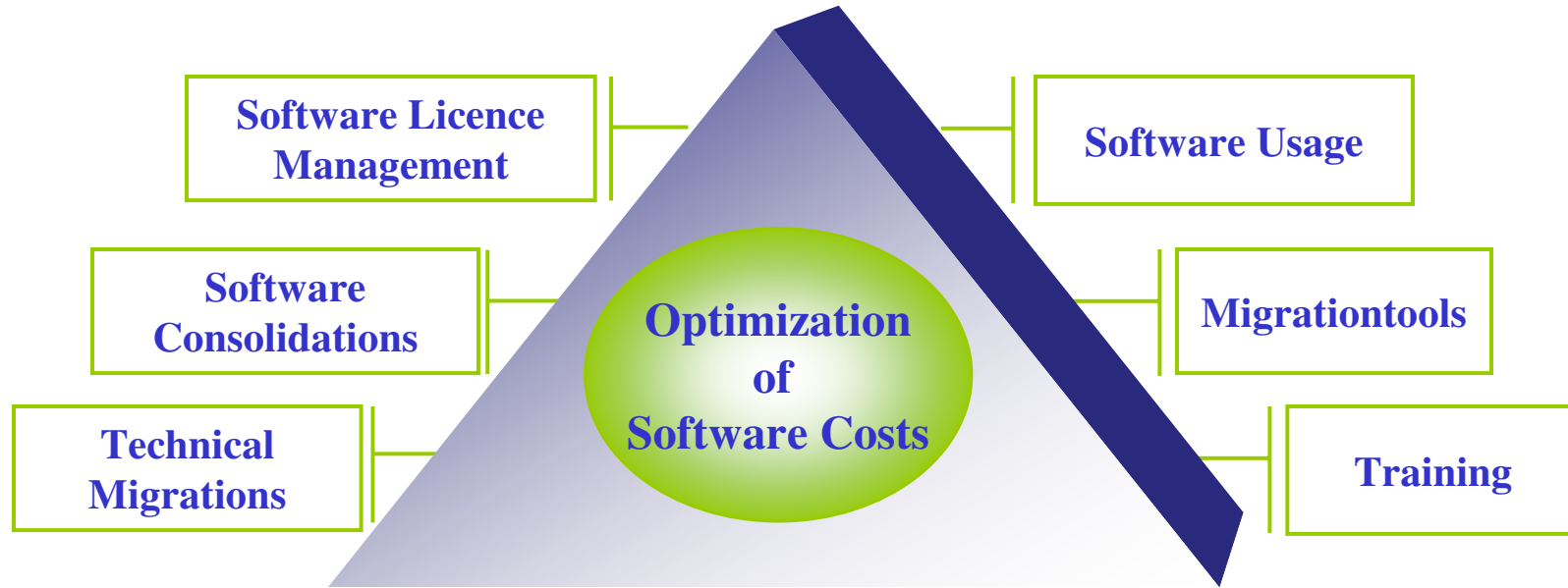
Helmut Englert, SE-Consulting GmbH
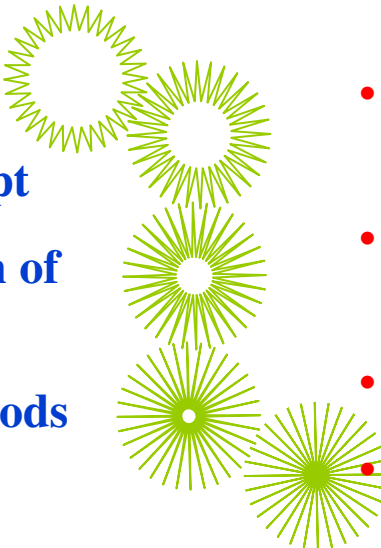
IMS
TECHNICAL CONFERENCE

San Jose, CA   **Oct. 10 - 13, 2005**

SE-Consulting GmbH

Software Licence Management	Software Usage
Software Consolidations	Migrationtools
Technical Migrations	Training

