



ERICSSON

# WI-FI CALLING: КАЖДЫЙ ХОТСПОТ КАК МОБИЛЬНАЯ БС

ВЛАДИМИР ЖИЛЯЕВ

СТАРШИЙ ИНЖЕНЕР ПО ПРОЕКТИРОВАНИЮ И АРХИТЕКТУРЕ ТЕХНИЧЕСКИХ РЕШЕНИЙ



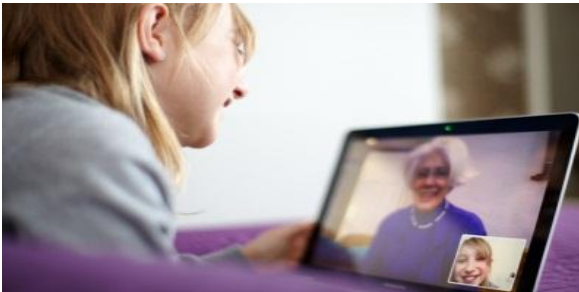
# WI-FI CALLING – USERS AND OPERATORS BENEFITS



# WHY WI-FI CALLING - USER PERSPECTIVE



- › Poor indoor coverage in specific areas
  - Cellars, specific rooms, thick walls, high-insulation windows etc,
- › High roaming fees
- › Easy-to-use
  - No need to download or create accounts with OTT VoIP provider apps, works using the standard phone number
- › Enterprise
  - Small enterprises with specific call bundles



# IMPROVING USER EXPERIENCE - WI-FI CALLING USE CASES



Homes with limited  
3GPP coverage

When roaming:  
Use operators' mobile voice  
service over Wi-Fi



3GPP  
access



Seamless handover of  
voice and video calls  
between LTE (VoLTE)  
and untrusted Wi-Fi

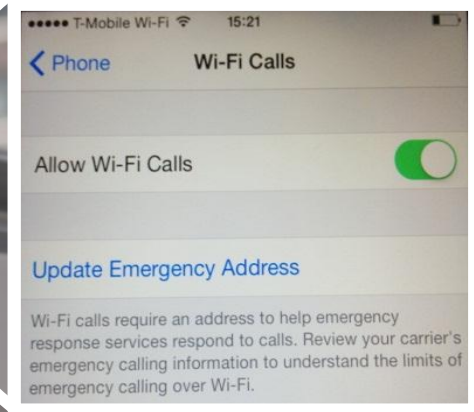
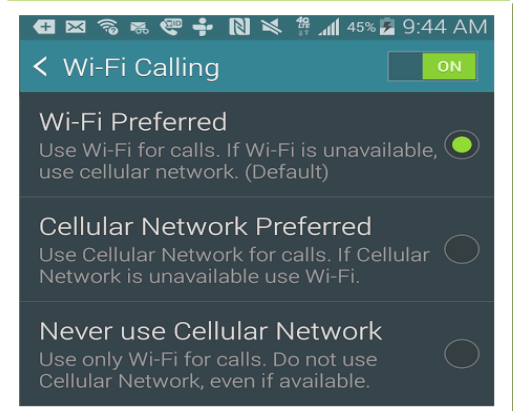


Hotel abroad



Small office/business  
with limited 3GPP coverage

# SIMPLICITY AND EASE-OF-USE TO SELECT SERVICE



Implementation example  
T-Mobile USA

Source: [TMO US](#)

Importance of native

# ADDRESS NEW REVENUE POTENTIAL



## Provide attractive bundles for consumers and small enterprises

- Roaming bundles
- Create video calling behavior through Wi-Fi
- Strengthen VoLTE service offer



LTE - Wi-Fi – 2G/3G



## Leverage new attractive devices

- Capture high-ARPU users
- Native service in smartphones, no special app

## High-quality secure operator service

- Regular phone number with SIM-based authentication
- Seamless voice handover between LTE and Wi-Fi

