ITU-T
STUDY GROUP 16

Multimedia

Highlights and future directions

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ITU-T SG16

1956 2016
CCITT / ITU-T

ITU-T SG16
Multimedia

Conferencing Systems

Telepresence Media gateways, Video conferencing

Advanced multimedia communication

Speech-to-speech translation, Visual surveillance

Multimedia systems and services

IPTV, Digital Signage, Intelligent Transportation Systems, E–health, Accessibility
(IoT moved into SG20 in Oct. 2015)

Media Coding

Audio and video coding

TDM legacy and transition to IP systems

Network signal processing, Echo cancellation, Noise reduction, Voiceband data
(modems, fax, text telephony)

Results

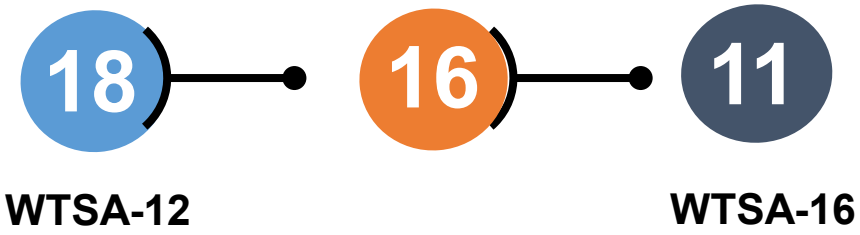
6	1	11	84
STUDY GROUP MEETINGS	WORKING PARTY MEETING	IPTV-GSI EVENTS	RAPPORTEUR GROUP (E-) MEETINGS

Significant collaborative work with:

ISO/IEC

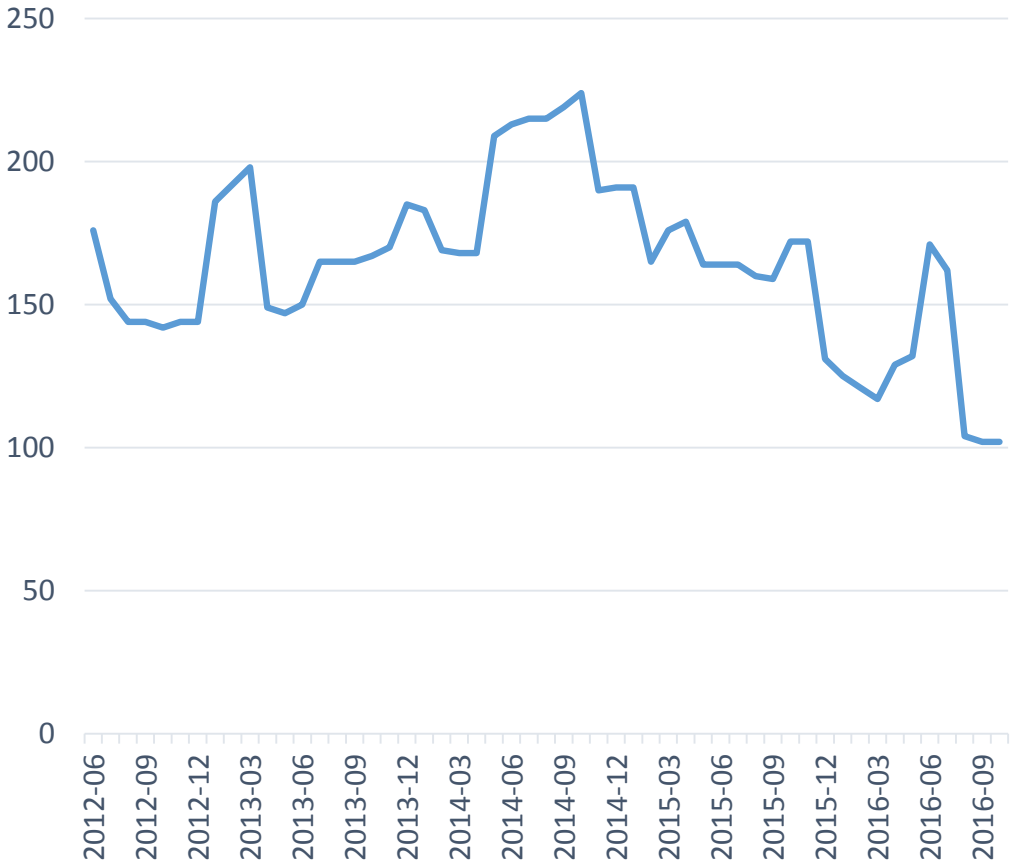
IEEE

Questions:

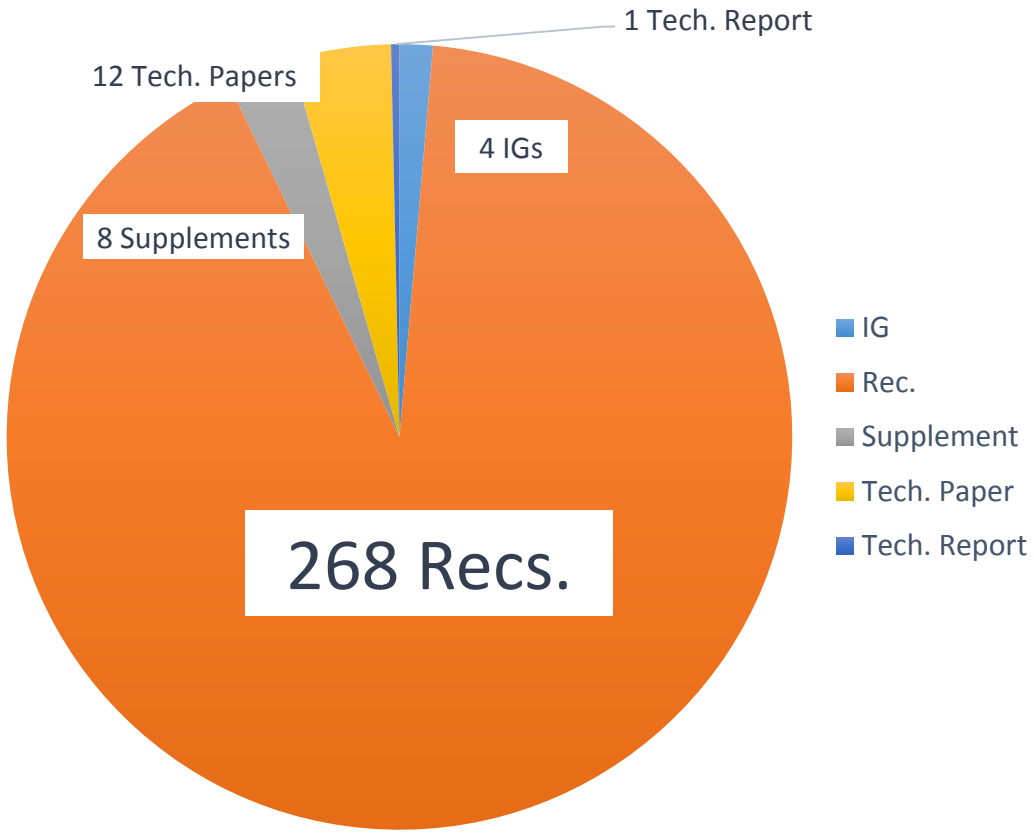


Results

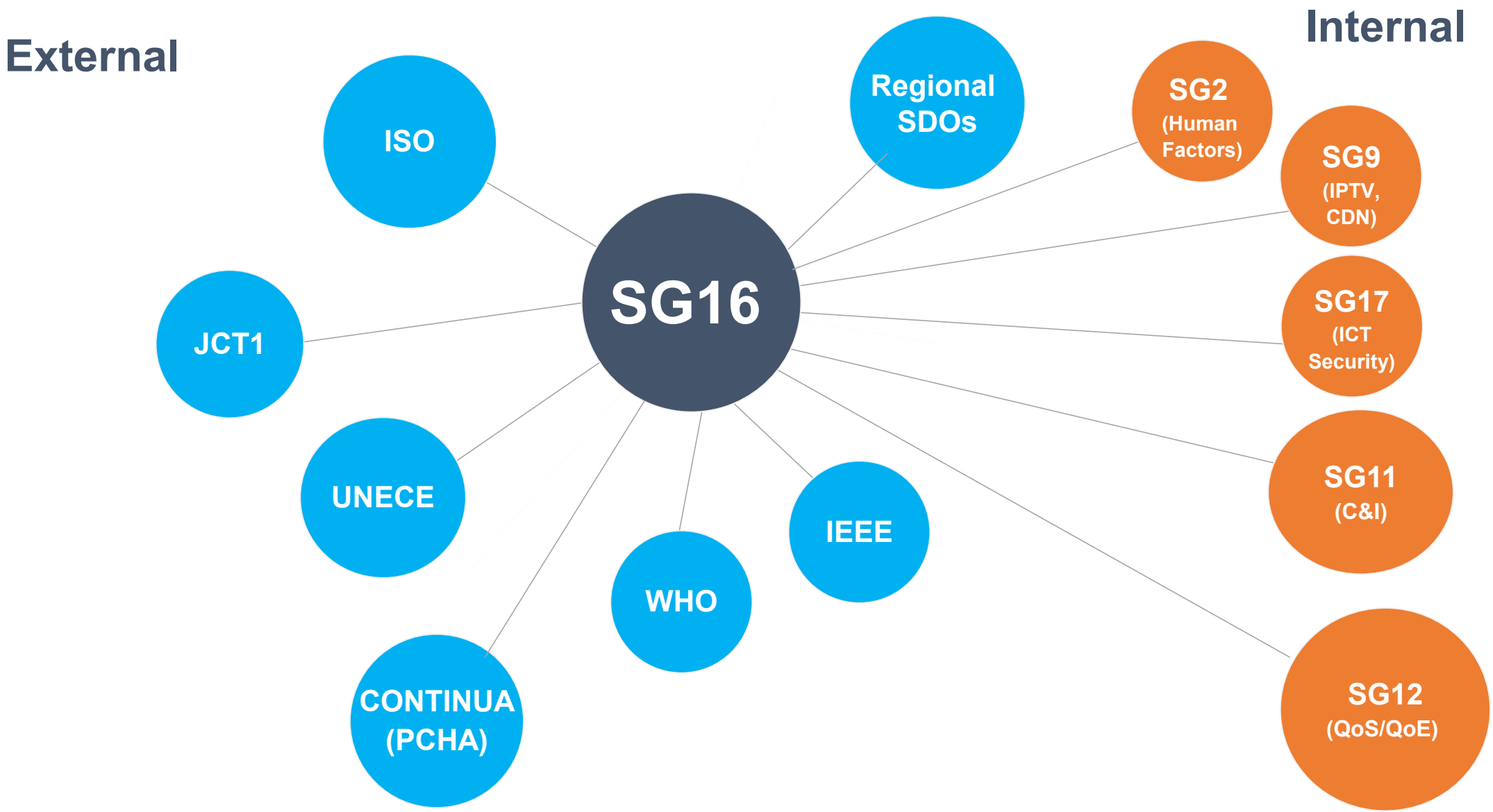
Work items under study



Texts approved



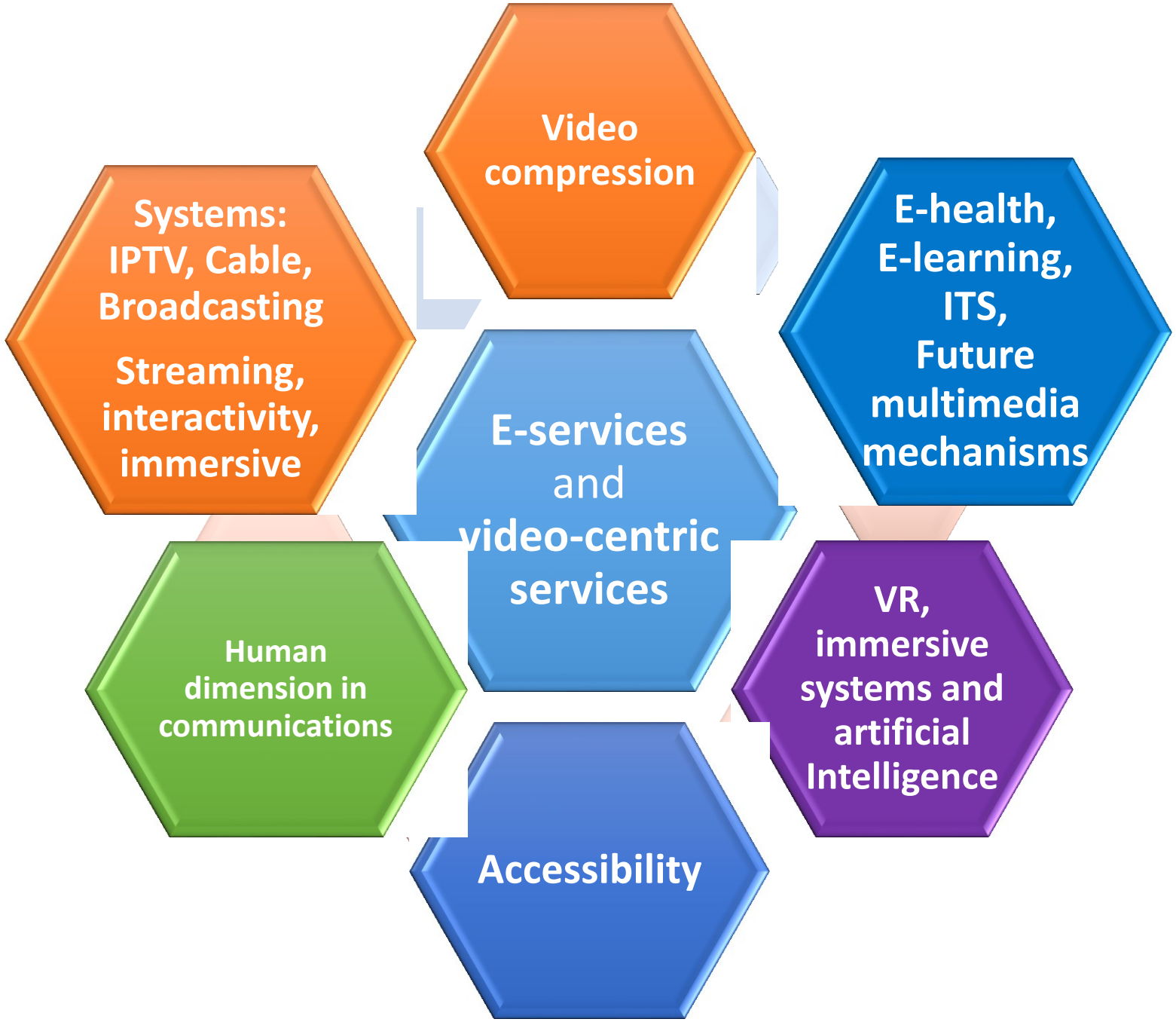
Collaboration



Trend

Maturity in classical areas

