

# ITU Workshop on Telecommunications Service Quality

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## Recommendation ITU-T G.1000: Communications Quality of Service: A framework and definitions

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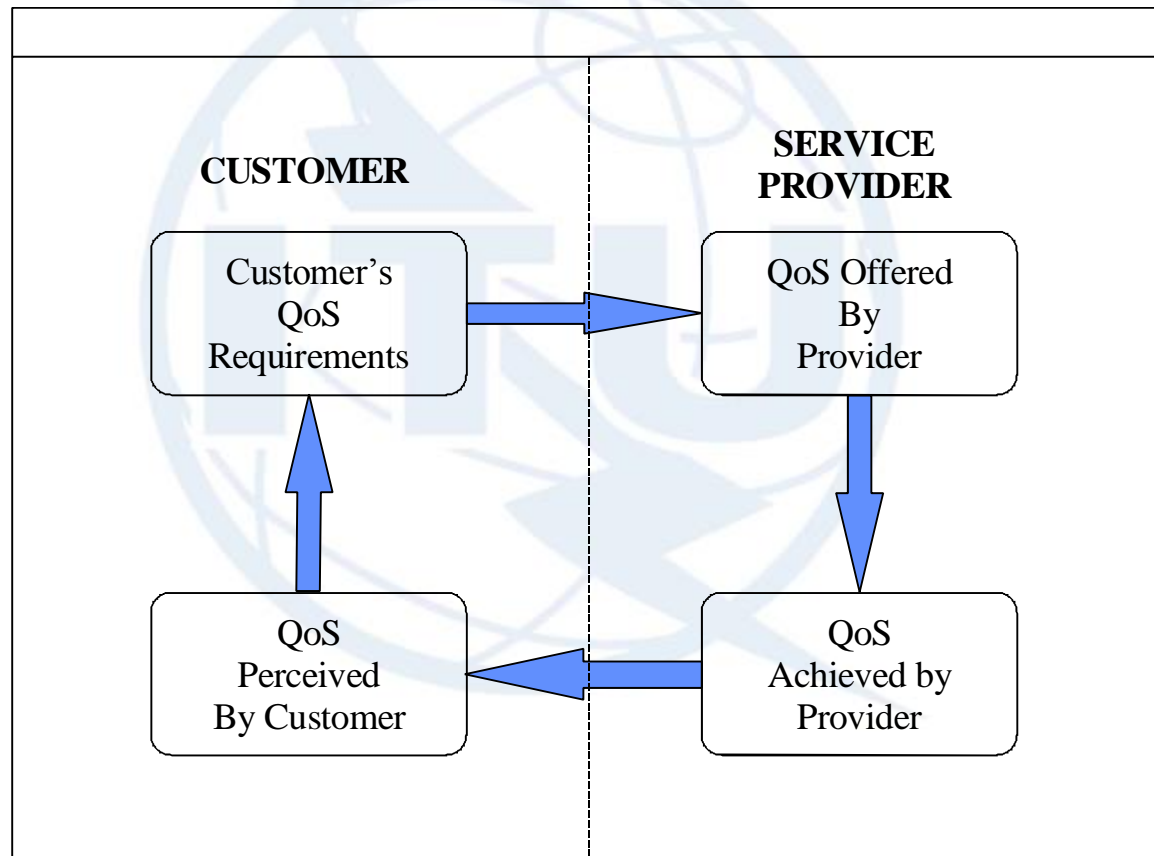


# G.1000 starting point

- RICHTERS (J.S.), DVORAK (C.A.):
- A Framework for Defining the Quality of Communications Services
- IEEE Communications Magazine, Volume 26, Issue 10, pp. 17-23, October 1988



# The four viewpoints of QoS



T1213040-02

# Quality of Service (QoS)

- **Quality of Service (QoS)**
- Totality of characteristics of a telecommunications service that bear on its ability to satisfy stated and implied needs of the user of the service.

# Quality of Experience (QoE)

- **Quality of Experience (QoE)** is the degree of delight or annoyance of the user of an application or service.  
[Qualinet2013]
- Note – Recognizing on-going research in this topic, this is a working definition which is expected to evolve for some time. (This note is not part of the definition.)
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- **Bibliography**
- [Qualinet2013] Qualinet White Paper on Definitions of Quality of Experience, Output from the fifth Qualinet meeting, Novi Sad, March 12, 2013



# QoE Influencing Factors

- **QoE Influencing Factors** include the type and characteristics of the application or service, context of use, the user's expectations with respect to the application or service and their fulfilment, the user's cultural background, socio-economic issues, psychological profiles, emotional state of the user, and other factors whose number will likely expand with further research.