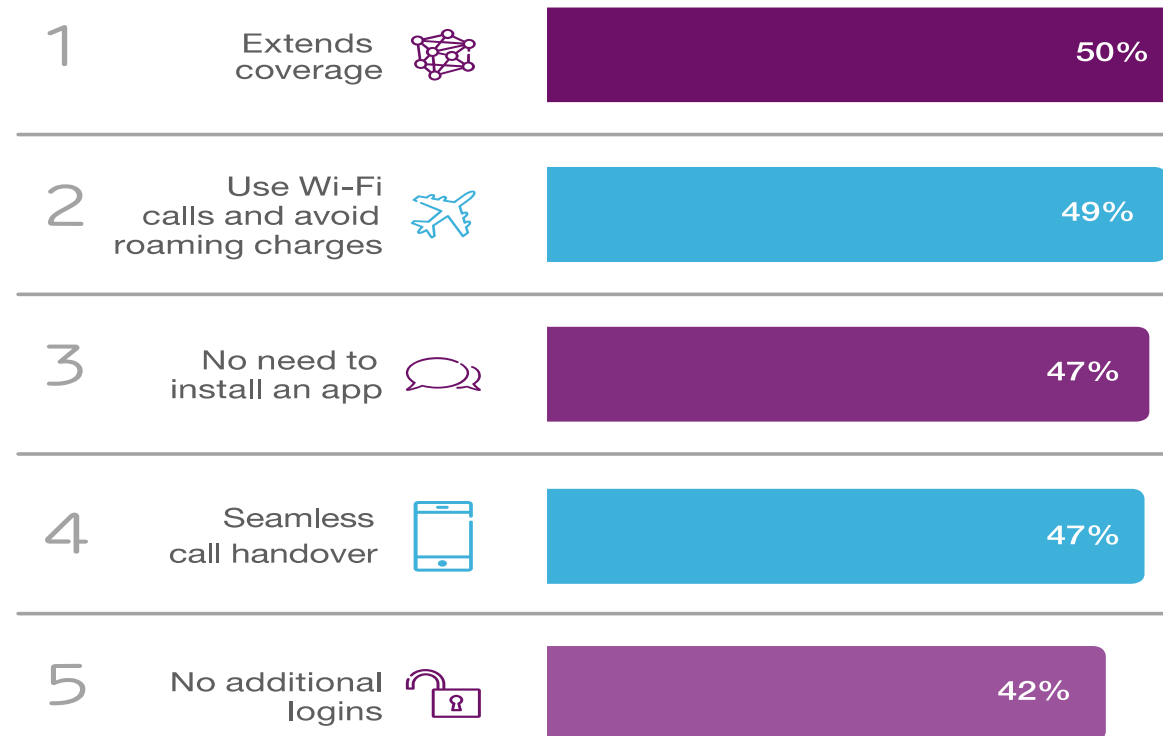
## Offer high-quality converged services for any accesses and any devices

- Voice/HD voice and video calling
- One-number concept

Wi-Fi calling is a stepping stone or add-on to VoLTE services

# THE APPEAL OF WI-FI CALLING

## Why users find Wi-Fi calling appealing



4 out of 5 Wi-Fi calling users interviewed in the US are very satisfied with the service

