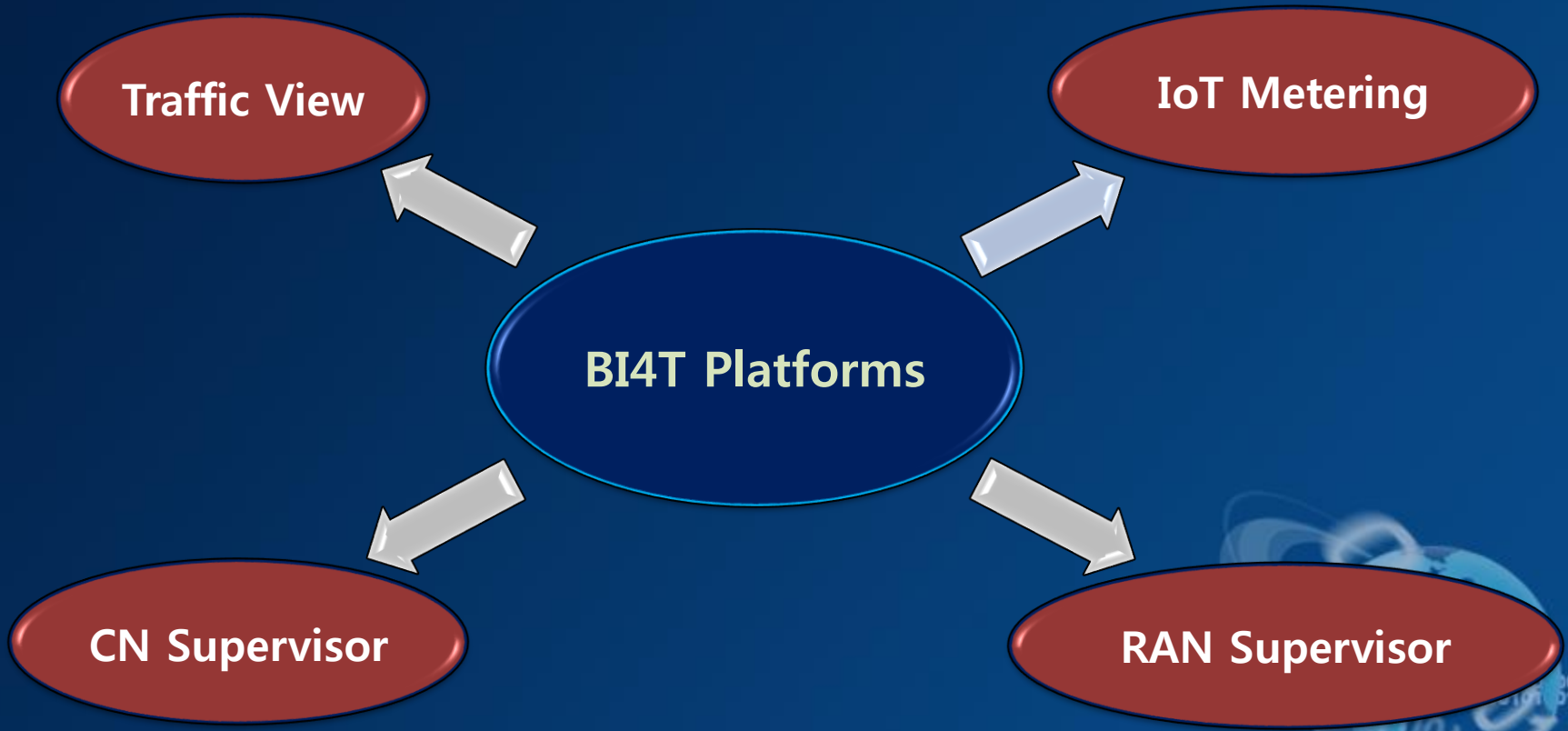
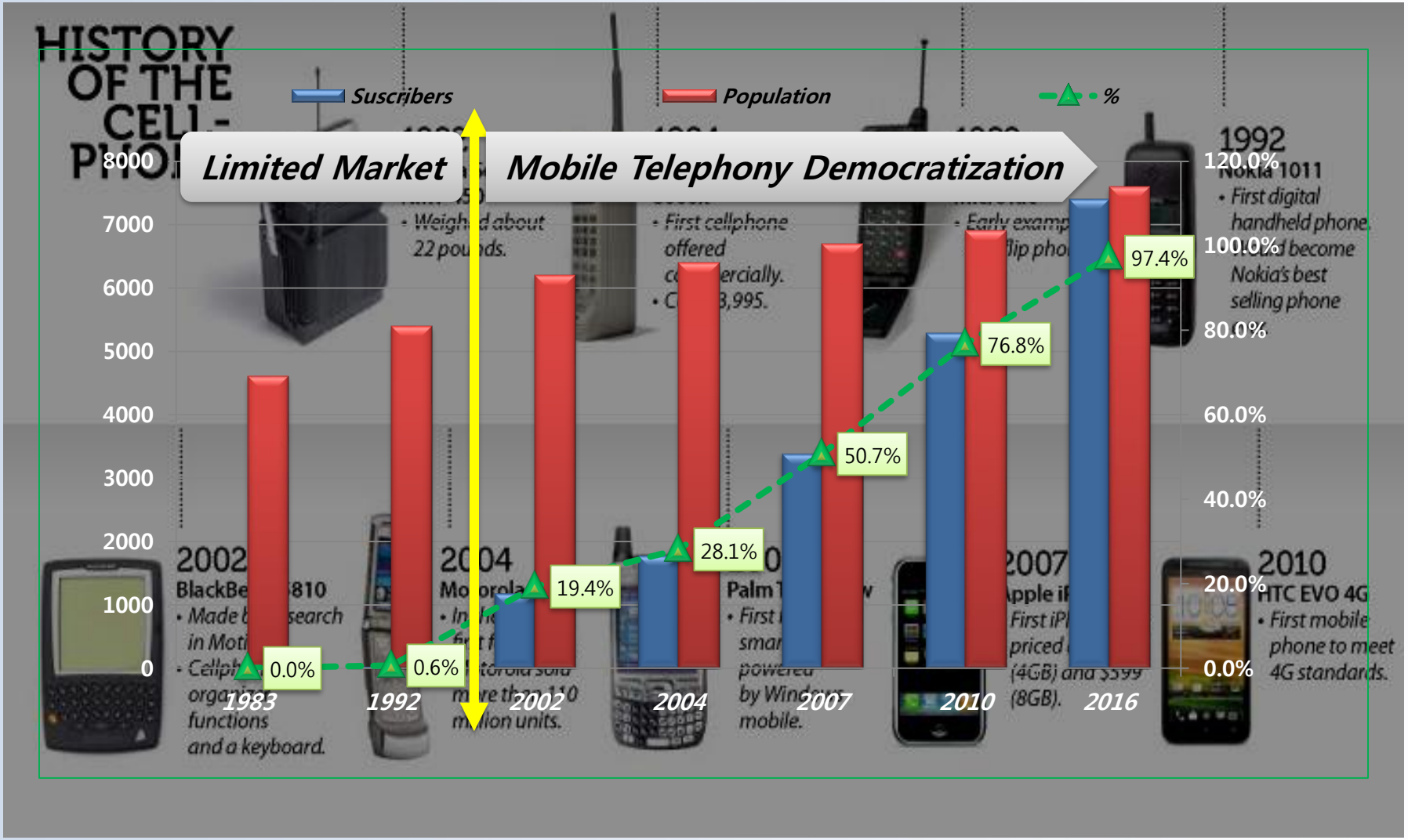
QoS & QoE
Measurement Tools and Strategies

