

Newton Water Meter System Timeline 2009 – 2022

2009

Newton selects Elster/AMCO meters and endpoints. RTM endpoints and C700 meters.

- This technology is a mesh network on a public frequency.
- The mesh tech failed to give us the guaranteed 95% reading rate.
- Frequent failures due to battery depletion.

2012-2013

Elster/AMCO contracts with KP Electronics to replace failed RTM endpoints

- KP Electronics provides a private frequency endpoint tech with greater reliability and increased range.
- Newton reaches it's 95% reading rate (over a 28 day window)

2013-2015

- KP Electronics provides timely software updates to keep system operating well
- Transmitter warranty service has a 30 day turnaround time.
- BETA program to test out two-way MTU systems offered to Newton

2015-2017

- Newton introduces the Irrigation Meter Program to residents
 - o This increases the work load on our AMI system
 - o Thousands of applicants in the first two years

2017

- March
 - o KP Electronics announces Mueller acquisition of AMI software system
 - Muller takes over MegaNET AMI system but promises full support
 - o KP Software support and RMA Warranty service ends
- November
 - o Newton's AMI system has software and hardware issues
 - RAM shortage
 - Hard Disk Drive space issues
 - o Limited support from Mueller
 - No one is fully trained on MegaNET to solve problems

2018

- January
 - o Ober Water Tower Antenna has serious issues
 - Transmissions per day drop from 30,000 to 2,000
 - Residents begin to complain of estimated bills in area around Ober Tower

- August 2018
 - Support from Mueller is unacceptable. No solutions offered.
 - Residents have endured three quarters of estimated bills around Ober Tower
 - Mueller does not return RMA warranty units and offers no explanation
- September
 - Full report of on-going AMI system issues sent to Mueller HQ. Department heads copied
 - Failure of Ober Tower
 - RMA Process delays
 - 30,000 endpoint threshold recommendations
 - Growing list of non-reporting endpoints due to lack of RMA warranty replacement
 - Request assistance in replacing non-active endpoints with Mueller supplied MTUs
- October
 - Mueller responds to full report letter
 - Will send representatives to troubleshoot tower concerns
 - RMA clarification – 10 years Full, 10 years pro-rated
 - Acknowledges 30,000 endpoint limitation in KP system
 - Mueller suggests we purchase endpoints as this will be faster than receiving RMA warranty units. Will not send reps to assist in replacement process.
- November
 - Mueller & Newton meet in person at Utilities to discuss issues 11/13/2018
 - Mueller believes that we need a new antenna at Ober & Stanton
 - Mueller will look into a system upgrade (>30,000 endpoints)

2019

- March
 - Mueller recommends replacement antennas at three sites
 - Paid for by Utilities, installed by private contractor
 - Stanton, Ober, Recycling Center
 - Computer failures at:
 - Willow Fire HQ
 - Stanton
 - Ober
 - Need to pay for replacement antenna computers – Only two year warranty
- July
 - Mueller proposes a \$30,000 system upgrade to fix numerous issues.
 - Includes system updates to allow for more than 30,000 endpoints
 - New Two-way endpoint deployed to Newton.

- September
 - System update completed
 - Results
 - 30-40% drop in communication with antennas city wide
 - Residents around City Hall, Waban Hill, and Fire HQ see more estimated bills.
 - No explanation available from Mueller. KP is their tech support and there is a delay in solving issues.
- November
 - Total failure of Stanton Tower. New computer is non-functional.
 - Residents west of Stanton Tower (Wellesley border) have high amount of estimated bills.
 - City Hall main AMI system computer crashes
 - Zero disk space, ballooning system file error.
 - No support from Mueller
 - Lead contact at Mueller (Brian Harwood) refuses to honor RMA warranty on endpoints.
 - Out of 559 units sent, 5 accepted and returned
 - Sites short wire contact voids warranty
- December
 - List of issues sent to Mueller
 - System upgrade failure
 - Four month delay on purchasing new endpoints
 - Ten month delay on returning RMA warranty units
 - Warranty process not being honored
 - Vice President of Mueller (Jon DeYarman) responds to Newton's issues
 - Will honor warranty in full
 - Will prioritize RMA warranty shipments
 - Will send employees to diagnose failing towers

2020

- January
 - Upgrade of City Hall computers
 - Move to Virtual Machines with IT support
 - Fixes RAM & Disk space issues
 - Improves speed of meter software
- June
 - Antennas are still running at reduced capacity
 - Need to flash five computer motherboards
 - Completed by Utilities & KP (Remote)

- September
 - City Hall computers are upgraded and operational
 - Software upgrade applied to MCM Meter Reading Utility
 - Lost all data prior to December 2019
 - KP/Mueller unable to recover
- November
 - Failure of Mueller customer support
 - Mueller loses key IT support help during move to Atlanta
 - Shipment dates for MTUs pushed out to 12+ months
 - Ted Jerdee sends letter to Mueller demanding assistance
- December 2020
 - 8 additional antennas installed by contractor paid for by Mueller
 - Improves communication from two-way endpoints
 - Does not improve legacy endpoint traffic

2021

- Utilities reaches out to new AMI system operators
 - Begins pilot program studies on next AMI/AMR system
 - Failure rate of existing Mueller AMI is at 53% of all endpoints
- RMA Warranty replacement shipments delayed
 - Expected turnaround time is 12-16 months
 - We are owed 4,000+ endpoints