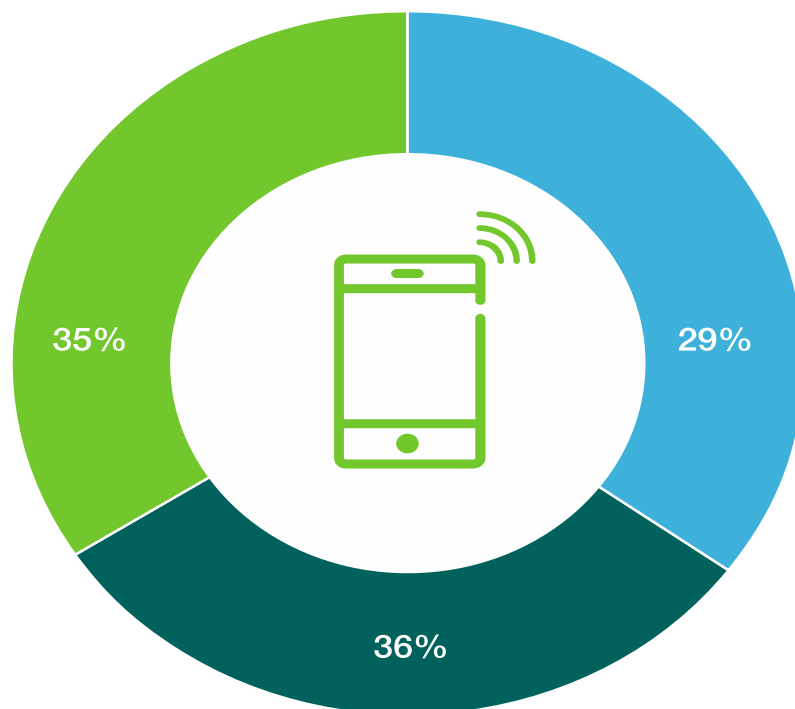
# USING AN APP VS. WI-FI CALLING



Smartphone users expect and demand enriched communication beyond just voice.

While 35 percent will give up using communication apps due to Wi-Fi calling, others will still use them or move between apps and Wi-Fi calls.

**Will consumers give up on communication apps when Wi-Fi calling is introduced?**



- No change in usage of communication apps
- Will increase communication app usage
- Will reduce communication app usage

Source: Ericsson ConsumerLab, Wi-Fi calling finds its voice, 2015  
Base: All smartphone international travelers, intenders of Wi-Fi calling

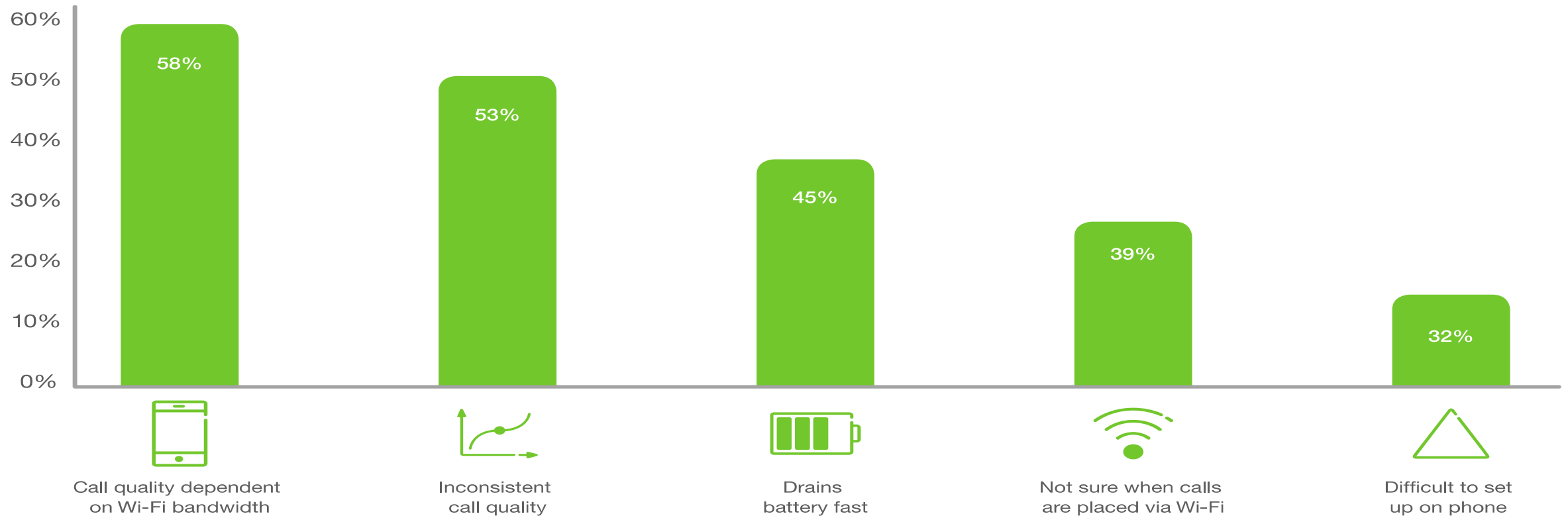


# ISSUES ON WI-FI CALLING



Wi-Fi calling users are facing issues. Fixing these problems early will ensure that Wi-Fi calling finds its voice in the future communication era.

