NetWorks
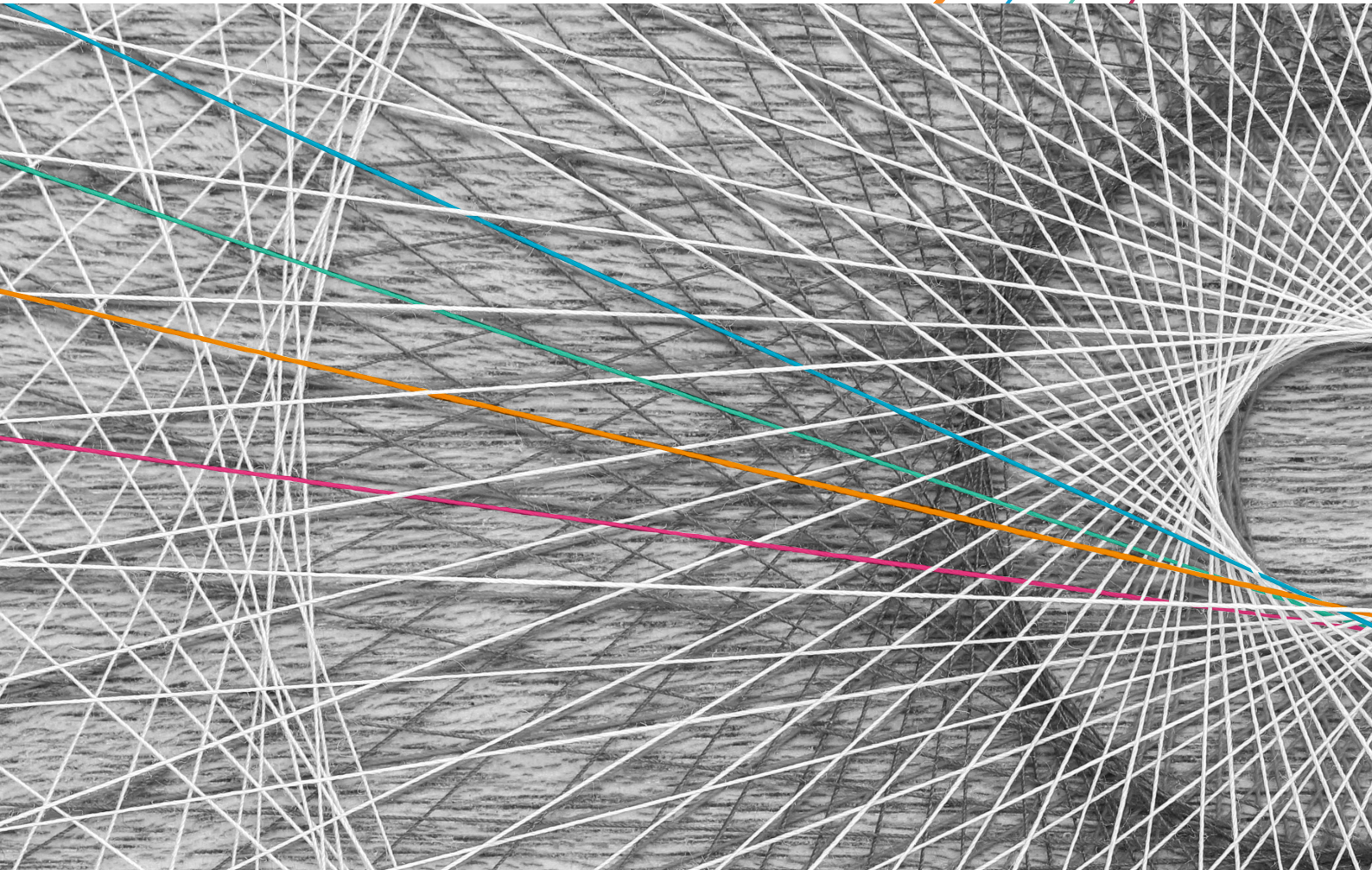
Network Capacity Management