Increase in e-services and video-centric services


Video compression
Systems: IPTV, Cable, Broadcasting
Streaming, interactivity, immersive
E-health, E-learning, ITS, Future multimedia mechanisms
E-services and video-centric services
Human dimension in communications
VR, immersive systems and artificial Intelligence
Accessibility

E-services

Combined use of ICTs for service delivery:

Healthcare

Education

Commerce

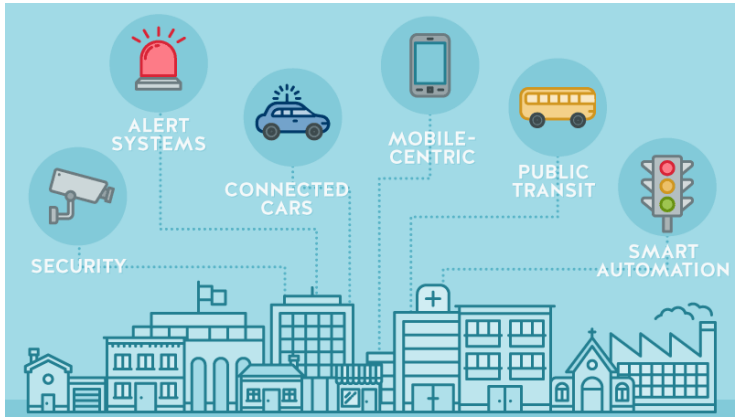
Entertainment

Transportation

Distribution and delivery of e-services:

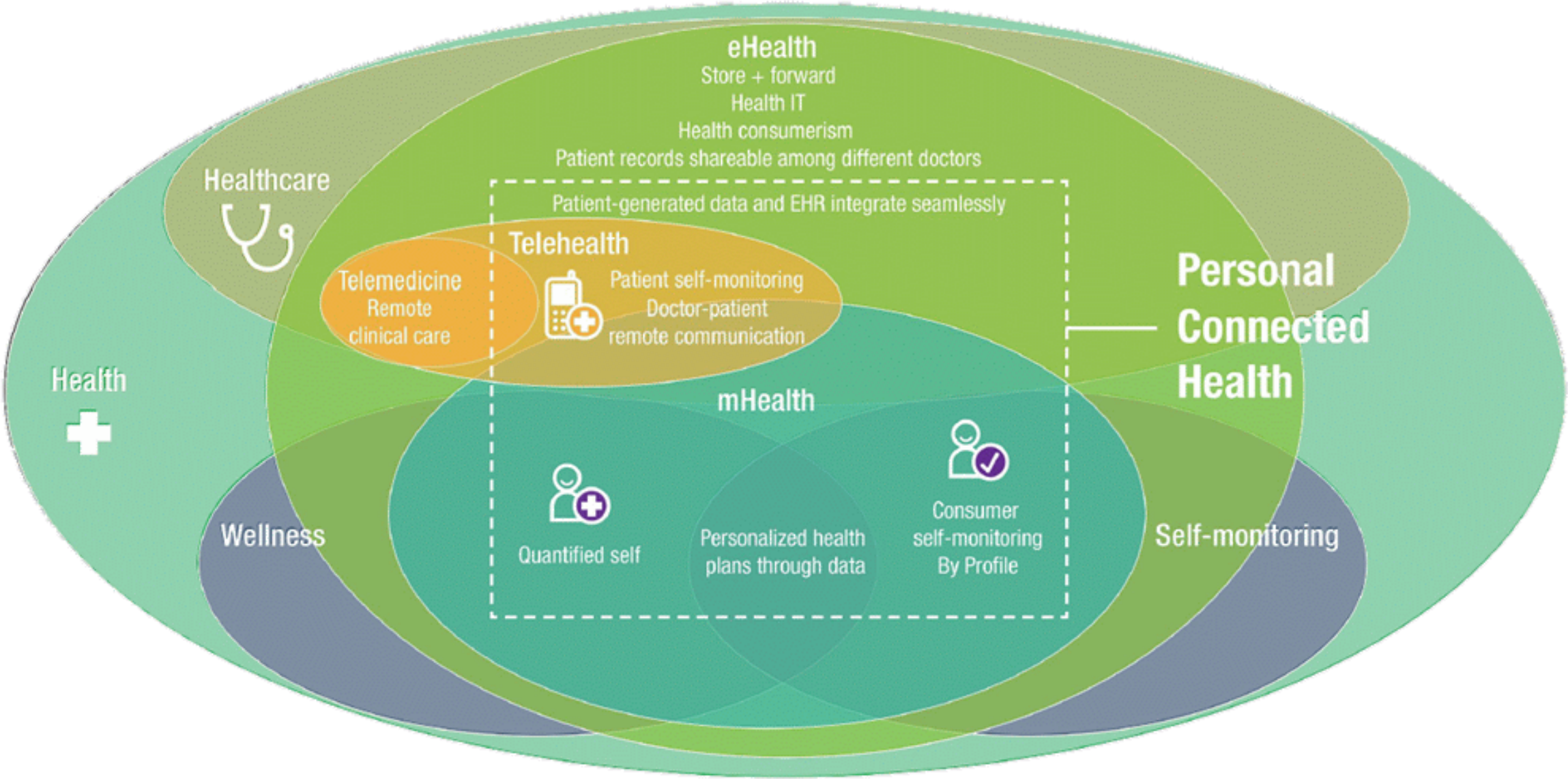
CHANNEL AGNOSTIC

The building blocks and delivery platforms developed by SG16 are used to enable applications in specific areas



Smart cities and communities by SG20

E-health


eHealth
Store + forward
Health IT
Health consumerism
Patient records shareable among different doctors
Healthcare
Patient-generated data and EHR integrate seamlessly
Telehealth
Telemedicine
Remote
clinical care
Patient self-monitoring
Doctor-patient
remote communication
Personal
Connected
Health
Health
mHealth
Wellness
Quantified self
Personalized health
plans through data
Consumer
self-monitoring
By Profile
Self-monitoring

