

aSIP-Access Security for IP-based services

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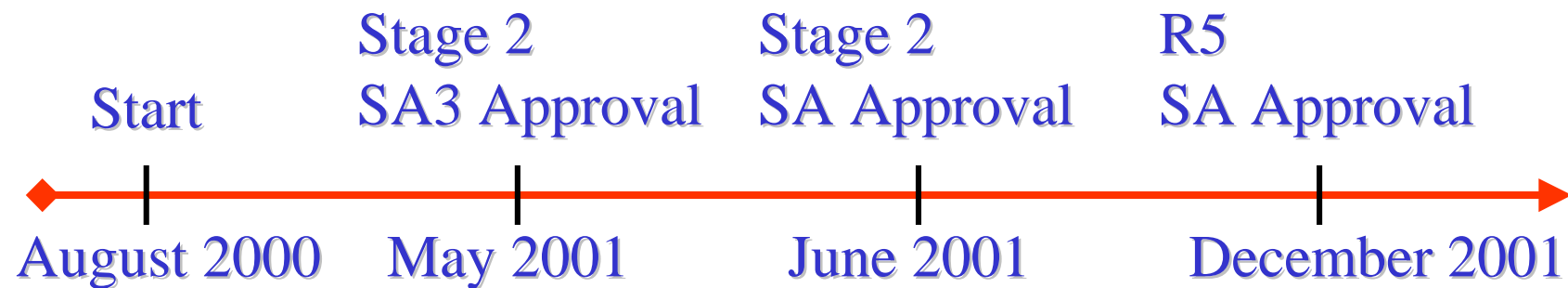
aSIP-Access Security for IP-based services

Objectives:

- Define trustrelations
- Define mechanisms for registration and authentication
- Define the necessary mechanisms for encryption and integrity protection
- If possible re-use mechanisms defined in R3 (R'99)

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Timeplan:

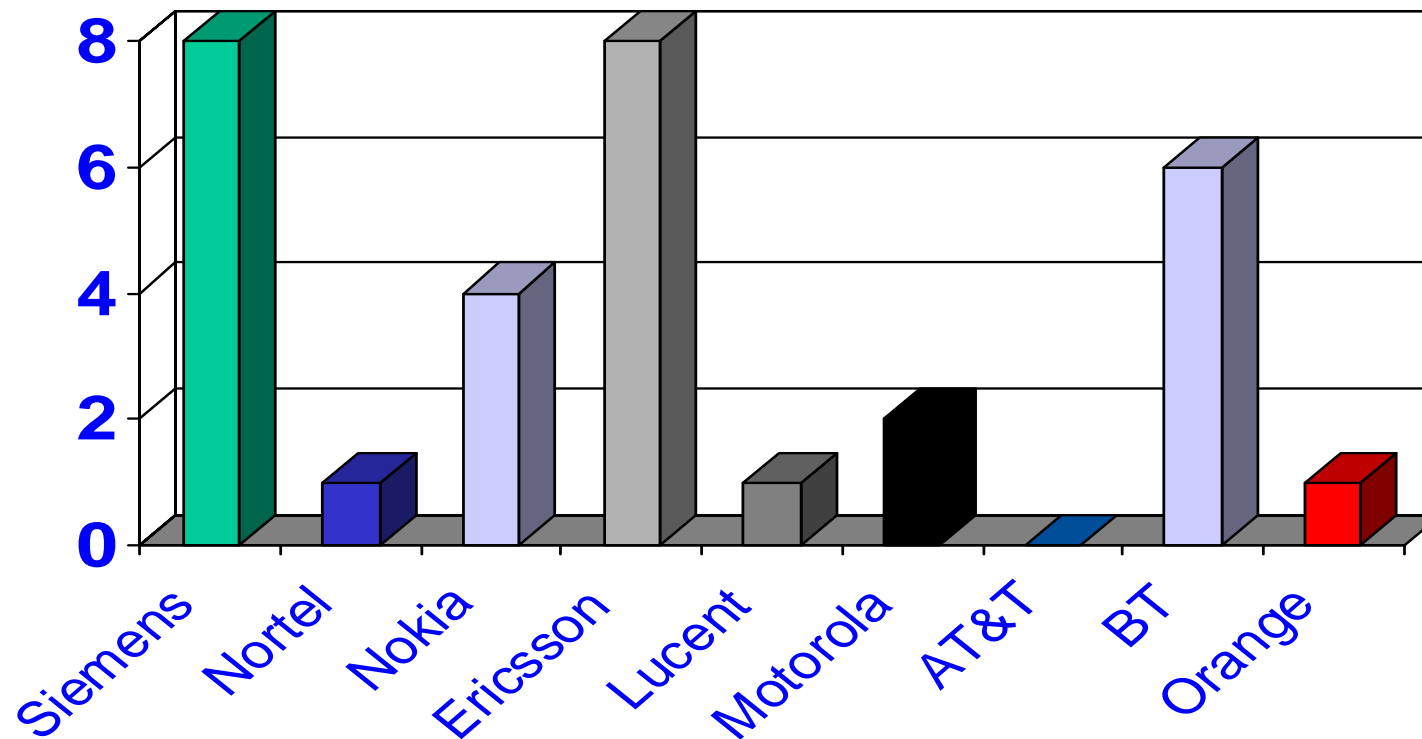


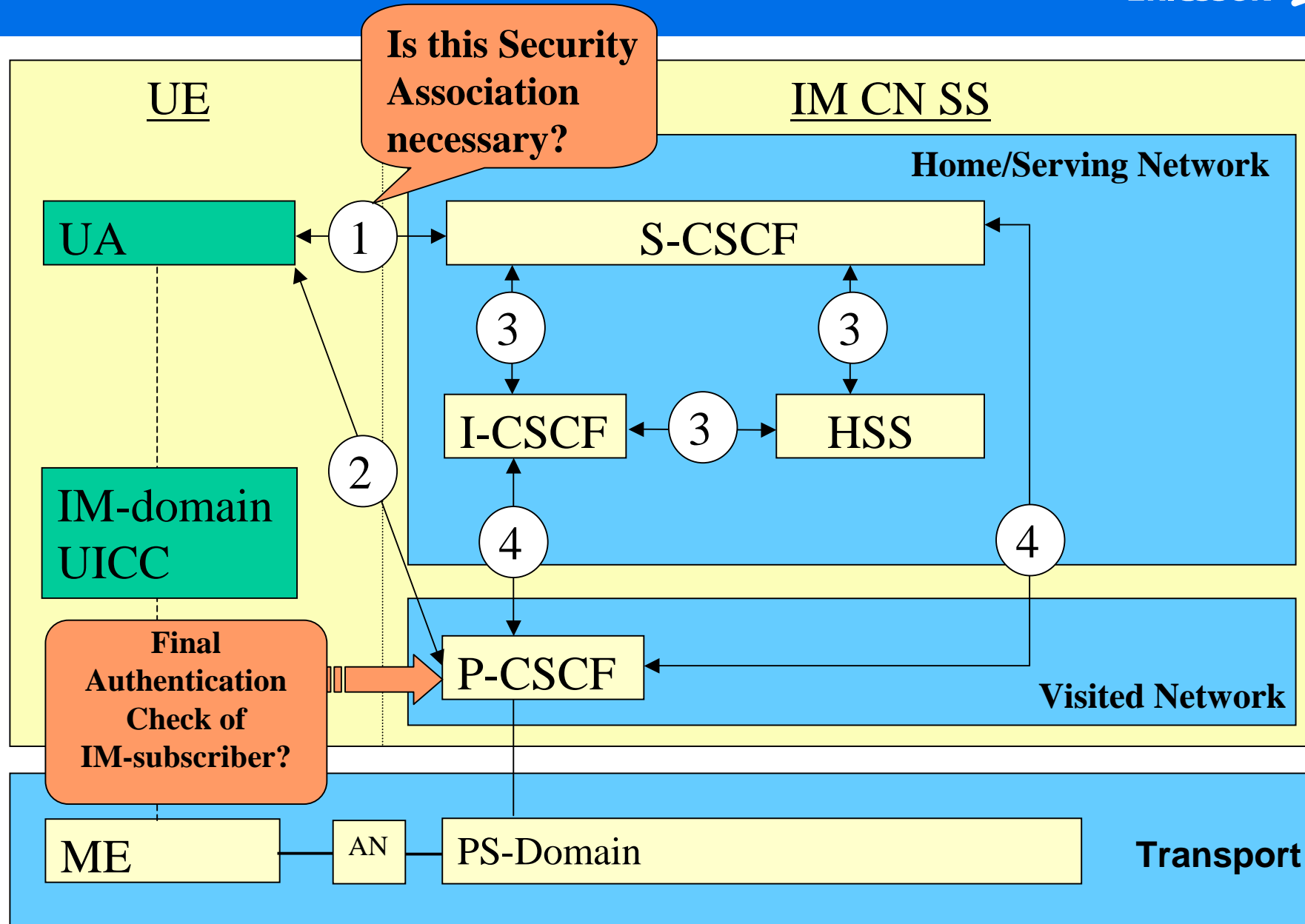
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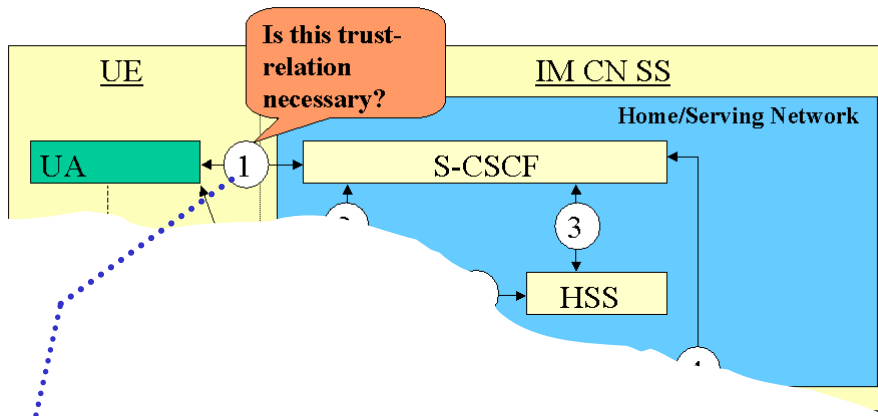
Timeplan:

- Action point from S3#16
To provide with a mutually agreeable solution on authentication control to S3#17
- Result
Since there were too few inputs to the discussion there was no foundation for a decision

Contributions from companies on aSIP in S3

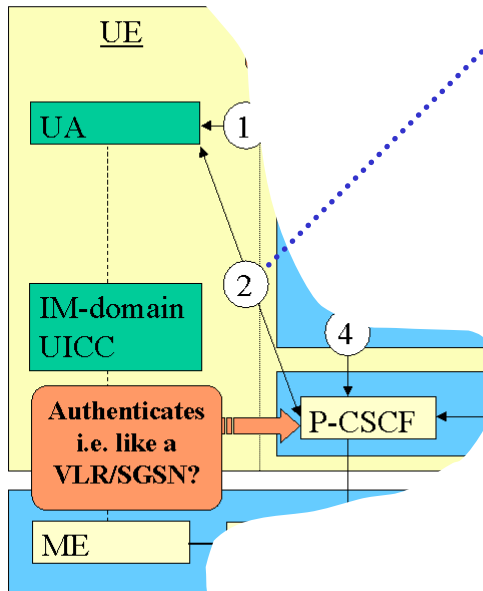






♦ Ericsson, Lucent, Nokia and Orange:

- Define a trustmodel where Home performs authentication based on IMS AKA (HSS) and authorisation (S-CSCF)
- Integrity protect SIP-signalling UE \leftrightarrow S-CSCF
- Home owns the IM-services -> home shall control and react on authentication/authorisation failures
- Extensions to SIP-necessary!
- Visited Environment still controls authentication/authorisation on PS-level



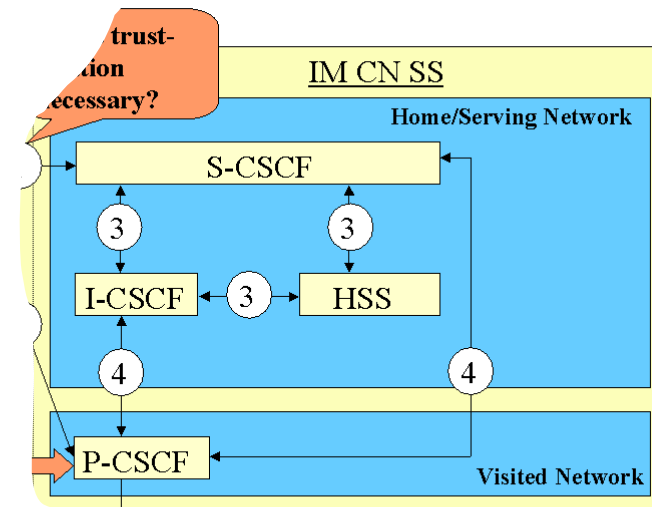
Siemens:

- Keep the trustmodel from UMTS R'99.
Home Network delegates authentication check to Visited Network i.e. the P-CSCF
- Authorisation is performed by the S-CSCF
- Integrity & Confidentiality protect SIP-signalling
UE \leftrightarrow P-CSCF
- Minimal complexity when it comes to key management and signalling flow
- For access independence the P-CSCF functionality can be combined with the I-CSCF
- Extensions to SIP-necessary!

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SA WG3:

- Shall be protected by mechanisms defined in Network Domain Security Which is a separate work item in S3



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SA WG3:

- Shall be protected by the Security Gateway, SEG, defined in the S3 WI Network Domain Security

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Status (Open Issues):

- Trust relations (To what degree is the P-CSCF trusted??)
- The mechanisms for encryption and integrity protection
- Signalling flow for authentication
- Key management (Symmetric or asymmetric)
- Start to work with IETF to get the wanted SIP Extensions in place

Thank's for your attention!

Questions?