

# Analysis of the Port Control Protocol in Mobile Networks

draft-chen-pcp-mobile-deployment-04

IETF 87- Berlin, July 2013

Gang Chen, Zhen Cao

Mohamed Boucadair

Ales Vizdal

Laurent Thiebaut

China Mobile

France Telecom

Deutsche Telekom

Alcatel-Lucent

# Status

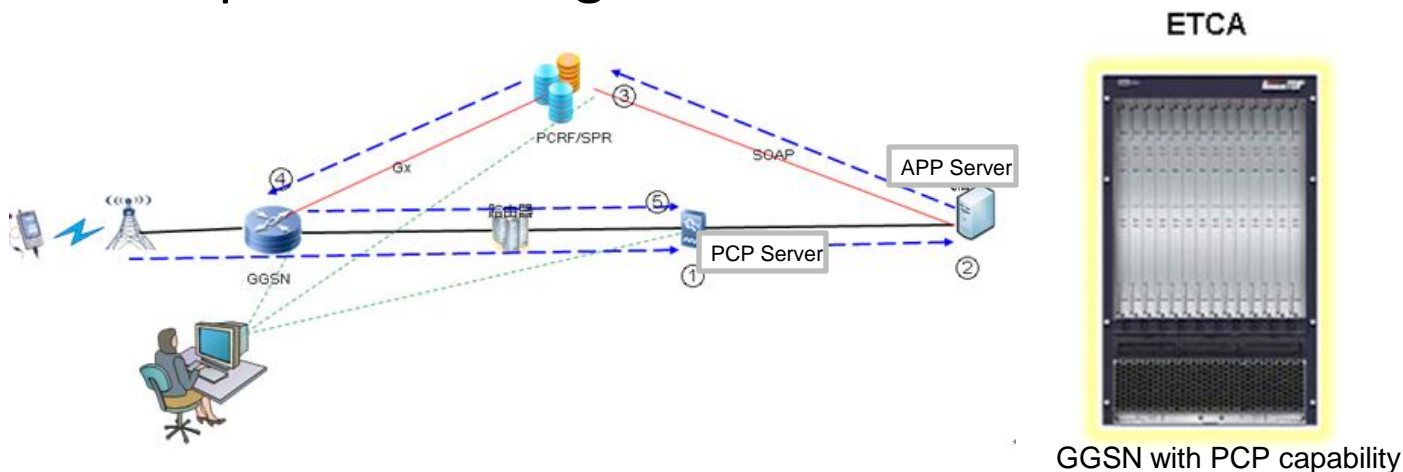
- The work had been presented at IETF#83, 84, 85, 86 and the interim meeting
- Authors had been encouraged to further improve the draft
- The contents are stable after the detailed reviews from Reinaldo Penno and Tirumaleswar Reddy

# Motivation

- Encourages devices with low battery resources to embed a PCP client
- Advocate PCP discussions in a mobile context (We are glad to see more mobile relevant topics proposed)
- Harmonizes considerations towards PCP designers/ implementers

## PCP-Mobile Prototype

- A PCP-Mobile prototype has been implemented to optimize the keepalives messages in our lab