Presentation

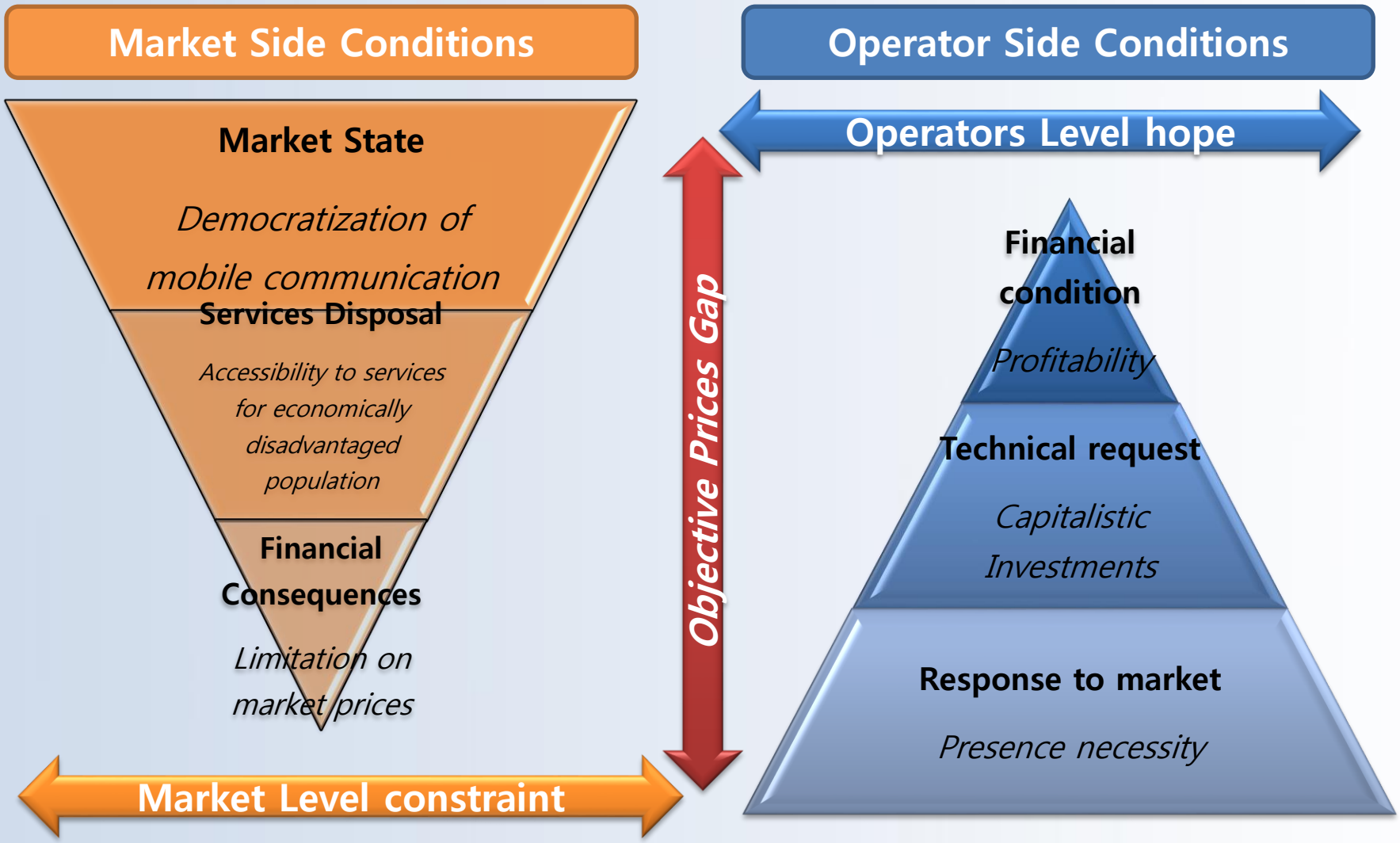
Tunisian ICT company providing solutions for mobile networks survey insuring monitoring of QoS, QoE & Traffic surveys



