# Design of the MOBIKE Protocol

<draft-ietf-mobike-design-03.txt>

Tero Kivinen
Hannes Tschofenig

### **Current Status**

Changes incorporated throughout the document.

 http://www.tschofenig.com/TEMP/Diff\_draft-ietf-mobikedesign-02\_txt-draft-ietf-mobike-design-03\_txt.htm

# Missing Pieces

- Selecting addresses (issue # 20)
- More details in the security consideration section
- Maybe need to add design rational for some issues that arise during the protocol discussions

#### **Examples**

- Adding version number to MOBIKE\_SUPPORTED (issue#35)
- Security and path testing (issue#27)
- Mostly about improving readability

## **Document Structure**

- Introduction
- **Terminology**
- **Scenarios**
- Framework
- **Design Considerations** 
  - Indicating Support for MOBIKE
  - Changing a Preferred Address and Multi-homing Support
  - Simultaneous Movements
  - NAT Traversal
  - Changing addresses or changing the paths
  - Return Routability Tests
  - Employing MOBIKE results in other protocols
  - Scope of SA changes
  - Zero Address Set
  - IPsec Tunnel or Transport Mode
  - Message Representation
- Security Considerations

- Introduction
- Simplified Scenarios
- Design considerations
  - Choosing addresses
    - Inputs and triggers
    - Connectivity
    - Discovering connectivity
    - Symmetry in decision making vs. asymmetry in decisions
    - · Suggested approach
  - **NAT Traversal** 
    - Background and constraints
    - Fundamental restrictions
    - Initiator behind a NAT
    - Responder behind static-NAT
    - Responder behind NAPT
    - Suggested appraoch
  - Scope of SA changes
  - Zero address set functionality
  - **Threats**
  - Return routability test
- Protocol detail issues
  - Indicating support for mobike
  - Window size
  - Message presentation

# Next Steps

Discuss text proposals among the authors

 Text proposals to the mailing list within the next two weeks

Next draft submission after feedback on mailing list