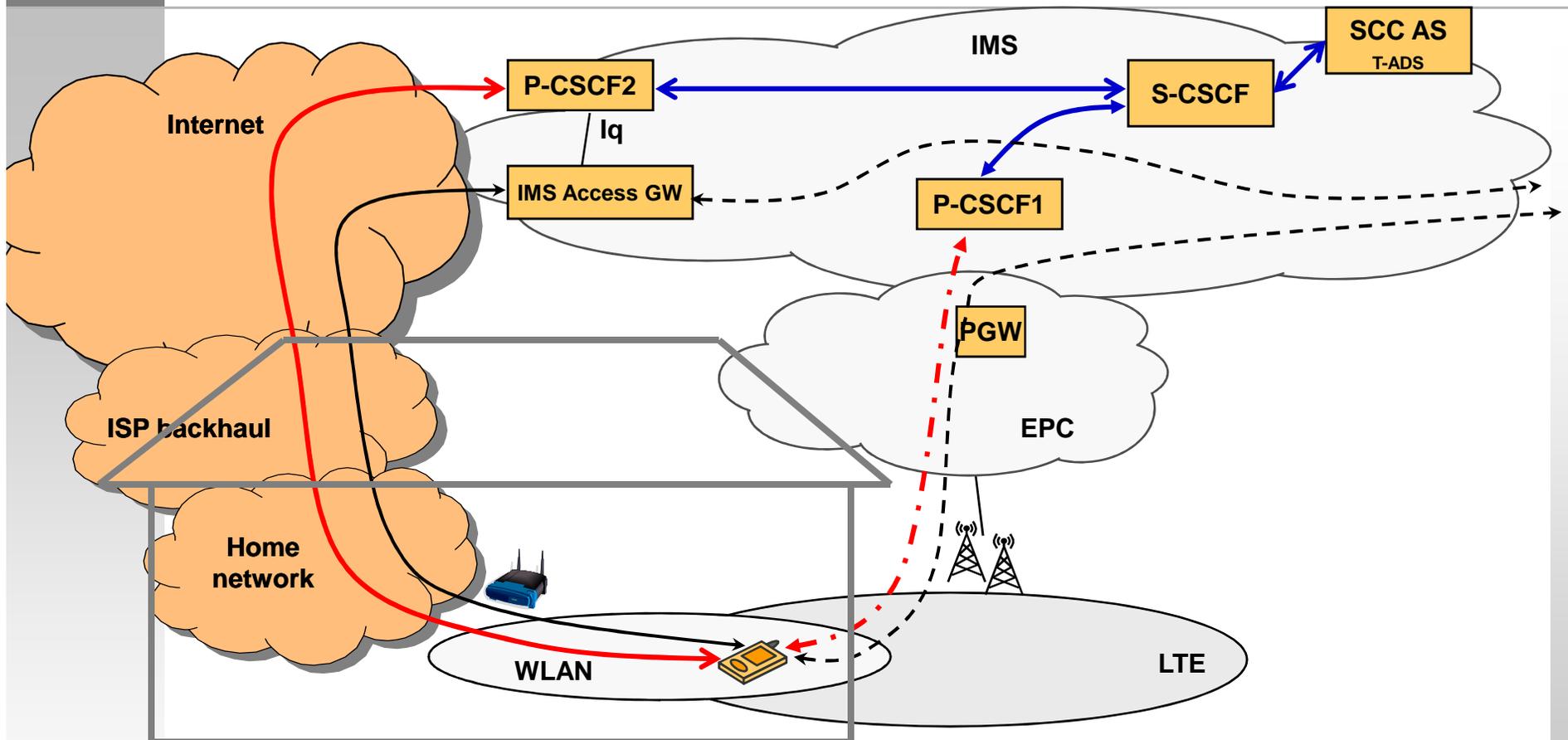




Required additions to IMS Service Continuity for FMC with plain WLAN access to IMS

LG Electronics

FMC with Plain WLAN access to IMS (1)



FMC with Plain WLAN access to IMS (2)

- ❑ **UE performs two IMS registrations in parallel**
 - ❑ Via LTE/EPC
 - ❑ Via plain WLAN access and via the Internet
- ❑ **Security**
 - ❑ When using WLAN access, the IMS media is protected with e2ae media security (33.328) using SRTP
- ❑ **Handover is Dual Radio**
 - ❑ In the previous example when UE retrieves LTE coverage, it performs IMS Service Continuity procedures (23.237) to move the voice session from WLAN to LTE access
- ❑ **Benefits**
 - ❑ No need for ePDG
 - ❑ No need for DSMIPv6, IFOM or MAPCON
 - ❑ Internet traffic can still be offloaded via non-seamless WiFi offload

Required additions to IMS Service Continuity for such an architecture (1)

T-ADS retry

- The UE might have left the coverage of the PS access chosen by the SCC AS for establishing the session.
 - Even if the UE is still able to receive signaling on the PS access chosen by the SCC AS for the call, the radio quality as seen by the UE might be bad. That could either result in the call being dropped while the user is being alerted, or in the call starting with a bad quality.
- ⇒ **Therefore, it is beneficial to introduce the possibility for the SCC AS to retry establishing a session on an alternate PS access.**
- ⇒ **Retrying on the alternate PS access could either be triggered by the UE not answering, or by the UE answering that an alternate PS access should be preferred.**

Required additions to IMS Service Continuity for such an architecture (2)

PS-PS access transfer in early dialog phase

- In the same way as SRVCC in alerting phase was introduced in release 10, a similar functionality would be beneficial to introduce for the PS-PS access transfer case.
- This allows to address the problem of coverage change while the user is being alerted, both in the case of outgoing calls and of incoming calls.

⇒ **The proposal is therefore to introduce PS-PS access transfer in early dialog phase**

- The “early dialog phase” refers to a state where an early dialog has been established between the UE and the SCC AS, so that a STI is available for it. This can be seen as the equivalent of alerting state in the CS case.
- This is complementary to the previous functionality allowing the UE to reject a session setup request in the incoming case if it determines the local operating environment is too bad for the session: indeed, while implementing PS-PS access transfer in early dialog phase is more costly to implement in the UE, it also allows for more cases to be catered.

Conclusions and proposal

- ❑ It is proposed to add the two aforementioned functionalities to 23.237 in release 10.
- ❑ Two CRs are provided implementing the functionality in the specification: S2-103735 and S2-103736