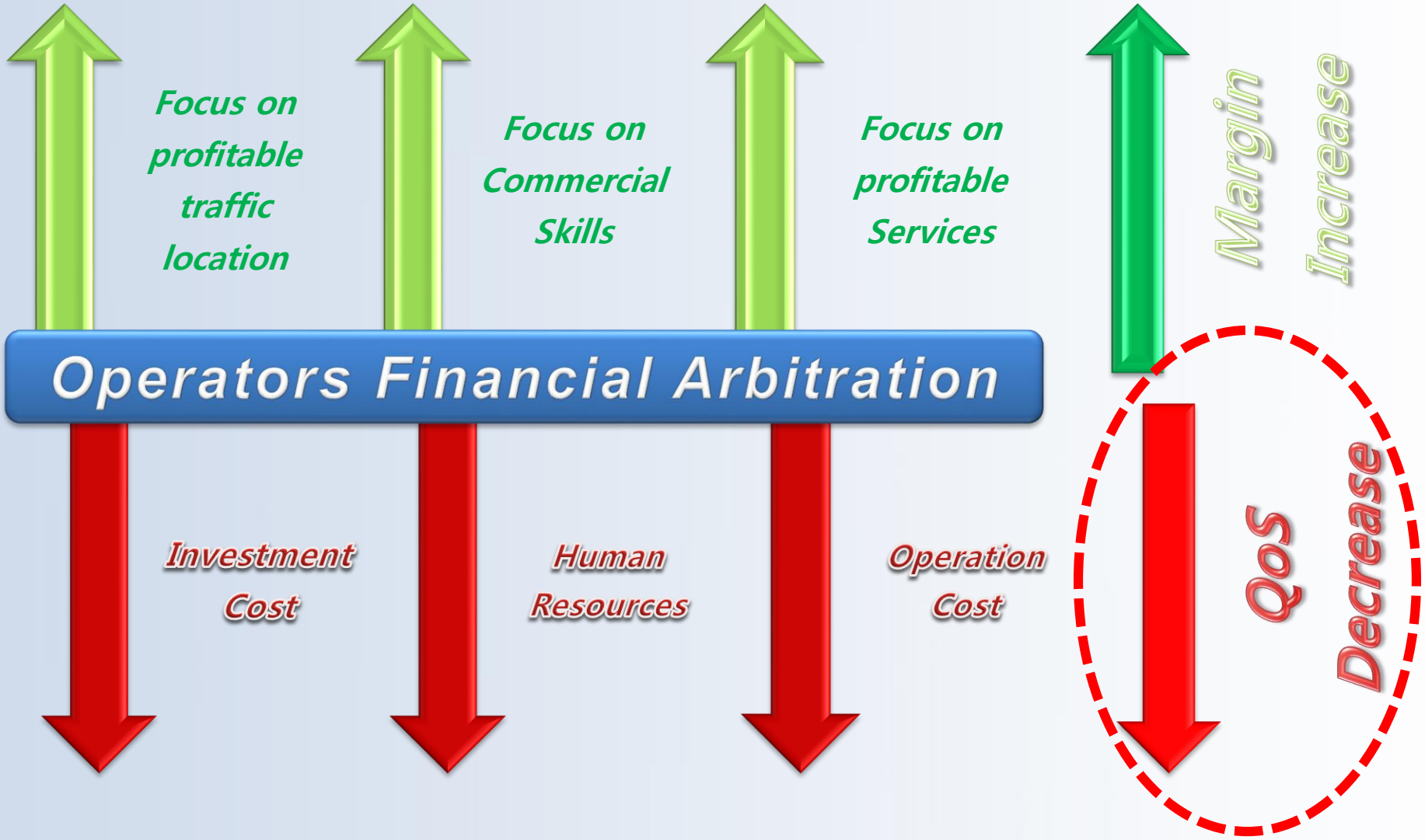
Mobile Communication Evolution



Mobile Communication Financial Dilemma

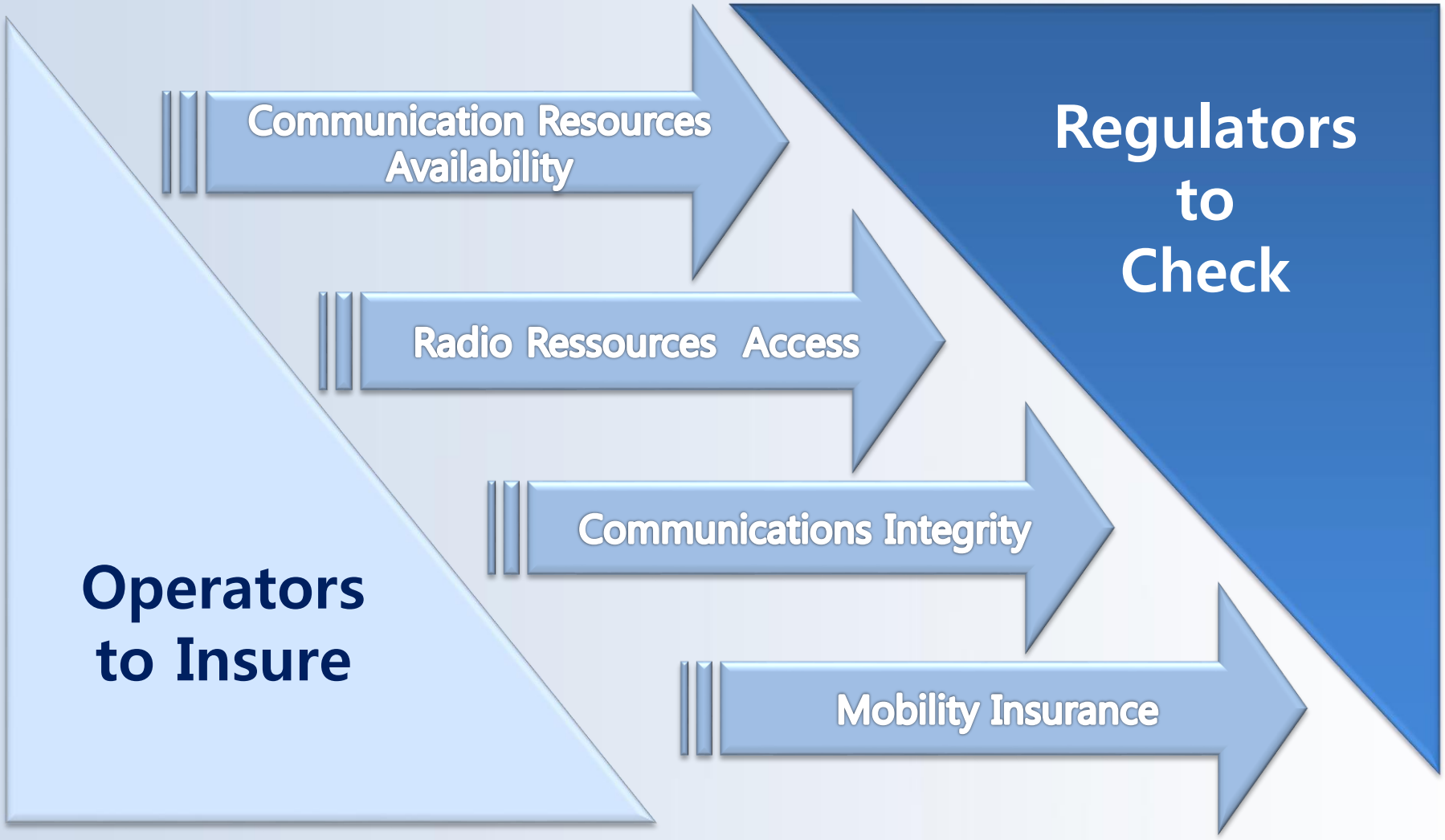


