





Alternative Calling Procedures including OTTs

Joint ITU-T Study Group 2/ITU-T Study Group 3
Regional Workshop on Topics of Mutual Interest

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Agenda

- 1 ACP Definition
- 2 ACP in ITU's Literature
- 3 General Overview
- 4 Advantages and Disadvantages
- 5 Possible ways of Fraud
- 6 Areas of Study
- 7 Role of Member States





ACP Definition

- There is always philosophical question that underlies any discussion of what is termed *alternative calling mechanisms or procedures*.
- WTSA Res 29 “That any calling procedure should aim to maintain acceptable levels of quality of service (QoS) and quality of experience (QoE), as well as to enable calling line identification (CLI) and/or origin identification (OI) information”
- Definition could be:
“to make international calls by accessing Internet-based calling services”





ACP Definition Cont ..

or

- “any communications technique, which is not based on interworking between PSTN/PLMN, and those based on IP or interworking of PSTN and IP based networks, such as OTT application, SimBox and international callback or any other technologies that may appear which is seriously degrade the QoS/QoE and the performance of the telecommunication networks”

or

- “Alternative calling procedures means routing of voice calls outside PSTN/PLMN at any stage during end-to-end call flow”

or

“Originating routing or termination of calls using either non PSTN/PLMN networks or via PSTN/PLMN but in a way that will impact on the charging mechanisms”





ACP in ITU's Literature

ITU Resolutions regarding ACPs

1. WTSA Resolution 29 Geneva, 1996 (Geneva 2022)
2. WTDC Resolution 22 Istanbul, 2002 (Kigali, 2022)
3. ITU Plenipotentiary Resolution 21 Marrakesh, 2002 (Bucharest, 2022)





General Overview

- Essentially, alternative calling procedures are those activities that route voice traffic outside standard international calling and charging mechanisms.
 - Generally, these procedures can be divided into two classes:
 1. Operator routing procedures
 2. Consumer dialing or billing procedures
- Alternative to what?
1. The Traditional Settlements System
 2. The traditional routing mechanisms





Advantages and Disadvantages

Advantages:

1. Liberalization
2. Competition
3. Lower prices vs. Acceptable QoS

Disadvantages:

1. Loss of revenues.
2. Compromised level of QoS/QoE
3. Loss of CLI/OI
4. Possible way of fraud.





Possible ways of Fraud

1. Re-filing (changing CLI or OI)
2. SIM-Boxing (call rerouting via local numbers)
3. OTT bypass (use OTTs to terminate calls)
4. Home Country Direct (Without agreements)
5. International call-back (via a third party country, where the call costs are deemed low)





Areas of study

Areas of study as Res 29

1. “to continue identifying and defining all forms of alternative calling procedures”
2. “to study their impact on all parties”
3. “to develop appropriate Recommendations concerning alternative calling procedures”





Areas of study Cont...

Areas of study as Res 29

4. “to instruct Study Group 2 to study other aspects, forms and definition of alternative calling procedures, including those associated with the interworking of legacy and IP-based infrastructures, and the consequent instances of hindrance, obscuring or spoofing of OI or CLI information, and the evolution of alternative calling procedures, including the use of over-the-top (OTT) telephone applications that use telephone numbers, which may give rise to instances of fraudulent practices, and to develop appropriate Recommendations and guidelines”





Role of Member States

Member States are invited to:

“to adopt national legal and regulatory frameworks requesting administrations and international telecommunication operators or operating agencies authorized by Member States to avoid using alternative calling procedures that degrade the level of QoS and QoE, to encourage the delivery of international CLI and OI information, at least to the destination operating agency, and to ensure the appropriate charging, taking into account the relevant ITU-T Recommendations”





Thank You

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