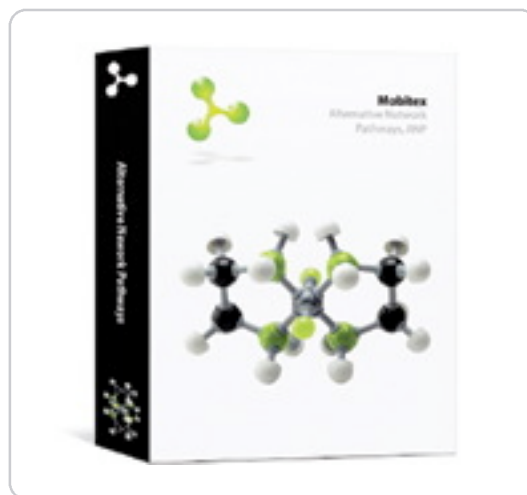# ANP

Alternative Network Pathways

To achieve a truly robust Mobitex network, a flat network architecture where MOXes act as top nodes are required. A flat network architecture allows base stations to be configured with Alternative Network Pathways between sub-networks.

The result is a truly winning formula: Improved network availability together with reduced number of required network nodes.

In order to maintain network availability for the end-users when the system is configured with topnode MOXes,it is necessary for base stations to have an Alternative Network Pathway (ANP) to at least one MOX in another sub-network. This feature makes it possible to build a flat network architecture where MOXes act as top-nodes without losing the ANP redundancy, hence resulting in guaranteed avail-ability of all network services.

A flat Mobitex system architecture also allows for better usage of network resources. In addition, since fewer network nodes are required in both large and small network configurations, it dramati-cally reduces costs of network infrastructure.

A flat network architecture also reduces network load and allows traffic patterns and their impact on different parts of the network to be predicted more accurately. With more accurate traffic pre-dictions, network congestion can always be kept at a minimum.

A flat network architecture also improves network manageability and increases the availability of net-work services. In addition, a less complex network architecture results in more efficient and less time consuming network supervision and configuration.

Technical specification
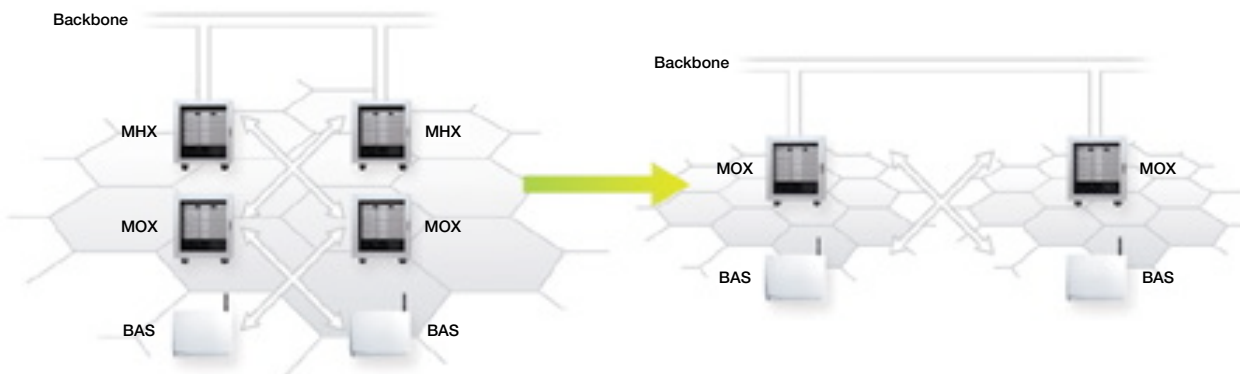
Benefits in brief

- Improved usage of network resources
- Reduced infrastructure costs
  (as fewer network nodes are required)
- Easier to predict traffic patterns and network load

- Reduced risk for traffic congestion
- Less complicated supervision and configuration
- Overall improved network manageability
- Improved availability of network services

System prerequisites

Mobitex NTE System Release R8 or higher

System impact

Affected network entities are MHX, BIU, NCC and NLS

Performance

The reliability and availability of the network will be affected in a positive manner

DRR load

The DRR load increase with number of sub-networks. This is due to the increased roaming of subscriptions between different sub-networks

Traffic

Traffic which previously was handled by X.25 line connections between network nodes is moved to the Mobitex backbone IP network

Please note

Base stations are not allowed to use ANPs to other sub-networks before the affected MOXes (i.e. MOXes to which the base station have ordinary and alternative connections) have been upgraded to the Mobitex NTE System Release R8

Configuration

All new features can be configured using a standard NMS configuration tool

Licensing

The Alternative Network Pathways feature is an optional add-on functionality to the Mobitex NTE System Release R8 which requires a software license