Network No QoS Originating

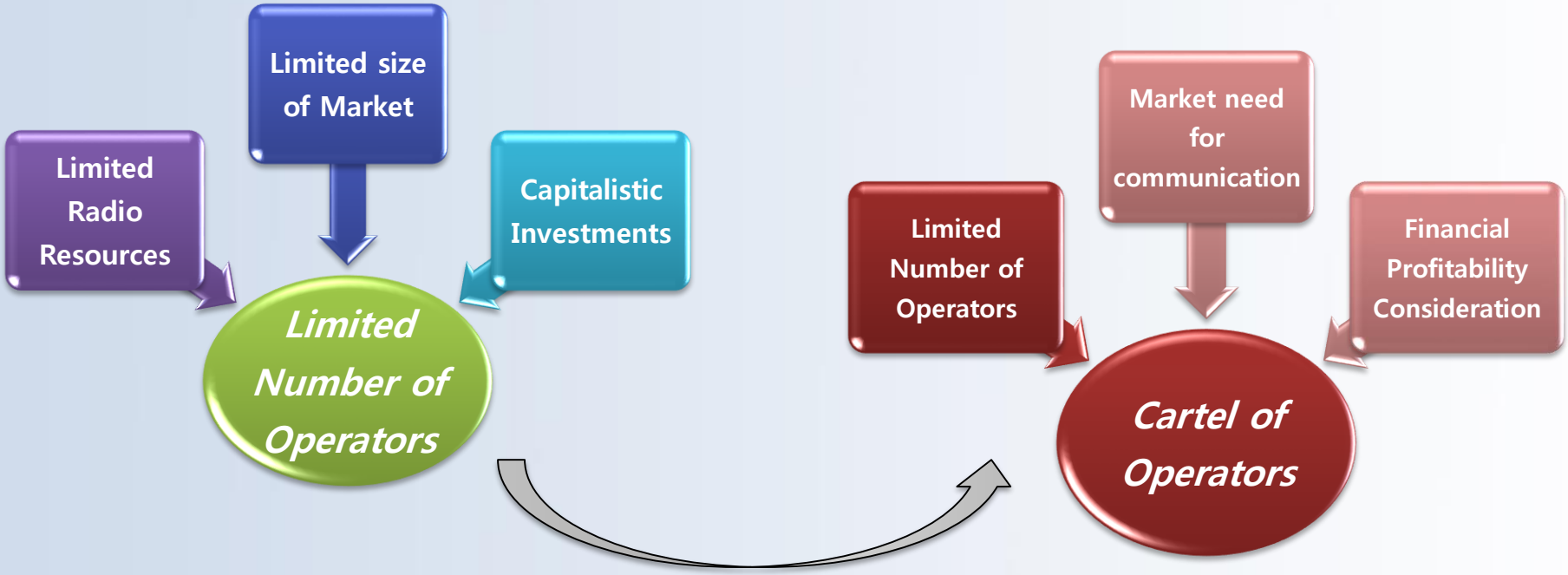


Users No QoS Originating

What is Requested ?