Percentage of existing Wi-Fi calling users facing issues



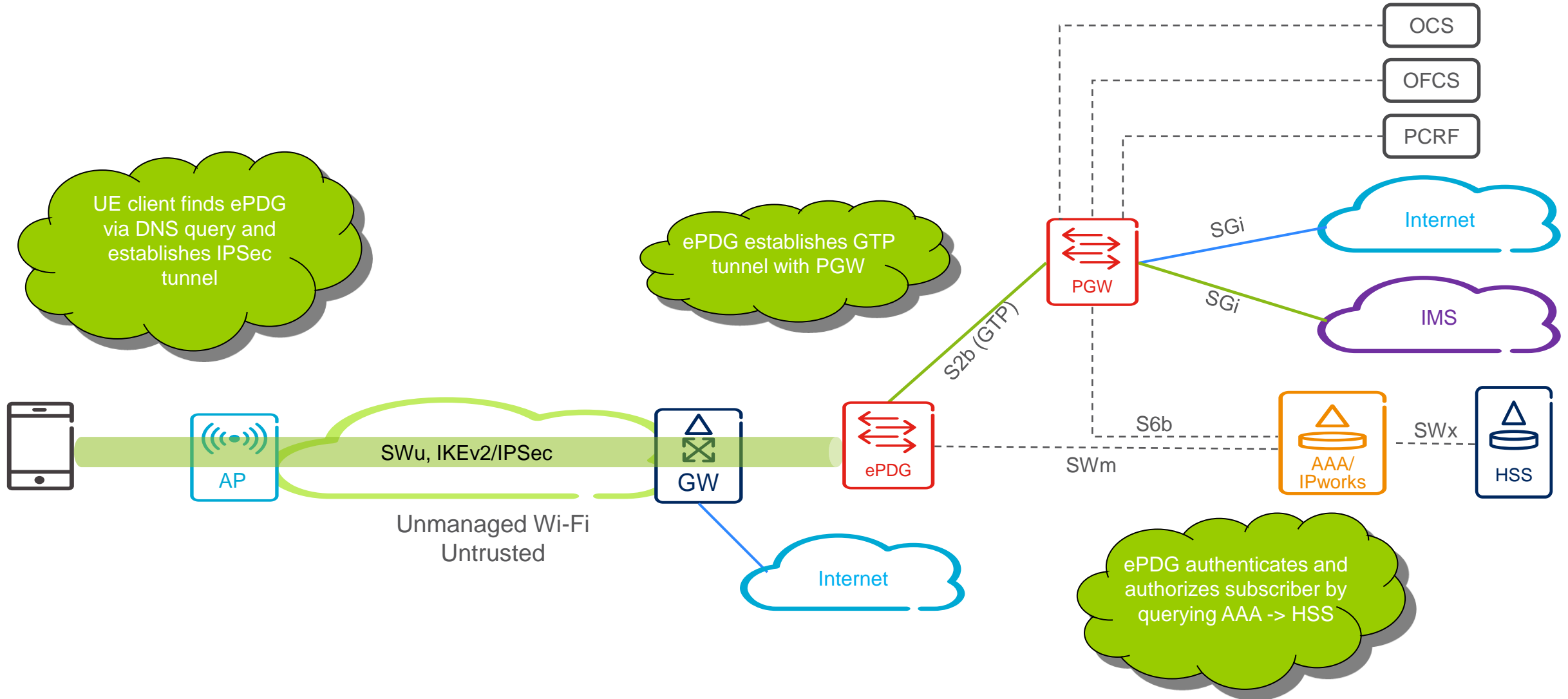
Source: Ericsson ConsumerLab, Wi-Fi calling finds its voice, 2015  
Base: Existing Wi-Fi calling users – US