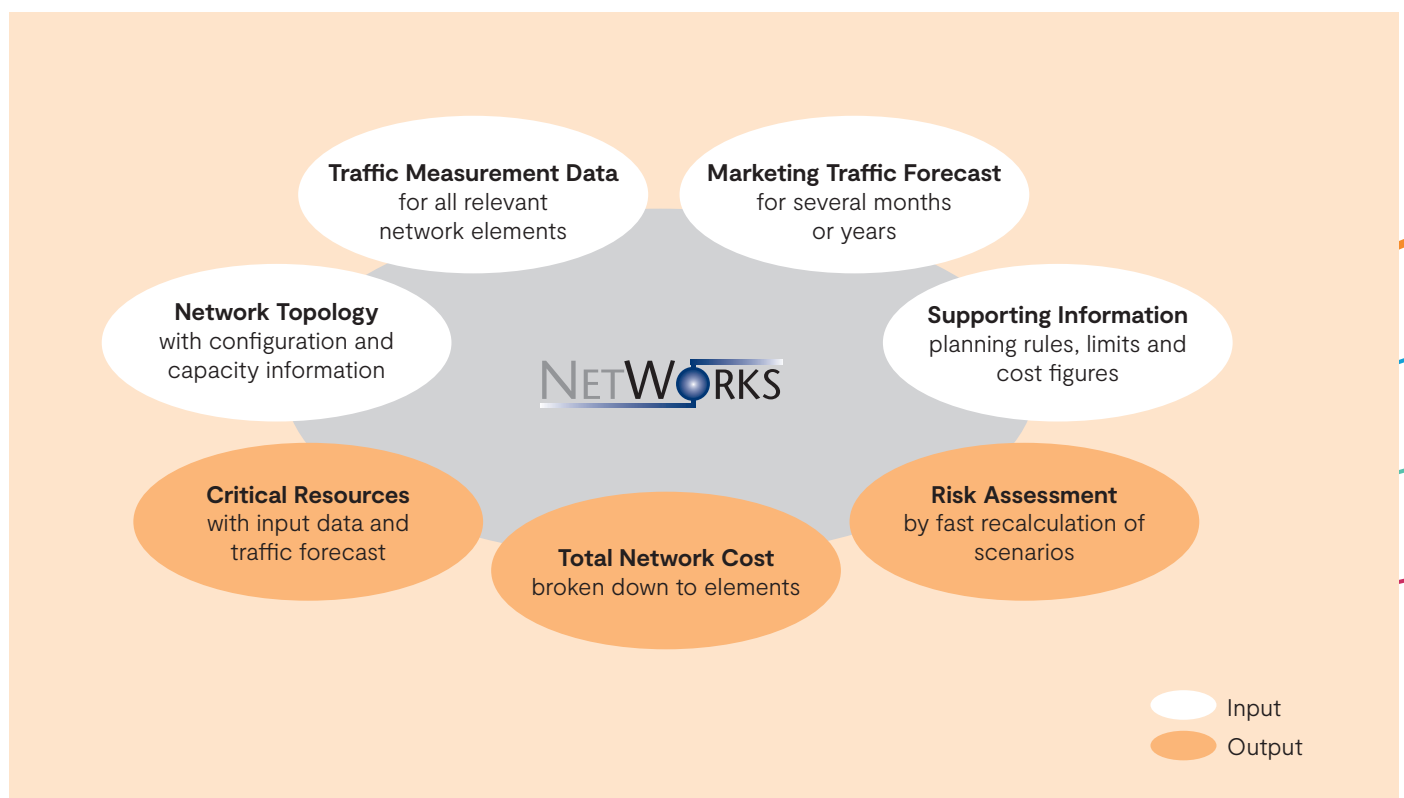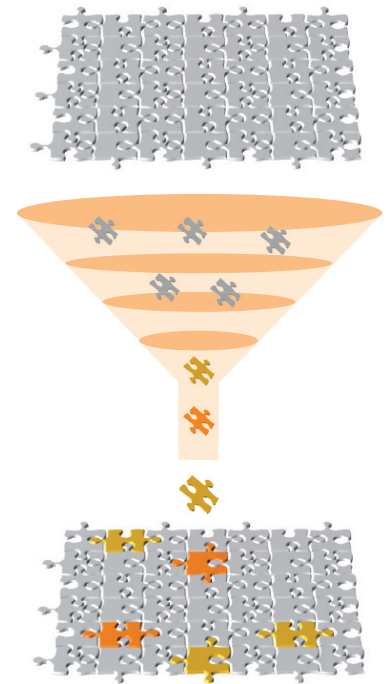
Mobile Forecast

