ERICSSON

Defining Standards that merge Mobile Systems with Internet -

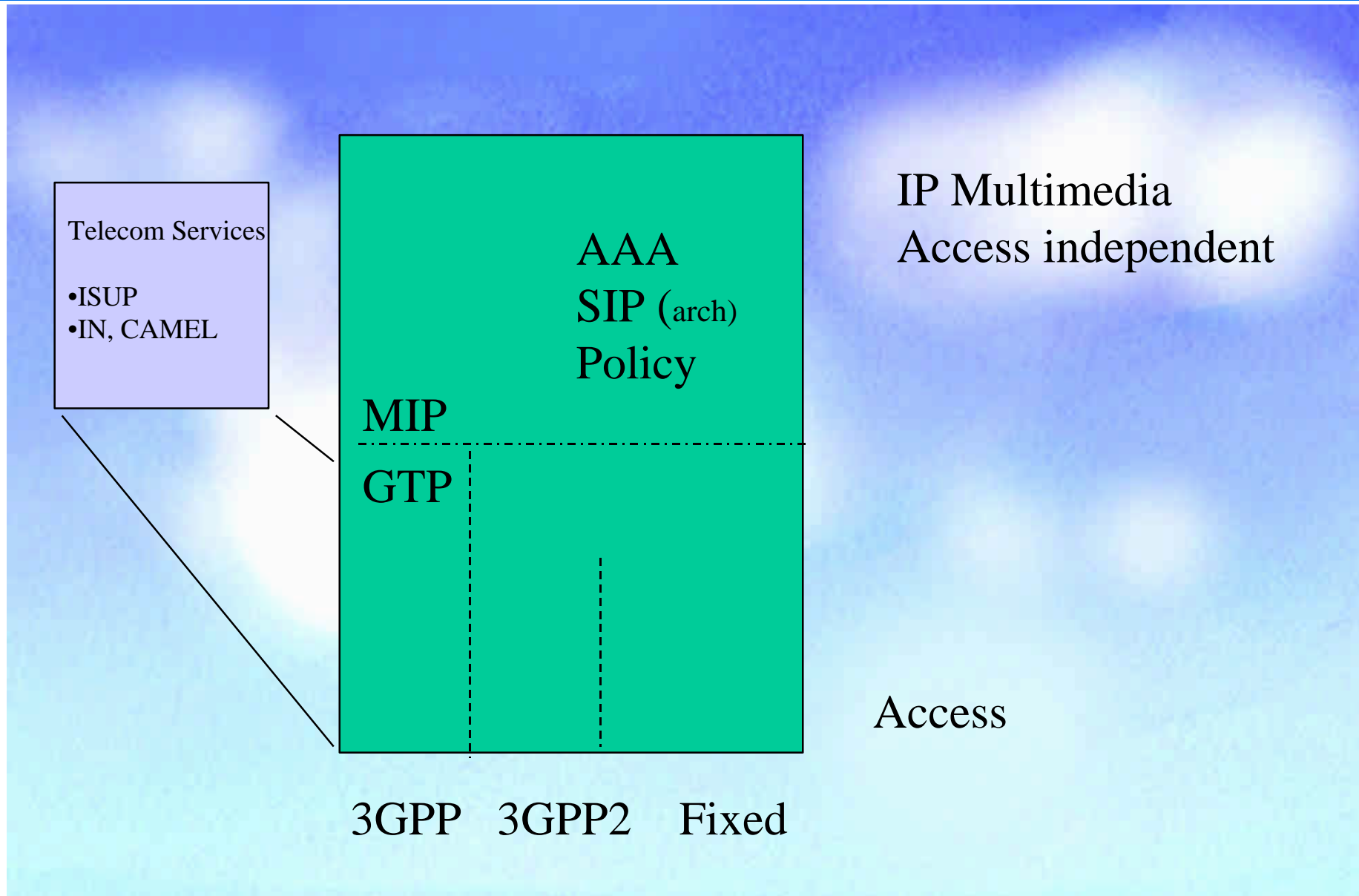## 3GPP All IP Workshop

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IP Multimedia for Wireless

- Combining the most valued Access Form (Mobile) with IP Multimedia is THE main effort
- Main issue - Combining radio environment with Internet service environment
- Radio environment characteristics
  - Scarce bandwidth resources
  - Fading, interference => Unstable BER up to %
  - Terminal mobility, fast handover