Video content – a strategic area

of Internet Traffic is of Video today

Forecast by 2018

Opportunities for revenue generation

Video compression: new challenges ⇨ JVET

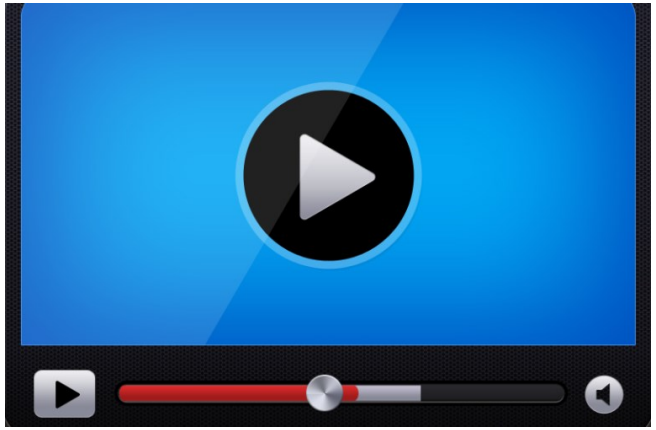
Higher demand ⇨ more efficient compression mechanisms

New IP-based digital TV systems

Use of digital video

Consumer electronic
video cameras

Digital TV broadcast & cable;
Digital TV sets



Internet video
Over-the-top

IPTV
DIGITAL SIGNAGE

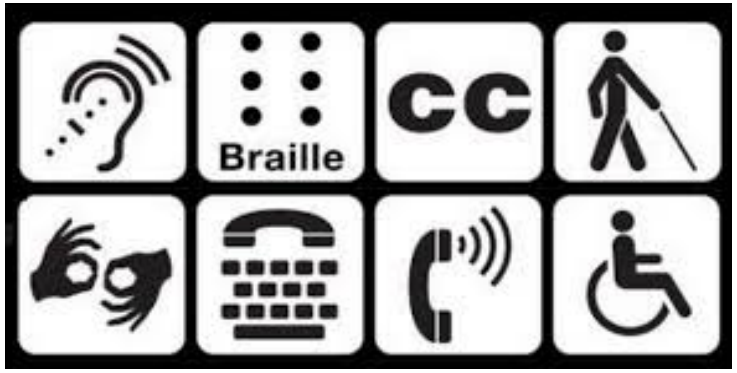
Over-the-top (OTT) applications

Mobile:
3G / 4G / 5G

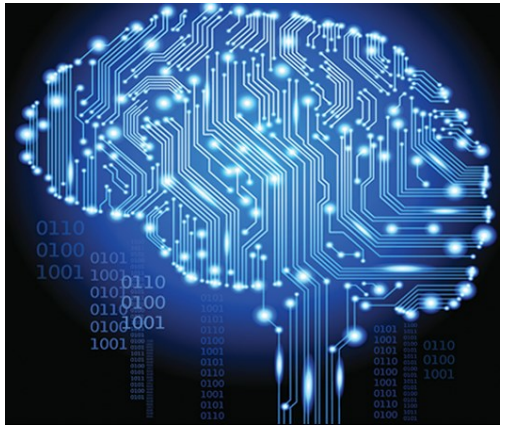
Future areas for video

Besides going after the "best and newest" video codec… it matters what you do with video

Future IP-based broadcasting



Accessibility



Artificial Intelligence to video

REAL TIME STREAMING

Delivery of high volume of video content

SG16

SG16 "Multimedia" continued to be very productive during the study period

E-services

Work growth in e-services and video-centric services and components

Video

Growth of video consumption drives newer codecs, systems and applications

obrigado
dankjewel
תודה
děkuji
na gode
misaotra anao
متشكرم
köszönöm
mulțumesc
তোমাকে ধন্যবাদ
Շնորհակալություն
teşekkür ederim
paldies
dankie
thank you
хвала
tack
dankon
hvala
go raibh maith agat
asante
cảm ơn bạn
спасибо
tak
dziękuję
merci
gracias
ngiyabonga
danke
คุณขอบคุณ
terima kasih
salamat
grazie
daalụ