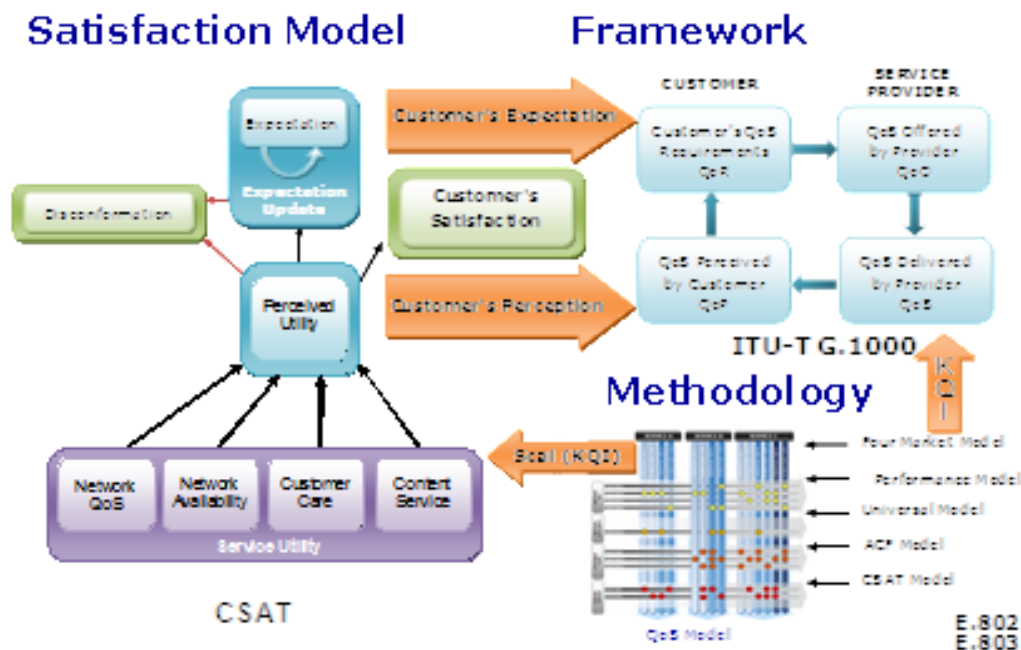


# QoE Assessment

- **QoE Assessment** is the process of measuring or estimating the QoE for a set of users of an application or a service with a dedicated procedure, and considering the influencing factors (possibly controlled, measured, or simply collected and reported). The output of the process may be a scalar value, multi-dimensional representation of the results, and/or verbal descriptors. All assessments of QoE should be accompanied by the description of the influencing factors that are included. The assessment of QoE can be described as comprehensive when it includes many of the specific factors, for example a majority of the known factors. Therefore, a limited QoE assessment would include only one or a small number of factors.

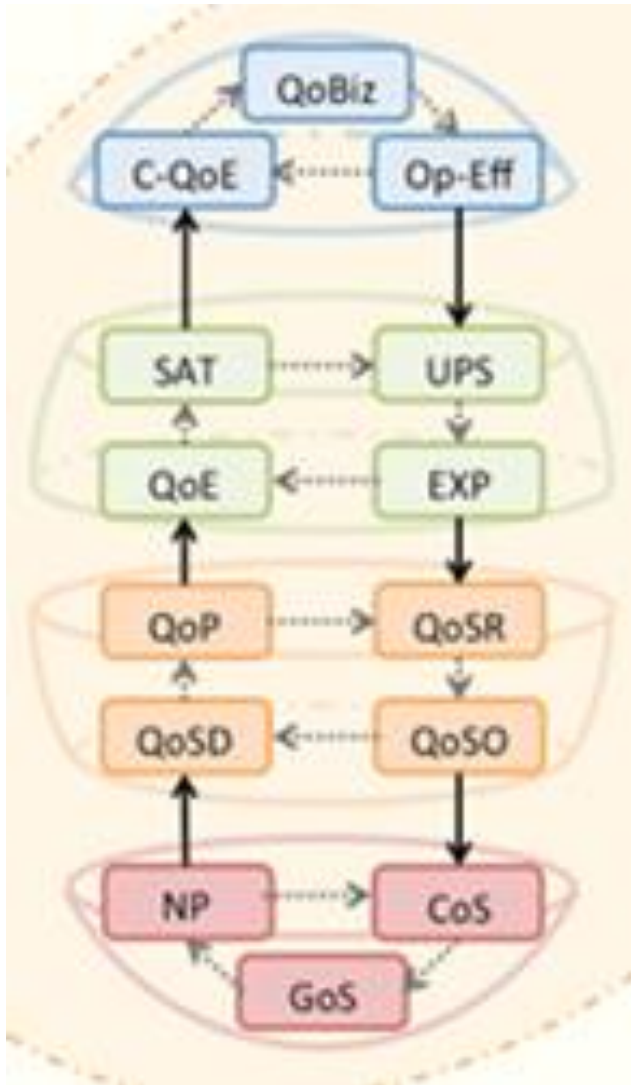
# Update requested

- University of the Basque Country (UPV/EHU)





# Linking Rec. G.1000 QoS definitions to QoE and other related concepts



## QoS BUSINESS

C-QoE: Customer Experience  
 QoBiz: Revenue & Margin  
 Op-Eff: Operational Efficiency

## ASSESSED QoS

QoE: Quality of Experience  
 SAT: Satisfaction  
 UPS: User Provider Selection  
 EXP: Expectation

## PERCEIVED QoS

QoS: QoS Perceived  
 QoSR: QoS Required  
 QoSO: QoS Offered  
 QoSD: QoS Delivered

## INTRINSIC QoS

NP: Network Performance  
 CoS: Class of Service  
 GoS: Grade of Service

# Conclusions

- SG12 agreed to the need to update G.1000
- Insert clarifications and measures how to assume compliance in all 4 sectors
- No further contribution received up to now
- Contributions are solicited
- SG 12 is contribution driven



# Any questions ?

- We need YOUR feedback !!!



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