Optimization of Software Costs

From the plan …

- technical project management

- precise utilization analysis of existing products

- migration and training concept

- installation and customization of the software solution

- adaptation of exits and usermods

- product deployment

- trainings

- management of the technical workflow

- cooperation with the software provider

- adaptation to customer's environment

- production preparation

- quality assurance

- handover to production

... to production

IBM IMS Technical Conference

ISV Migrations

What SEC did in the past …

from	to	number of projects	tasks
BMC Software	IBM	4	Vendor Replacement between 6 and 14 IMS products, between 3 and 12 DB2-products, MainView Automation
Computer Associates	IBM	3	Vendor Replacement between 6 and 10 products
Compuware	IBM	3	Vendor Replacement between 2 and 3 products
Compuware	Macro 4	2	Vendor Replacement between 2 and 3 products

The Mission

Replace all BMC-products within 24 months in all data centers in Germany matching T-Systems SLAs and solve special tasks like:
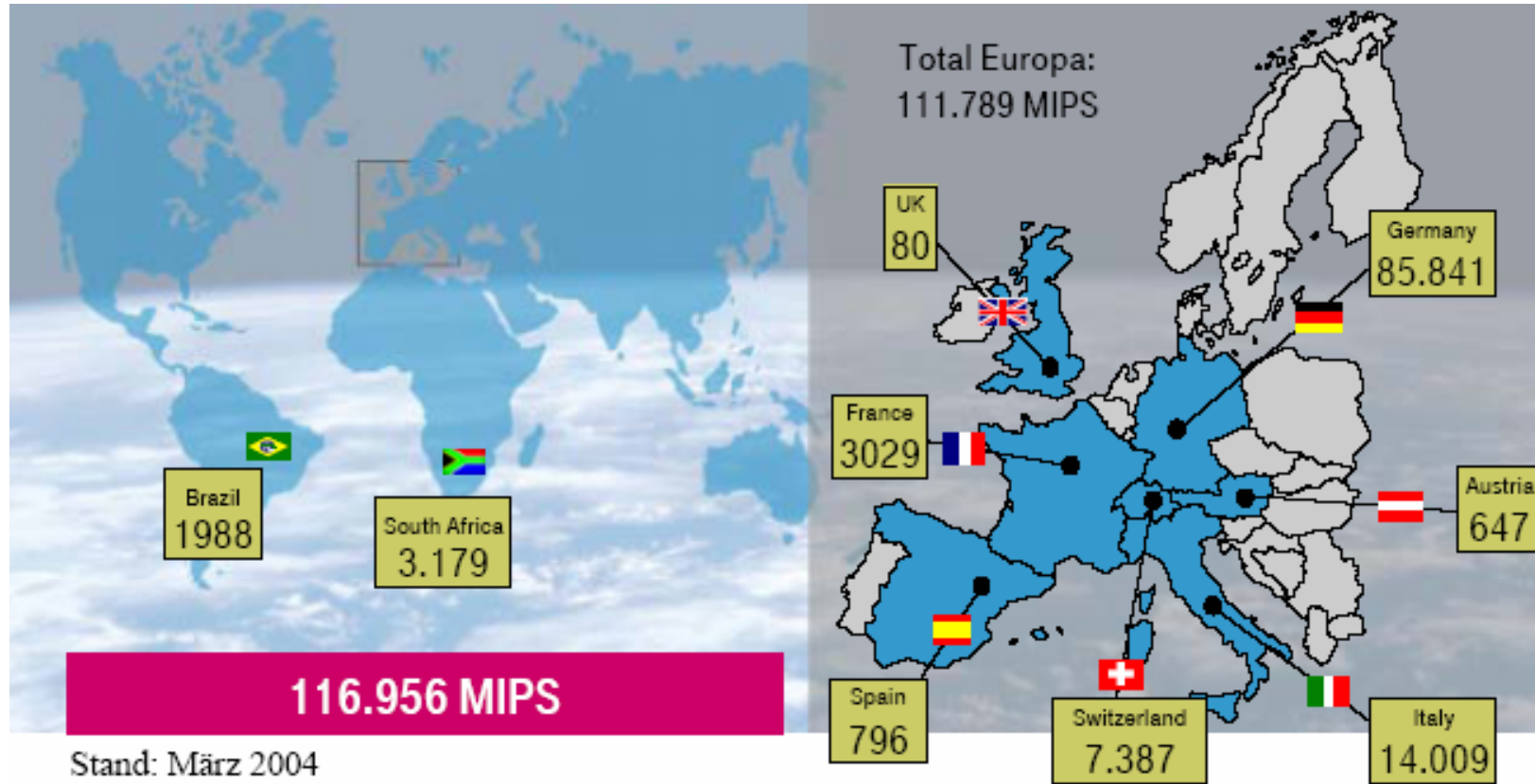
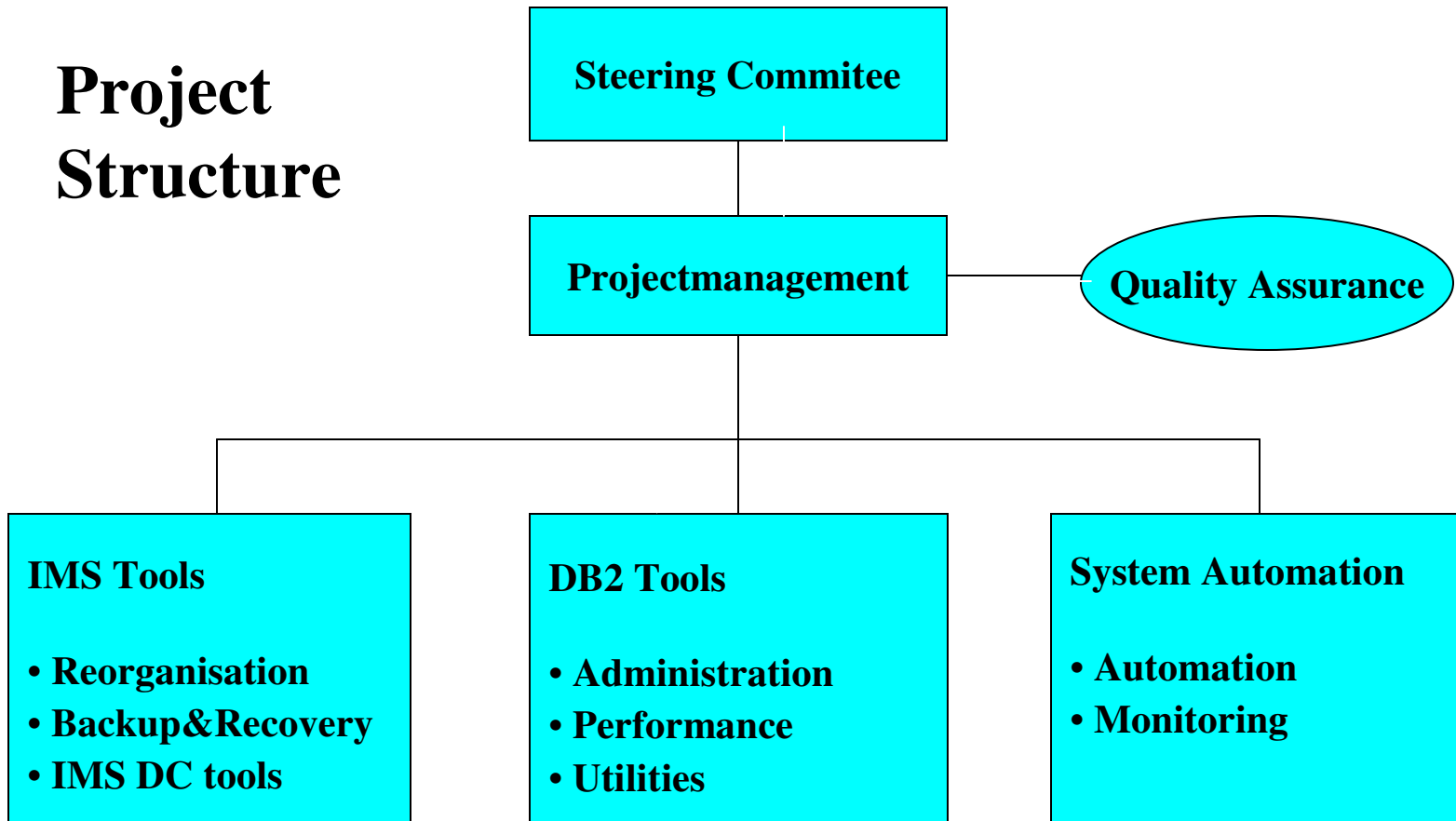DB2 Recovery for SAP & IMS Accounting/Reporting