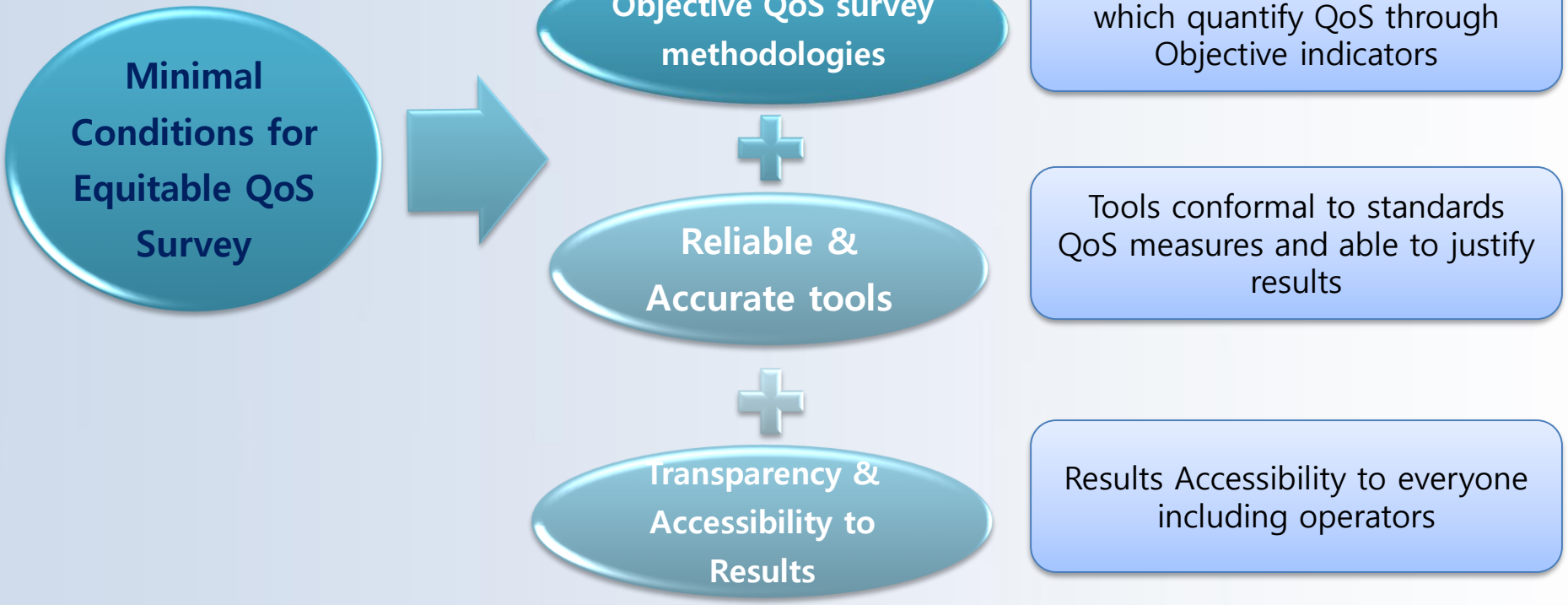


Challenges for Regulators

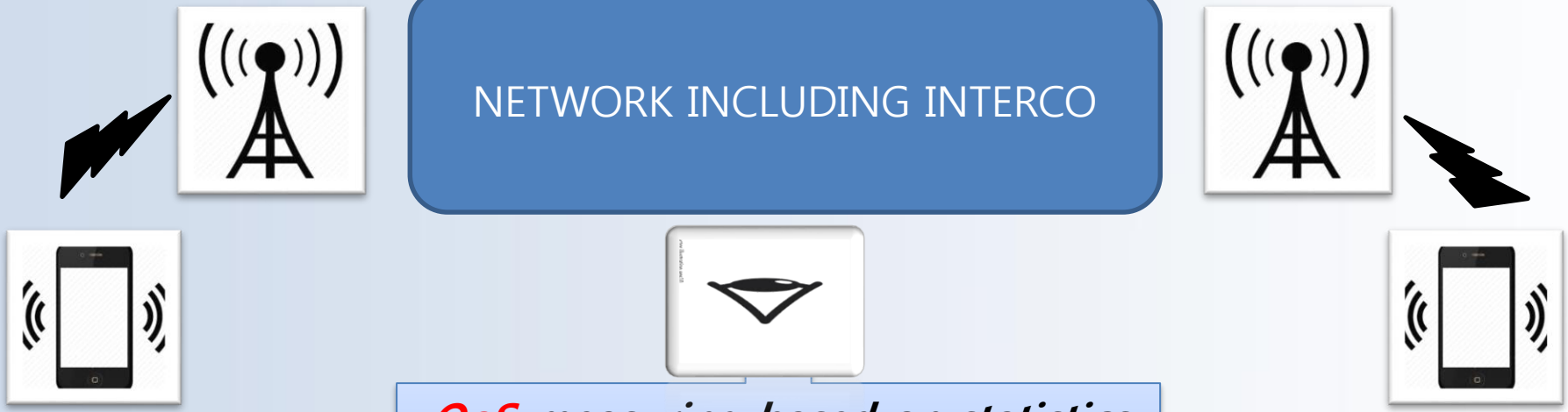


Need for STRONG regulatory framework provided with accurate tools to GUARANTEE a Fair Market

