3GPP TSG-SA WG1 Meeting #82

Dubrovnik, Croatia, 7 - 11 May 2018

K. SEPTINUS

Support Slides for Discussion on Clock Synchronization in S1-181109.doc

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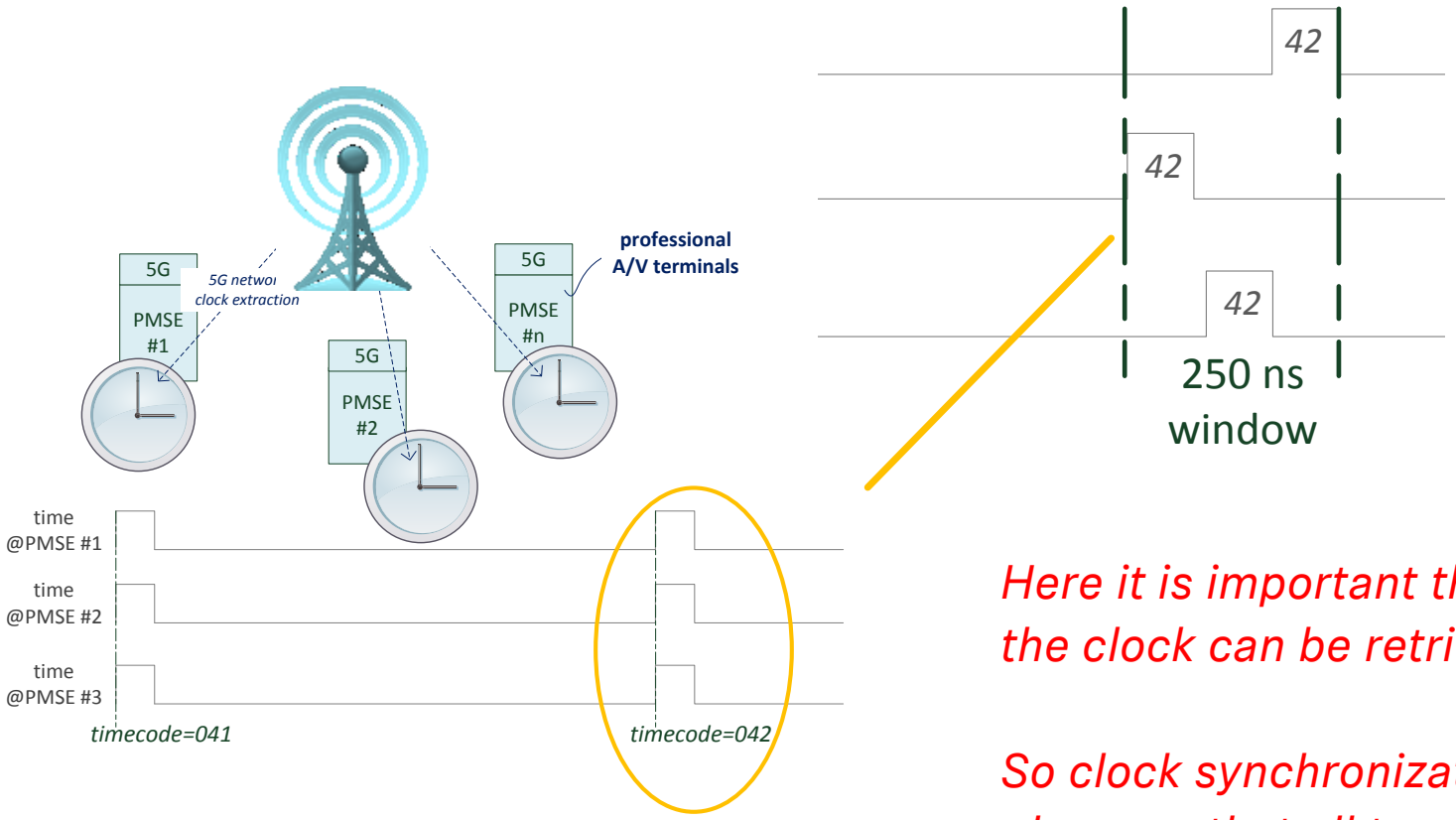
To be discussed

- "*Clock Synchronization*" used throughout CAV, but not defined yet
- Central importance for automation and media application
  - Professional audio applications require capturing samples at the exact same times
  - Professional video applications require having exact timestamps
  - Many automation use-cases rely on time-synchronization (Future Factories, Power Distribution)
- Outlook to *S1-181109.doc and CAV*

Illustration



Here it is important that the phase information of the clock can be retrieved and is precise enough.

So clock synchronization include frequency and phase so that all terminals are provided with the same time reference.

- Requirements in CAV may be resolved by introducing PTP-like features or exposing network time reference signals at the application interface

- However, the definition may needs to be general enough to cover different applications:

  „***clock synchronisation**: the maximum allowed time offset within the fully synchronized system between dedicated UE clocks and the reference system clock provided by one master device.*“