The Objective

Reduction of software costs

Some customer facts:

➢ 32 data processing centers with high bandwidth back bone

➢ z/OS capacity of 116.956 MIPS (March 2004)

➢ 31.365 Open System Servers

➢ Biggest network in Europe

➢ Workflow and services for over 97.000 workstations

➢ Biggest SAP-Installation in Europe

➢ Over 50 international outsourcing customers:

Deutsche Telekom, Airbus, BLG, DaimlerChrysler, EADS, Henkel, MTU, Schufa, TechData, Unilever, ...

Total Europa:
111.789 MIPS

UK
80

Germany
85.841

France
3029

Austria
647

Brazil
1988

South Africa
3.179

Spain
796

Switzerland
7.387

Italy
14.009

116.956 MIPS

Stand: März 2004

Project Structure

Steering Commitee

Projectmanagement

Quality Assurance

IMS Tools

- **Reorganisation**
- **Backup&Recovery**
- **IMS DC tools**

DB2 Tools

- **Administration**
- **Performance**
- **Utilities**

System Automation

- **Automation**
- **Monitoring**

Project Progress

➢ until end of 2003: 21 IBM IMS-, 20 IBM DB2-, 2 IBM CICS solutions implemented

➢ by end of 2003: more than 250 T-Systems employees trained on IBM IMS & DB2 tools with internal courses

➢ by mid of 2004: all 150 IMS LPARs migrated

➢ by fall 2004: DB2 V8 ESP with System Recovery fully tested and implemented to replace the BMC solution named "Smart Recover for SAP"

➢ by end of 2004: IMS Accounting & Reporting (Mainview IMS Offline) replaced using CA NeuMICS

➢ May 2005: 3 SysPlexes migrated from BMC MainView Automation to Tivoli SA

➢ by mid of 2005: 190 of 250 DB2 LPARs migrated

➢ until today: several workarounds developed to provide same functionality as BMC products

Project Documentation

➢ Checklists of implementation deepness (used functions)