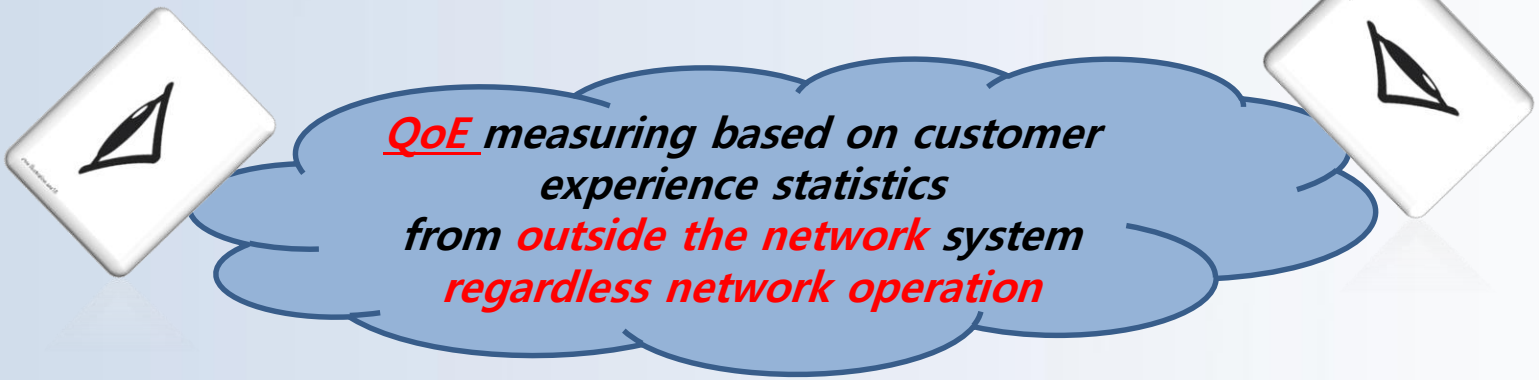
Regulators for QoS Defense



QoS VS QoE

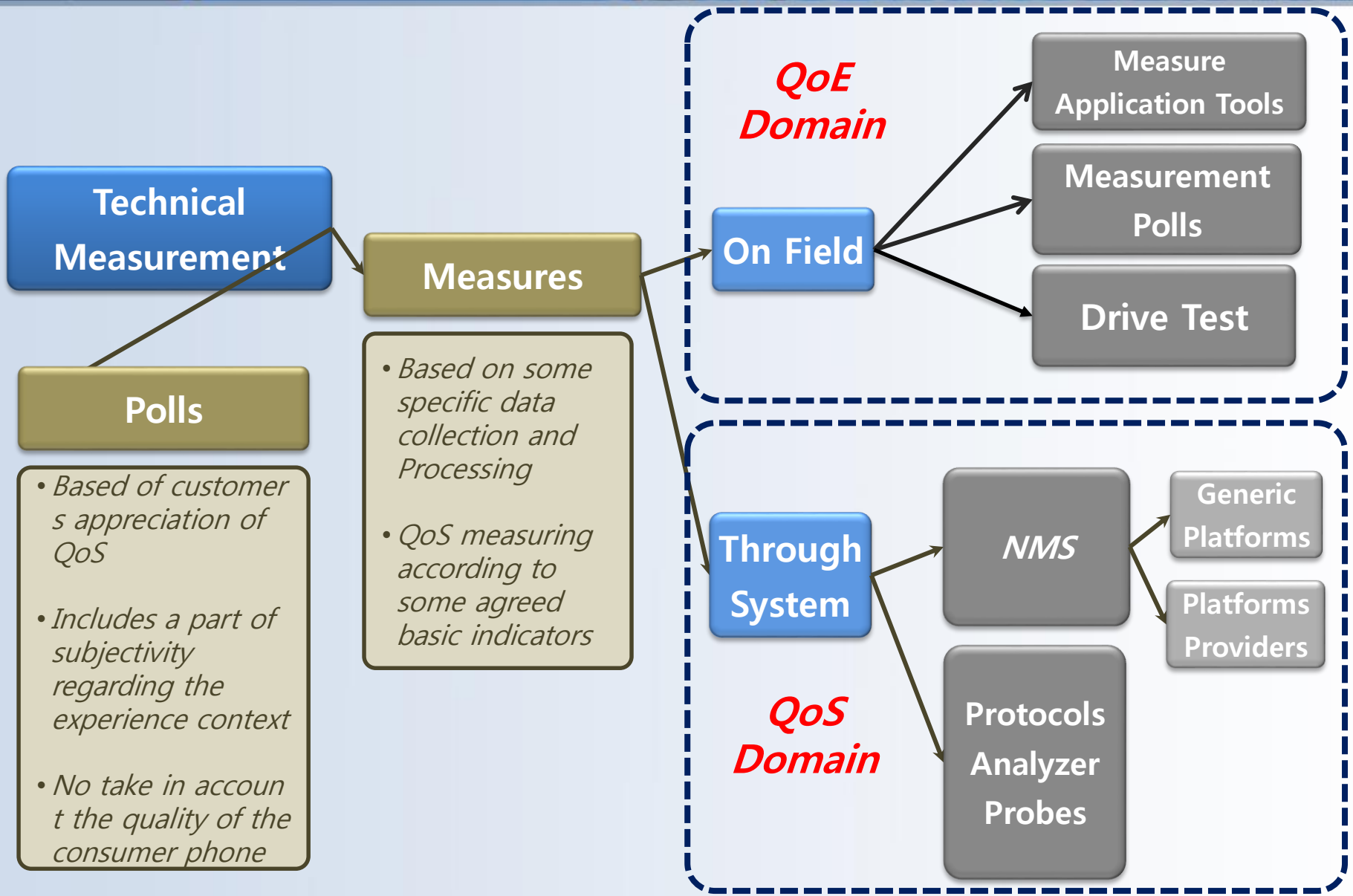


QoS** measuring based on statistics from **inside the network** system **regardless the customer experience



QoE** measuring based on customer experience statistics from **outside the network** system **regardless network operation

