### What is the support and assistance that SALGA is offering to municipalities?

SALGA has, and will continue to provide assistance, support and build capacity in the municipalities in order to ensure that the prepayment meters are reset by 24 November 2024 through TID rollover process. The support and capacity given to the municipalities include the following:

- Workshops and information sharing sessions: SALGA has hosted a number of workshops and information sessions with the municipalities over the past number of years to share the progress made by other municipalities in rolling out the prepayment meter reset TID rollover project, share challenges and successes so that municipalities can learn from one another, discussed the potential revenue losses if the municipalities do not reset the prepayment meters; and how to mitigate the risk. More workshops will be hosted at national and provincial level with the municipalities throughout until November 2024
- PartnershipwithSouthAfricanCouncilforGraduates (SACGRA) to make provision for graduates to assist municipalities: SALGA has established that one of the challenges raised by some municipalities, especially smaller municipalities, was that they would need support in a form of human capital to assist in resetting the meters. This partnership will make provision certain number of graduates to be assigned in municipalities as part of capacitation. The graduates are expected to join municipalities from June 2023 for a period of 12 months.

Establishing STS TID rollover prepayment meter project dashboard: SALGA has established a dashboard where the status of TID rollover meter reset statistics is displayed. The dashboard consists of various parameters on the TID rollover data, such as total number of prepayment meters to be reset, number of prepayment meters that have been reset per municipality, outstanding number of prepayment meters. This dashboard is on the SALGA website and can be accessed by anyone who wish to see the status of meter reset in the local government. The purpose is to identify municipalities that are lagging behind and offer support to ensure that their prepayment meters are reset by the deadline. The dashboard can be viewed at http://www.salga.org.za/event/sts/Home.html

#### Where do I get more information the STS TID rollover prepayment meter project?

- The dashboard with status of prepayment meters is available on SALGA website and can be viewed at http://www.salga.org.za/event/sts/Home.html or contact SALGA on smulaudzi@salga.org.za or nngidi@salga.org.za
- key change tutorial from the STS Association (https://www.sts.org.za/understanding-the-tidrollover#gsc.tab=0)
- STS Association further information visit www. tidrollover.com or riccardo@sts.org.za
- To view the remaining number of days visit the timer on https://www.tidrollover.com/TID-Rollover-Calculator

The Standard Transfer Specification (STS) Token Identifier (TID) rollover prepaid meters reset



### What is Standard Transfer Specification (STS)

- The Standard Transfer Specification (STS) is the global standard for the transfer of electricity, water, gas and other utility prepayment tokens.
- The STS describes a secure message system for carrying information between a point-of-sale and a meter.
- In South Africa, distributors (municipalities and Eskom) use the STS technology in their electricity and water utilities business to measure and charge water and electricity.
- The STS was first introduced in South Africa in 1993, it provides the facility of generating (e.g., credit transfer) tokens which can only be used by the intended meter, and furthermore in the case of credit tokens, can only be used once in that meter.
- The STS technology is used by over 500 utilities from 40 countries across the world, and there are over 70 million prepayment meters based on STS technology across the world.
- In South Africa, there are over 10 million STS electricity prepaid meters, which 7 million are managed by Eskom and over 3 million are managed by municipalities.

#### What is Token Identifier (TID)?

- Each credit token (20 digits that customers receive when recharging electricity) has a unique Token Identifier (TID) encoded into the 20 digits to prevent token replay at the meter.
- The TID is a 24-bit field, contained in STS compliant tokens that identifies the date and time the token was generated.
- The TID is used to determine if a token has already been used in a payment meter, and to ensure that each credit tokens can only be used once-off in a meter.

# What will happen to the prepayment meters on 24 November 2024?

- All prepayment meters based on STS technology will stop accepting new credit tokens on 24 November 2024.
- This is the case because the TID is referenced to a base date of 1993 and will run out of range in 2024, thus causing the prepayment meter to stop accepting new tokens.
- Thus, all meters will require key change tokens with the roll over bit set.
- In addition to this, the base date of 01 January 1993 will be required to be changed to a base date of 01 January 2014. This process will force the meters to reset the TID stack memory to 0.
- All the prepayment meters will require Key Change Tokens (KCT)

#### What is it that municipalities should do? What is the technical remedy?

- Municipalities should upgrade their vending software to STS Edition 2
- Once the vending system has been upgraded and certified to STS Edition 2, the vending software can now generate Key Change Tokens (KCT) for each of the meters in the field.
- Enter unused tokens first, because if the Key Change is done, then the unused tokens will be rejected if they are entered afterwards, because they will be in the old meter key, therefore they must be entered before the Key Change process
- The existing credits will not be affected by the key change process. Don Taylor, what should we suggest here? KCT can be in any order?
- For more information, watch the key change tutorial from the STS Association (https://www.sts.org.za/ understanding-the-tid-rollover#gsc.tab=0)

## How are the municipalities rolling out this project?

- There are two options that municipalities using to roll out this project, some use one option, whilst others are using both options
- This process is done manually by entering the key change token (two reset tokens) in the meter
- **Option 1:** When the customer purchases his/her next credit token, the municipality will give him/her two "reset" tokens that must be entered into his/her meter (how to do this, see the key change tutorials using the link above; and
- **Option 2:** A dedicated field team visit every meter, generate the key change tokens (two "Reset" tokens) and enter them into the device/meter. This option allows the municipal team to fix meters that may be faulty on-site
- **Option 3:** Initiate contact with a service provider so they can assist you with your TID rollover project.

