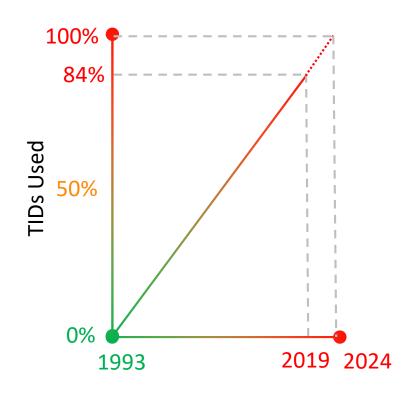


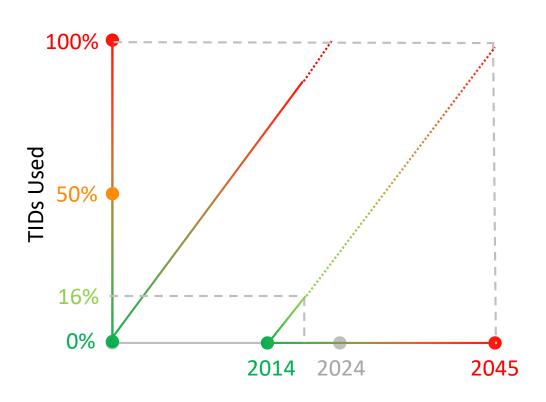
What is a TID Rollover?



- Each STS token is uniquely identified by a Token Identifier (TID) which is based on time.
- The TID maximum value (rollover) will be reached in 2024.
- Meters will reject all subsequently vended credit tokens.



What is STS 6?



- The STS Association has developed an upgrade (STS 6), which amongst other things has introduced better vending key security.
- In addition, a new base date has been introduced (2014) to allow vending to take place after 2024 via the new vending keys.
- However, in order for meters in the field to adopt this new key (and TID starting point), it is necessary to change each meter key and to clear the TID memory in each meter.
- This is achieved by generating and entering a <u>special</u> pair of TID rollover Key Change Tokens into each meter.

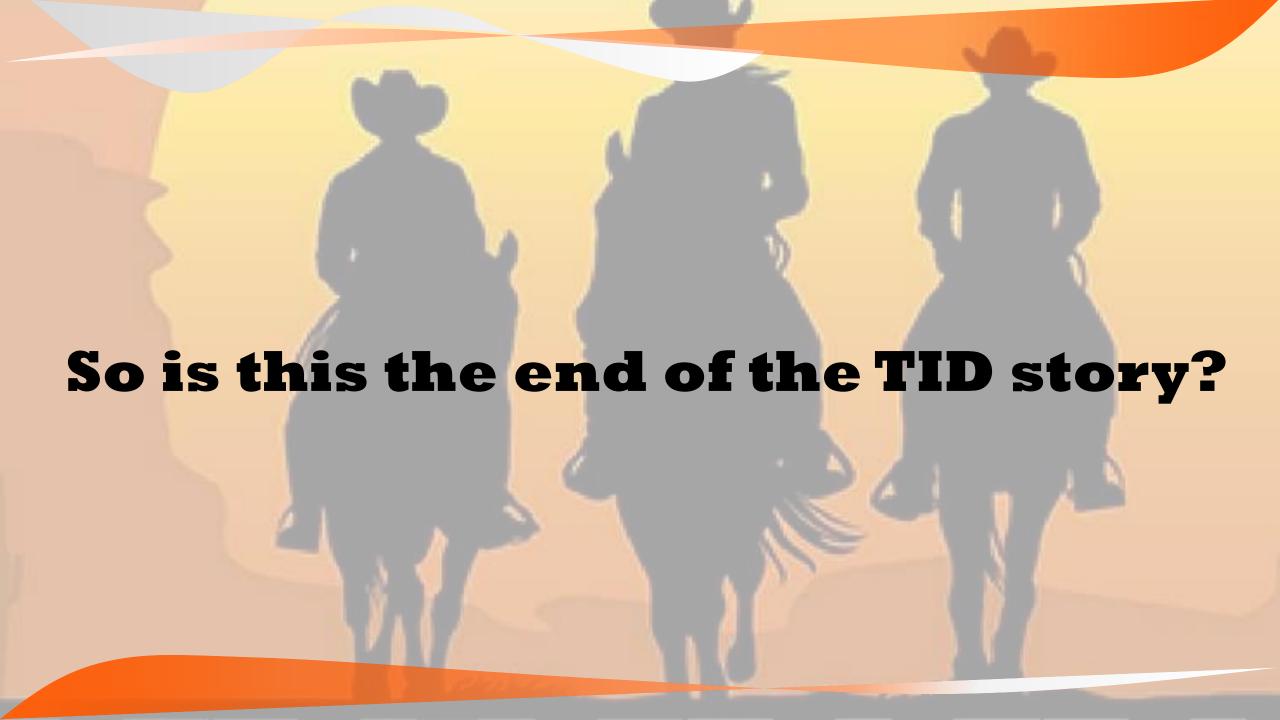
How does the STS 6 upgrade process work?