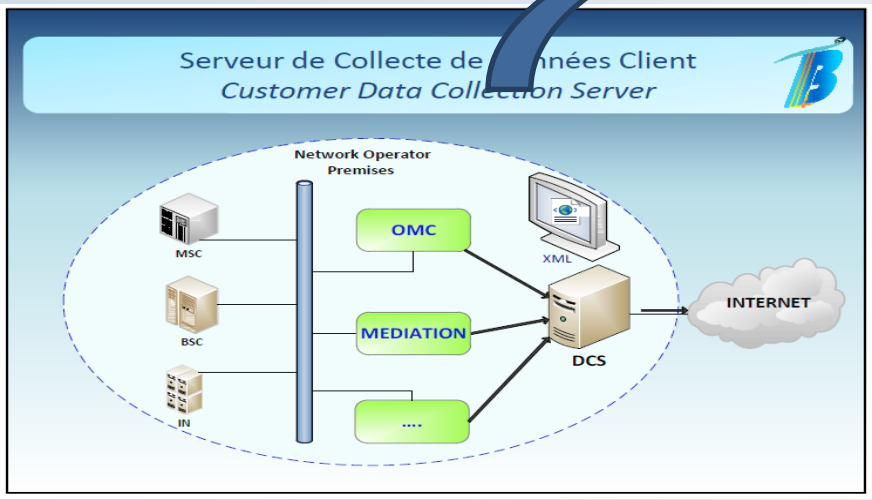
QoS Measuring Methods

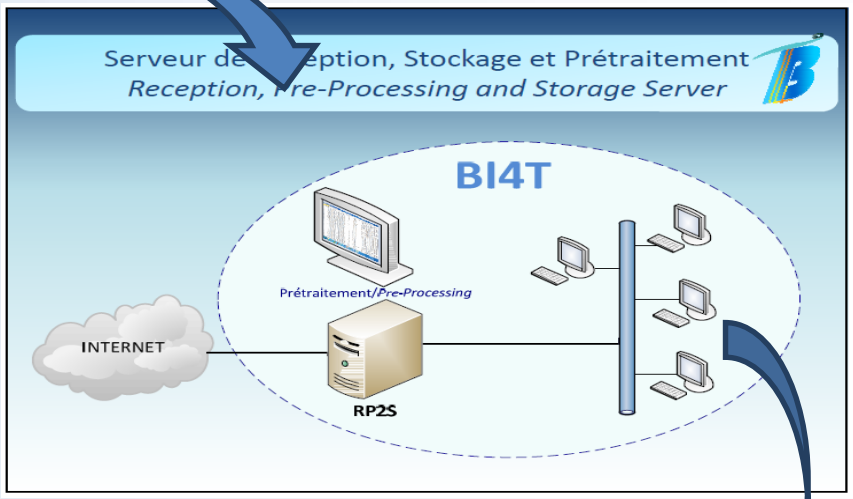


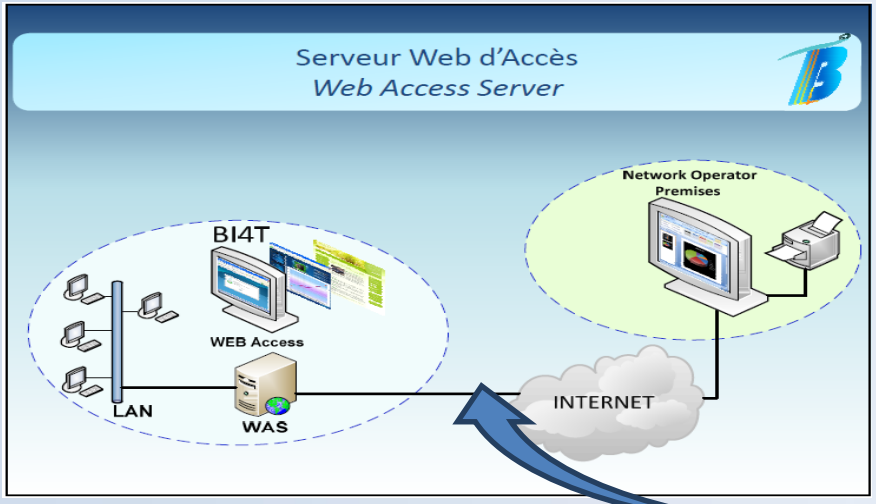
For Accurate QoS Survey

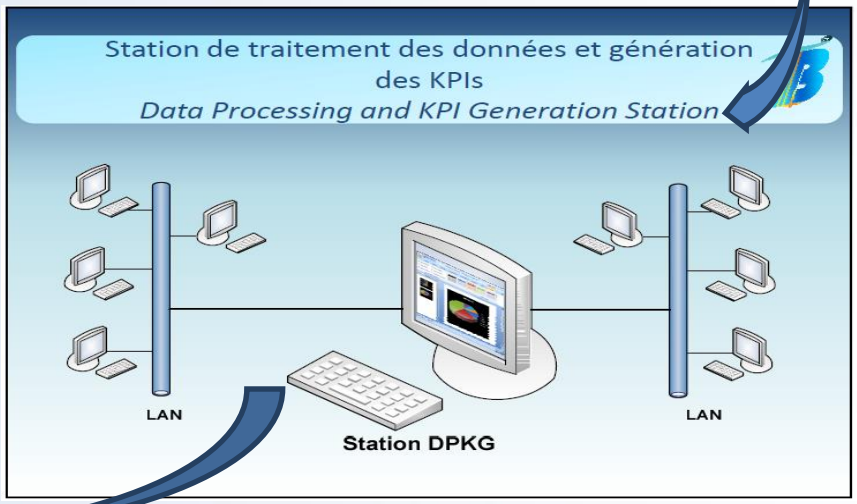
QoS Description Through NMS Solution	*QoS Qualification Through QoE Solution*
• Descriptive statistics	• *Focus on specific path*
• Faithful image of networks state	• *Benchmark fo NMS results*
• Description continuously in time	• *Reality of customer experience @ a given time*
• Tight survey of hole networks	• *Quantizes customer experience appreciation*
• Rapid identification of problems	• *No subjectivity in experience de scription*
• Circumscribe the survey locally	