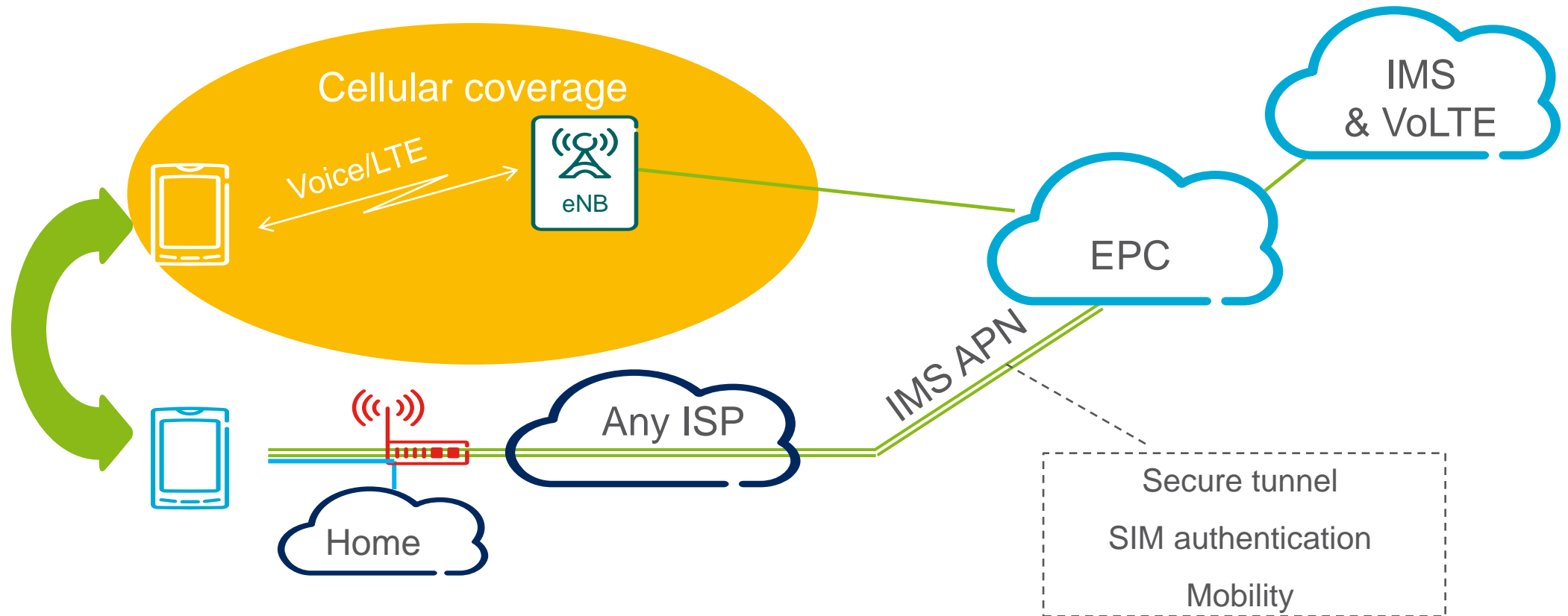
# WI-FI CALLING SOLUTION FROM ERICSSON



# VOICE OVER WI-FI AN E2E SOLUTION ARCHITECTURE

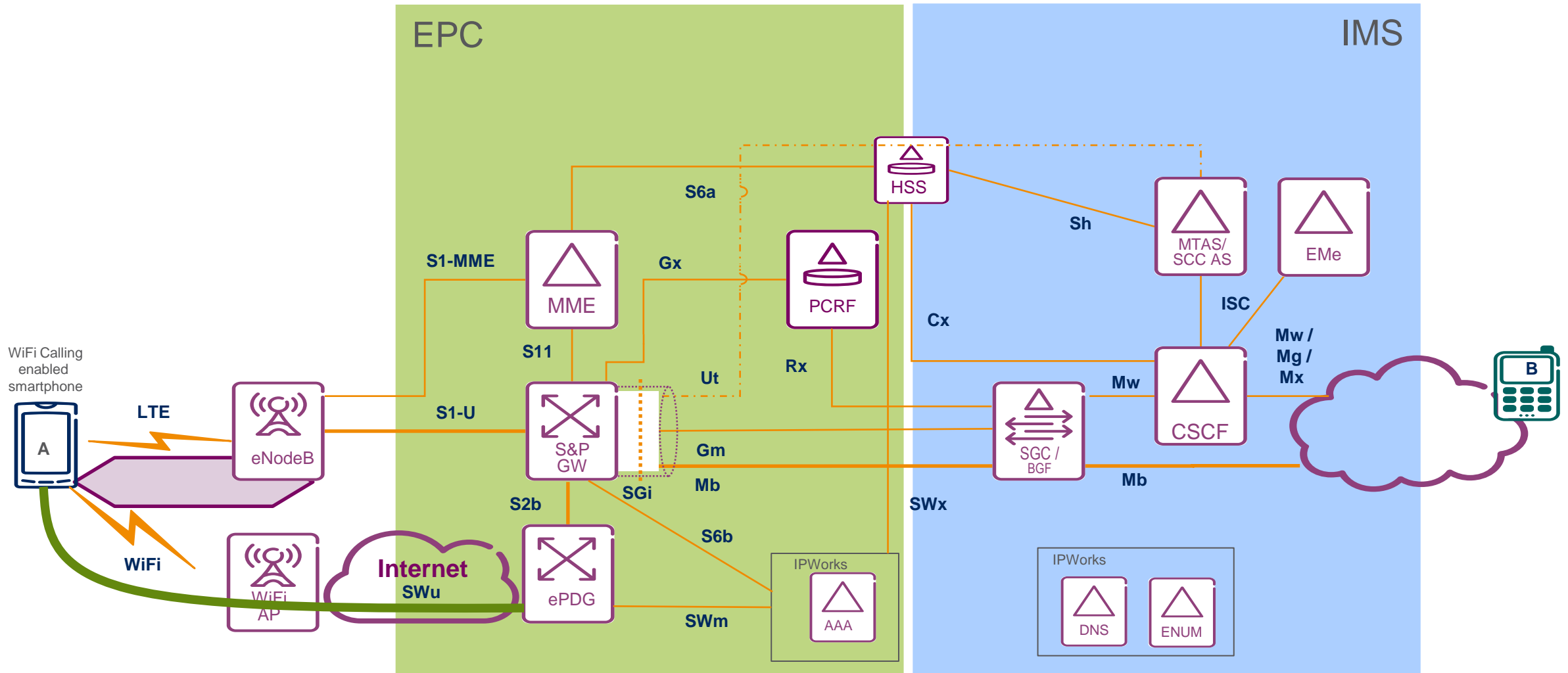


# SEAMLESS MOBILITY BETWEEN LTE AND WI-FI



Complete solution with Ericsson EPC, IMS and RAN

# WI-FI CALLING ARCHITECTURE (DETAILED)





# COMMERCIAL DEPLOYMENTS AND VENDORS SUPPORT



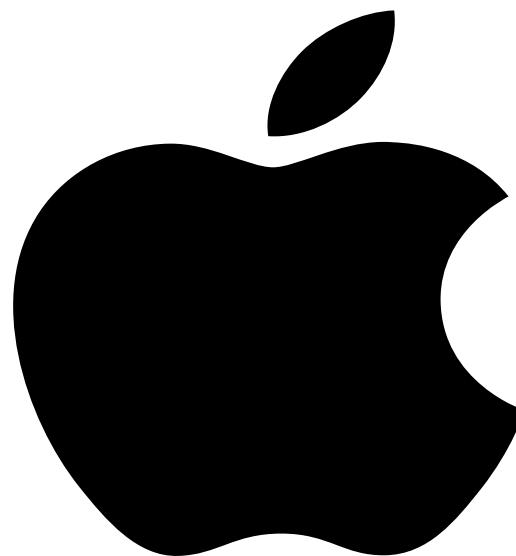
# EXISTING DEPLOYMENTS IN OPERATORS' NETWORKS



# MOBILE DEVICES VENDORS SUPPORT



nexus



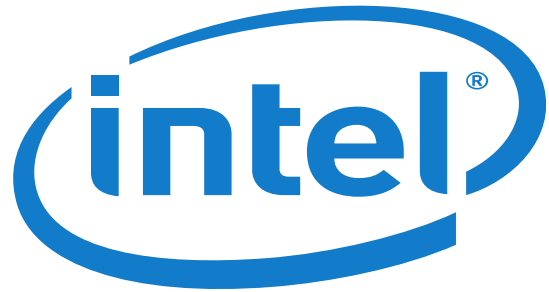
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**SAMSUNG**

**SONY**



# MODEM AND CHIPSET VENDORS SUPPORT



# WANT MORE DETAILS?



LOOK AT WI-FI CALLING INSIDE ERICSSON PORTFOLIO:

[HTTP://WWW.ERICSSON.COM/OURPORTFOLIO/WI-FI-CALLING](http://www.ericsson.com/ourportfolio/wi-fi-calling)



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