➢ Test plans & scenarios

➢ Project plans

➢ SLAs & acceptance criteria

➢ Benchmarks

➢ Documentation of technical problems & requirements

➢ Status presentations

➢ Change Management

Migrated IMS Tools

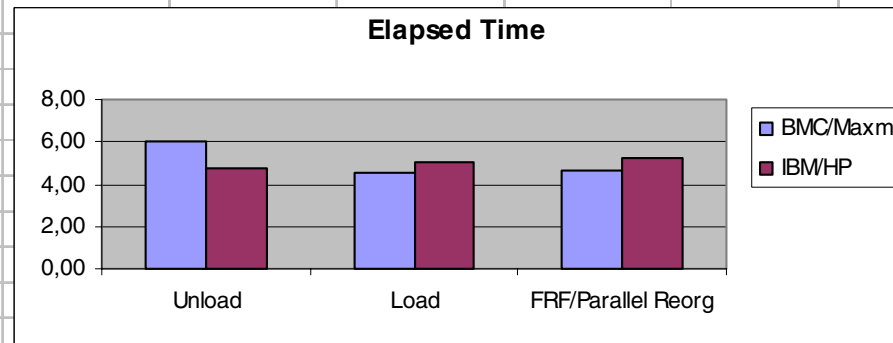| BMC Product	IBM Product
IMS DC/IMS TM	**IMS DC/IMS TM**
Data Packer IMS	IBM IMS HD Compression Extended
Message Advisor for IMS	IBM IMS Queue Control Facility
Ultraopt/IMS	IBM IMS Network Compression Facility
Database Integrity Plus	IBM IMS Library Integrity Utilities
Extended Terminal Assist Plus & Delta IMS/Virtual Terminal	IBM IMS Extended Terminal Option Support
Delta IMS & DeltaPlex	IBM IMS Command Control Facility IBM IMS High Performance Sysgen Utilities
IMS Database Reorganization	**IMS Database Reorganization**
Fast Reorg Facility/EP	IBM IMS Parallel Reorganization
Unload Plus/EP for IMS	IBM IMS High Performance Unload
Loadplus/EP for IMS	IBM IMS High Performance Load
Secondary Index Utility/EP	IBM IMS Index Builder
IMS Backup&Recovery	**IMS Backup&Recovery**
Image Copy Plus	IBM IMS Image Copy Extensions
Recovery Plus for IMS	IBM IMS Image Copy Extensions
Pointer Checker Plus	IBM IMS High Performance Pointer Checker
Change Accumulation Plus	IBM IMS High Performance Change Accumulation

Lessons learned

➢ **Benchmarks**

- Static runtime environment
- Adjust default settings to have comparable results
- Bitmap issue

➢ **Image Copy Compatibility**

- Compressed IC
- Special considerations to decompress image copies

➢ **User Exits**

- Exit interfaces
- Return code exit
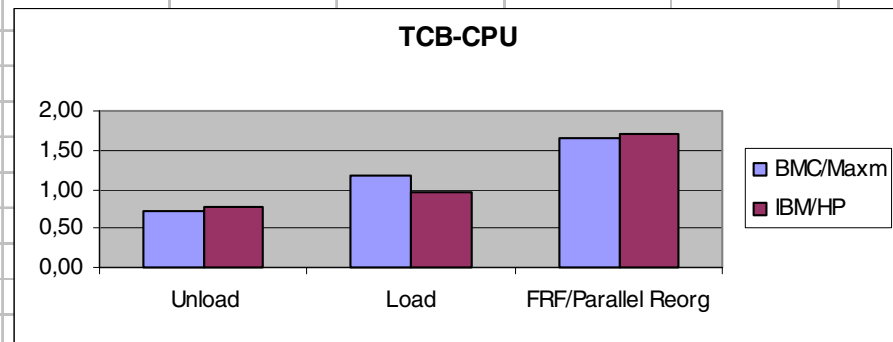
➢ **User Defined Unload Formats**

Benchmark

HIDAM/OSAM with 49.341 Mio Segments			
Elapsed Time (min)	BMC/Maxm	IBM/HP	
Unload	6,02	4,73	
Load	4,54	5,02	
FRF/Parallel Reorg	4,65	5,26	

Elapsed Time

TCB-CPU Time (min)	BMC/Maxm	IBM/HP	
Unload	0,72	0,78	
Load	1,17	0,96	
FRF/Parallel Reorg	1,66	1,72	

TCB-CPU

Migration Tools & Addons

➢ **ETA TSS Converter**

- Convert ETA or DELTA/VT terminal definitions to ETO Support

➢ **Mainview AutoOperator Rules Analyzer**

- Analyze the AutoOperator rules dataset

➢ **SMF Record Analyzer**

- Identify jobs run with BMC utilities by analyzing SMF records

➢ **JCL Converter**

- Convert JCL and utility control statements
- Using different sources
- Analyze Job Scheduler definitions

Migration Tools & Addons cont.

➤ IMS Pointer Checker Extension

- ISPF interface to IBM's Pointer Checker
- Threshold monitoring for IMS databases

➤ Variable Unload Formats

- Unload, Sort, Reload of IMS databases in various formats

Any Questions?