BI4T Platforms Architecture

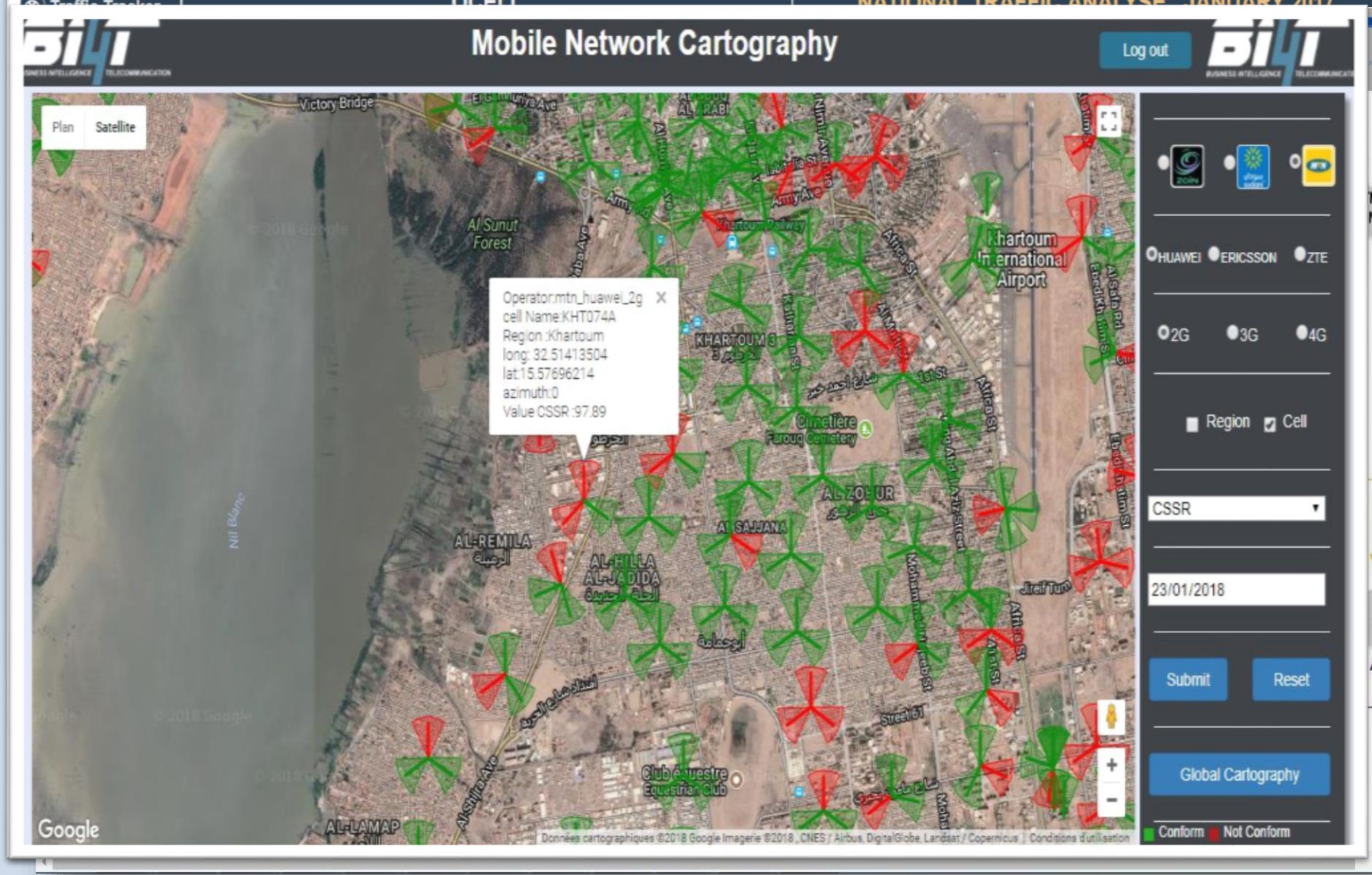




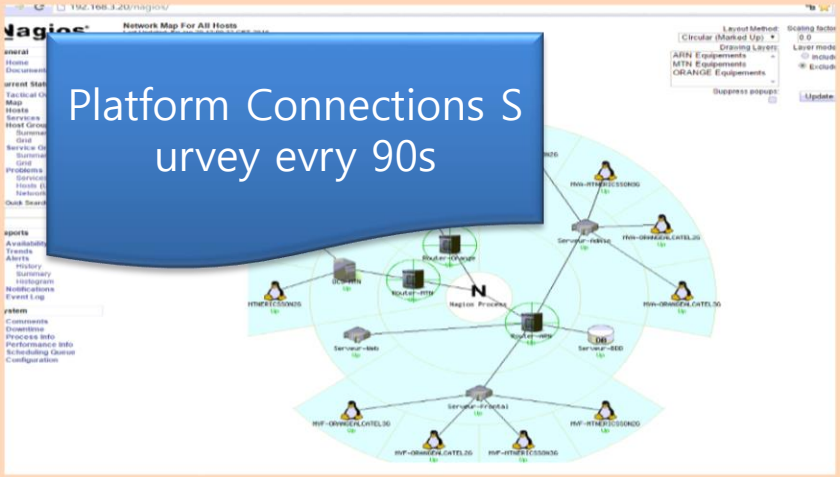


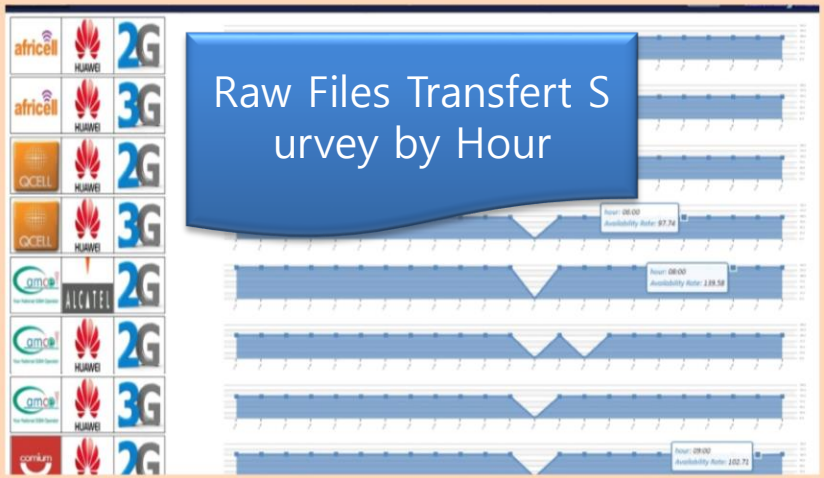


Tight QoS Survey



NOC Configuration





Interface to Benchmark QoS & QoE

Netlook

Welcome,

- Home
- Maps
- Data Presentation
- Reporting
  - *KPIs Tables*
  - *Report*

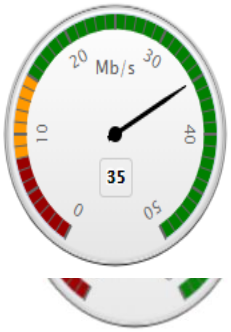
StartDate: Date

EndDate: Date

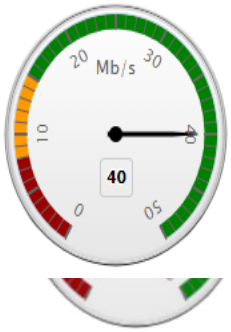
validate

Cell_ID	Cell_Name	Passive Tests							Active Tests		
		Voice				Coverage		GPS	Latency	HTTP Web Browsing	Video Streaming
		Call Setup Time	CSSR	International Call	Call Drop Rate	Signal Level	Network Information				
C0001	C_Name1	12:56	96.5%	95.2%	0.78%	-35 dbm	Network1	(48.65;2.02)	1.5ms	1s	2Mb/s
C0002	C_Name2	10:32	96.5%	97.2%	0.98%	-65 dbm	Network2	(37.65;2.02)	1.6ms	1s	2Mb/s
C0003	C_Name3	23:12	96.52%	95.9%	0.55%	-82 dbm	Network3	(47.65;6.02)	1.5ms	1s	2Mb/s
C0004	C_Name4	08:56	96.5%	95.2%	0.78%	-38 dbm	Network4	(48.65;2.02)	1.5ms	1s	2Mb/s
C0005	C_Name5	12:56	96.5%	95.2%	0.78%	-66 dbm	Network5	(22.65;1.08)	1.5ms	1s	2Mb/s

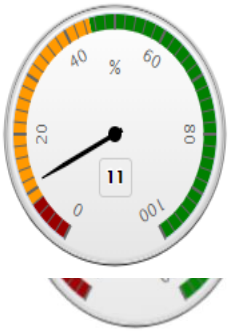
Average Upload Speed



Average Download



Average Data Loss



OTT (Facebook, Instagram)

IoT System for QoE

THANKS
for Kind Attention