Telecom Services

•ISUP
•IN, CAMEL

AAA
SIP (arch)
Policy

MIP

GTP

IP Multimedia
Access independent
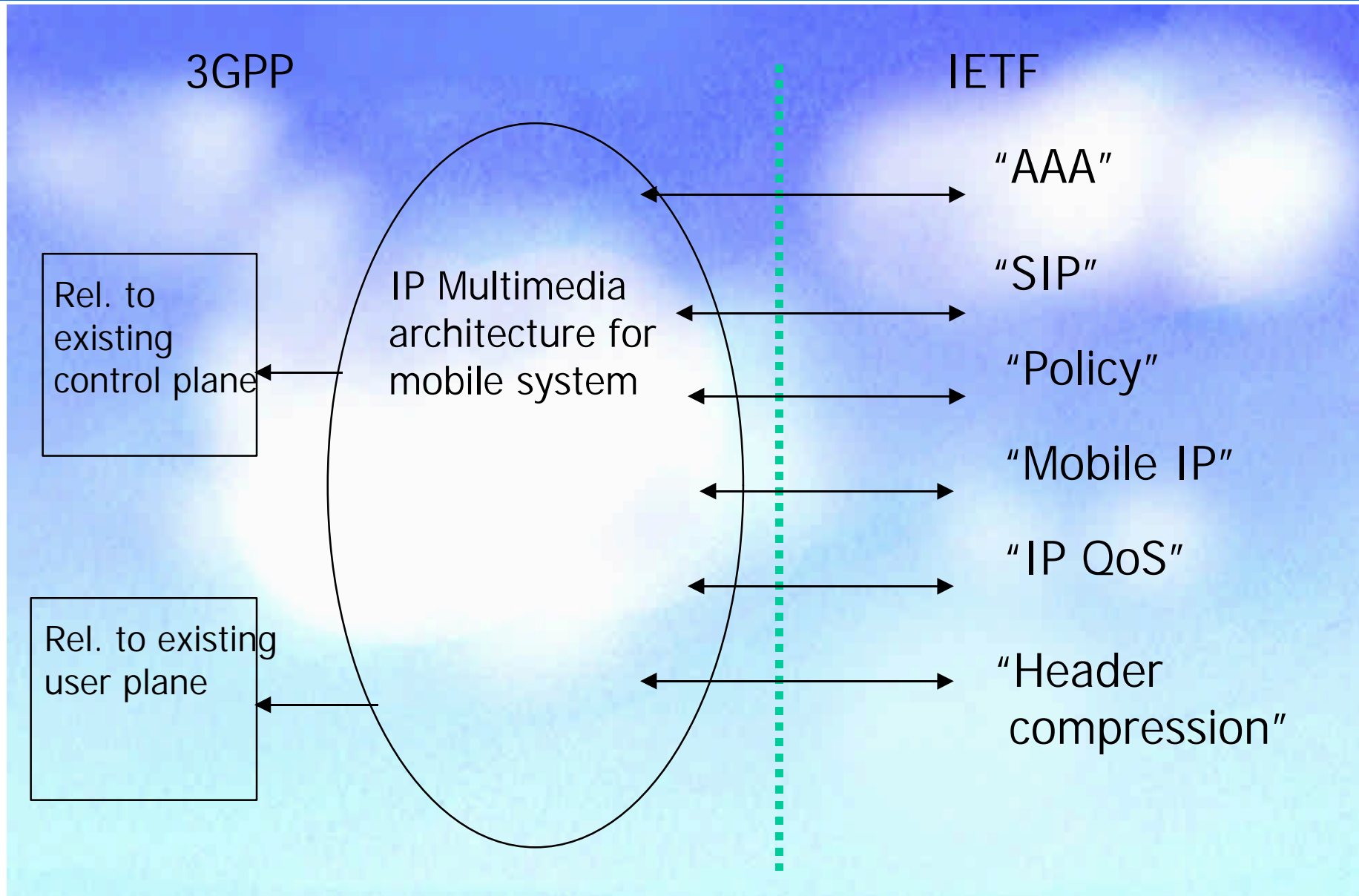
Access

3GPP   3GPP2   Fixed

ERICSSON ⋛

- Wireless adaptation (Bandwidth efficiency, New QoS classes for wireless)

- Mobile terminal adaptation (mechanisms supporting terminal classes (clients): PC, ... , Simple voice only terminal)

- QoS, Real-Time and Fast handover for GPRS (Related to QoS for fixed datacom)

- Network and application level protocols also applicable for wireless

3GPP Holds

- Network Architecture, mobility and roaming

- Radio expertise necessary to input solutions for radio adaptations

- Systems responsibility for WCDMA air interface

- Backward and forward compatibility (including legacy issues)

IETF Holds

- IP protocols
- The Internet expertise
- Protocol development machinery (stage 3)

3GPP

IETF

Rel. to existing control plane

IP Multimedia architecture for mobile system

Rel. to existing user plane

"AAA"

"SIP"

"Policy"

"Mobile IP"

"IP QoS"

"Header compression"

Arrangement - IP for the mobile domain

- 3GPP defines architecture (including information flow) and identifies which IETF mechanisms that shall be utilized and/or modified to support radio environment

- IETF defines the relevant IP protocols, including performing the radio adaptations, taking into account 3GPP as well as all other inputs. (Requires participation from 3GPP expertise in mobility and radio adaptations into relevant IETF WG-s)