 Older (STS 5) Security Modules contain legacy (1993 base date) keys only.



- Newer (STS 6) Security Module contain <u>both</u> legacy and new (2014 base date) keys.
- This allows a Utility to install newer security modules while continuing to vend to meters on legacy keys and progressively issuing the TID rollover key change tokens to selected meters in order to move them to the new STS 6 keys.



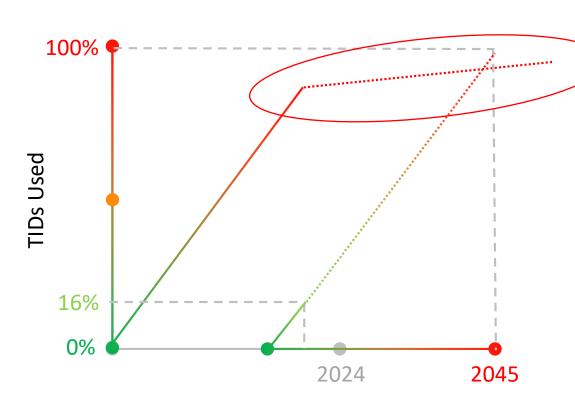
There are significant challenges ahead...

- Every aspect of your prepayment infrastructure is affected. This includes meters, vending system, keys and security modules.
- Every meter must receive and <u>accept</u> the **TID rollover key change tokens** before 2024 in order to continue to accept tokens. Utilities are uncertain of the "best route" to follow to achieve this.
- The pricing model for STS 6 security modules is currently pay for use (regardless of key).
- Some older STS meters may not accept the TID rollover key change tokens. These meters would then need replacement, possibly immediately.





What is TID Conservation?



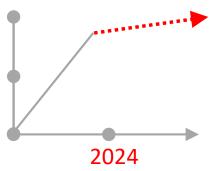
- TID Conservation is a methodology to significantly postpone the TID rollover deadline by slowing the rate at which TID values are consumed.
- It is not proposed as an alternative to STS 6, but as a **complementary** technology to assist utilities in reducing risk.
- TID Conservation is not currently endorsed by the STS Association.

What is dual Security Module vending?

Vending Platform

Token requests for meters with legacy keys





Token requests for meters with new STS 6 keys



- Dual Security Module vending is a risk and cost reduction strategy that allows Utilities to vend concurrently on legacy STS 5 and STS 6 security modules.
- This allows vending to legacy meters to continue on the cheaper STS 5 security module until such time as meters are changed to the new STS 6 keys.
- When combined with TID Conservation it facilitates continued vending beyond 2024 for those meters that reject the special TID rollover Key Change tokens and cannot be upgraded.

Reach out to experts

- Each Utility's challenges and solutions for the TID rollover event will be different (theory only goes so far).
- Therefore <u>above all</u>, Utilities are going to need tried and trusted expertise to counter the TID rollover challenges.
- Use a partner that has an excellent track record of providing continuous support and successfully executing field audits.
- Benefit from their past experience in issuing key change tokens to very large meter install bases.



Reach out to experts

- Draw on your partner's knowledge in respect of organising consumer awareness campaigns.
- If applicable, work with them to ensure that your Super Vendors have been properly accredited and trained to distribute the TID rollover key change tokens.
- Utilise their STS 6 meter type compatibility database to evaluate likely STS 6 compatibility for your install base.
- Reduce the overall risk and effort by benefiting from your partner's TID rollover technology toolset.



Thank You