DETECON
CONSULTING

The Features

NETWORKS Mobile Forecast is a tool for analyzing current load of existing access, aggregation and core networks. It supports planning necessary extensions and thus optimizing network capacity management.

The tool provides a detailed view of the structure of your network in synchronized tables and graphs. Automated analyses of performance measurement data for long periods in time assure fast and reliable planning results. These results allow operators and carriers to reduce their investment and operational costs.

Generally capable to monitor network end-to-end capacity across technologies and network levels, the tool can be applied also to specific topics, e.g. mobile access network capacity management.

Planned capacity extensions can be prepared as regionalized reports supporting internal planning processes while providing an overview on the overall network health state.

For general features please refer to our flyer NETWORKS Product Portfolio.

Traffic Measurement Data
for all relevant
network elements

Marketing Traffic Forecast
for several months
or years

Network Topology
with configuration and
capacity information

Supporting Information
planning rules, limits and
cost figures

NETWORKS

Critical Resources
with input data and
traffic forecast

Total Network Cost
broken down to elements

Risk Assessment
by fast recalculation of
scenarios

Input
Output

End-to-End Capacity Monitoring

Calculating required network capacities with detailed information about place of extension and point in time.

Measurement Analysis

> Import of measurement data of several days, weeks or months for thousands of network elements

> Consideration of dependencies between network elements

> Automated data processing

> Graphical and tabular reports on overloaded network elements

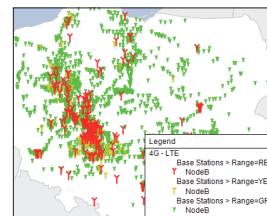> KPI calculation and evaluation

Future Network Utilization

>> Traffic Trending (e.g. linear regression model) for estimating future traffic based on imported measurements

>> Evaluating dependencies between measurement counters and using this information for traffic forecasting

>> Using marketing forecast figures to estimate required network extensions

Detailed Lists

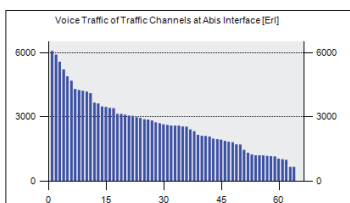| ID	Type	MeasuringData	Traf1 BitTr MBit/s	Dim1 Quantity (#CE_DL_Max)	Range
12008 NodeB-003068	NodeB	(44xBitTr) -- (17...	6.06	768.00	GREEN
12009 NodeB-003069	NodeB	(44xBitTr) -- (17...	46.05	1152.00	RED
12010 NodeB-003070	NodeB	(44xBitTr) -- (17...	9.42	1152.00	GREEN
12011 NodeB-003071	NodeB	(44xBitTr) -- (17...	22.45	1152.00	GREEN
12012 NodeB-003072	NodeB	(44xBitTr) -- (17...	40.78	1152.00	YELLOW
12013 NodeB-003073	NodeB	(44xBitTr) -- (17...	39.01	1152.00	GREEN

> Prioritization of network elements
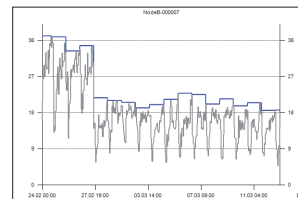> Configuration and capacity
> Current and planned load

Graphs

> Checking spatial distribution of overload, e.g. detecting regional overload
> Tracing technology rollout, e.g. monthly graph on LTE sites

Key Performance Indicator

Voice Traffic of Traffic Channels at Abis Interface [Erl]

> Overview of overall network performance
> Automated reporting using customized graphs

Measurement Analysis

NodeB-000007

> Verifying planning result
> "Deep dive" capability by combining measurement data, configuration information and capacity values

Your Benefits

NetWorks Mobile Forecast supports network operators in identifying critical resources in the current network and in planning necessary network extensions.

Automated Processing of Planning Data	> By fully automated network calculation > With prepared controls for individual planning
Consistent End-to-End Network Analysis and Planning	> From access over aggregation to core level > For nodes and links, physical devices and pools
Algorithmic Approach for Calculation/Optimization	> Reduced runtime of network analyses > Analytical and heuristic methods for capacity planning
Synchronized Tables and Views	> For efficient evaluation of planning results > Consistent network documentation as graphs & lists
Future Proof Software System	> Multi-layer approach to combine different technologies > Flexible algorithms to extend calculation functions

We invite you to benefit from the advantages of analysis, planning and optimization with NetWorks.

We look forward to your inquiry.

NetWorks

a product of **DETECON**

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