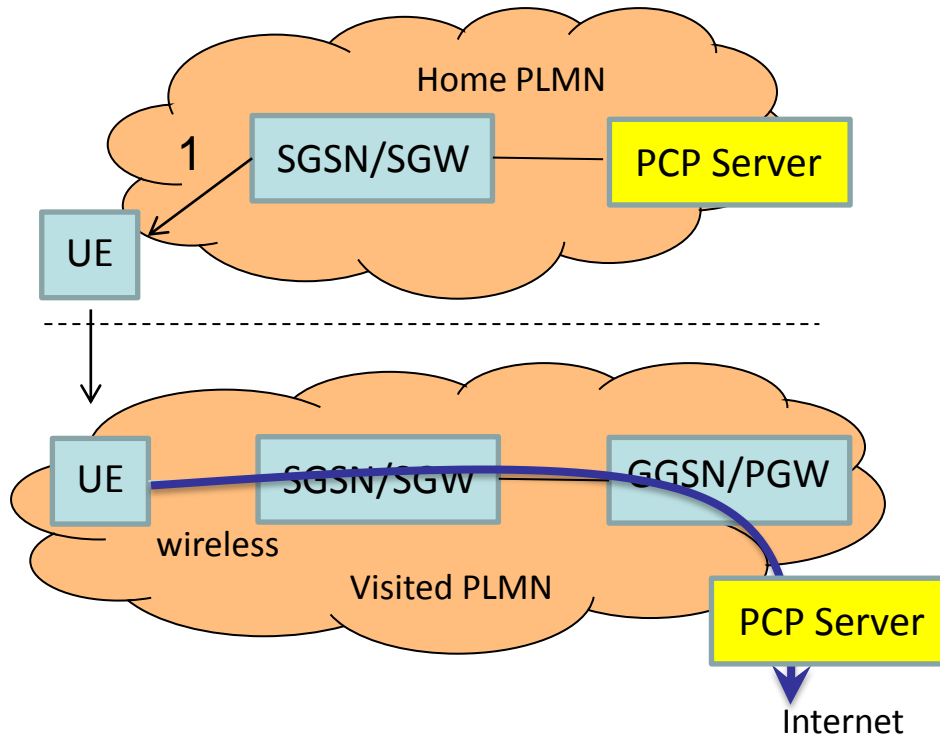


# Updates

- Refine the statements on each sections
- The topics the draft covered
  - Motivation Statements
  - Deployment architecture
  - PCP Server Discovery
  - MN and multi-homing
  - Retransmission Consideration
  - Unsolicited Messages Delivery
  - SIPTO Architecture
  - Authentication Consideration

# Updates: SIPTO(1/2)

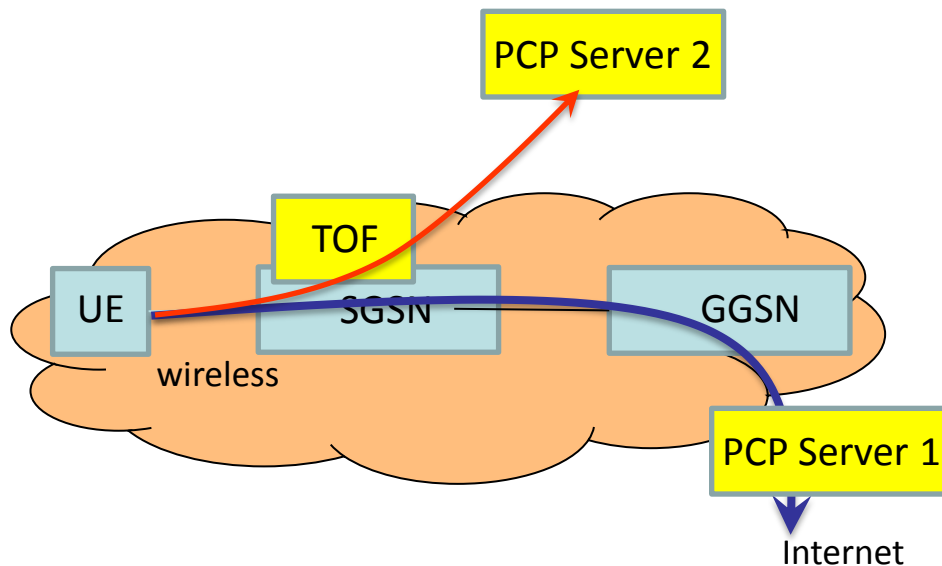
- Case 1: The UE IP address is renumbered



1. Home SGSN/SGW deactivate UE
2. PCP client initiates the messages to delete the mappings on the old PCP server
3. PCP client discover the new PCP server
4. PCP client install new mapping on the new PCP server

# Updates: SIPTO(2/2)

- Case 2: The UE IP address is remained



1. PCP proxy with advanced functions is required
2. PCP proxy should parse Radio Access Bearer Identifier (RAB-ID) to determine each flow

# Next Step

- Adopted it as a WG item?