





What is Collective?

Modular, paperless system for complete control of all collection, cleansing & maintenance operations.

- Domestic refuse and recycling
- Street cleansing
- Commercial refuse and recycling
- Grounds maintenance
- Licencing and permits
- Environmental Health and Public Safety



Overview



Immediate info at control centre

Customer enquiries Vehicle messages

Bartec manage all IT and equipment issues – users simply log-in and use the system via the internet

Reducing round errors

information etc

assisted collections, recalls, traffic



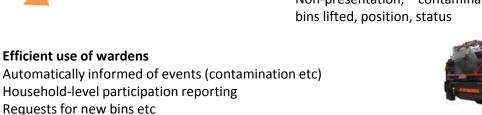
Bin checks

Round updates in real time

New entitlements (assisted collections etc), bin deliveries, new houses Round analysis and routing



Non-presentation, contamination,













Proven in use

Collective is currently serving over 2 million households throughout over 50 UK Council customers

Over 1,000 mobile working systems in daily use

Customers are listed on our website, along with some very strong case studies



Systems Integration

Successful integrations running today with CRM and financial applications including:

















Agresso



Web Services

Web services providing open, secured integration with external systems and web presence

- 'bin day' web pages
- Self-service portals
- CRM integrations



Route Optimisation

Collective integrates with route optimisation engines.

- Monitoring actual routes against planned routes allows the optimisation parameters to be continuously improved
- Harrow are automatically re-optimising every trade round every day so the best sequence is always suggested to the driver.
- Live integration with RouteSmart established at Durham County Council, Gateshead Council and Leeds City Council.



In-Cab Terminal

In-Cab Terminal

- Proven in hundreds of trucks running every day
- Robust touch-screen
- •Experienced, high-quality installations compliant with VOSA regulations
- Remote diagnostics, admin and support
- Off-line working
- •Interface options, weighing, camera systems, RFID, bin weigh, CanBus





Driver Sign-in

- Driver sign-in
- Start of day vehicle check
- Select round for the day
- End of day vehicle check





Vehicle Check

- Traffic light system
- Report Major and Minor defects
- Major defects reported prevent a Work Pack being selected
- Defect report generated for work shop
- 'Start of Day' and 'End of Day' checks







Selecting a Work Pack

SELECT WORKPACK

Waste-CREW-E-270614

Waste-CREW-F-270614

Waste-CREW-G-270614

Waste-CREW-H-270614

Waste-CREW-I-270614

Waste-CREW-J-270614

Waste-CREW-K-270614

Waste-CREW-L-270614









Domestic Collections View

Once the Work Pack has been selected the driver can view their route street-by-street.

[36] BARKWITH ROAD (SOUTH WILLINGHAM [5] BENNIWORTH ROAD (PANTON) [4] BLACKSMITHS LANE (SOUTH WILLINGHA [1] BUTTERGATE HILL (GREAT STURTON) [8] CHAPEL LANE (BAUMBER) [32] CHURCH LANE (GREAT STURTON) [1] CHURCH ROAD (RANBY)



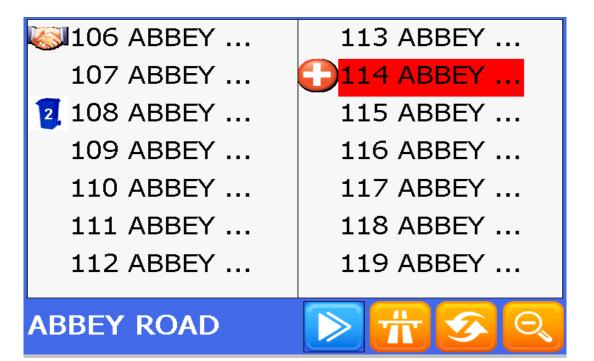




Standard Domestic Collections View

The cab computer shows crews key information such as:

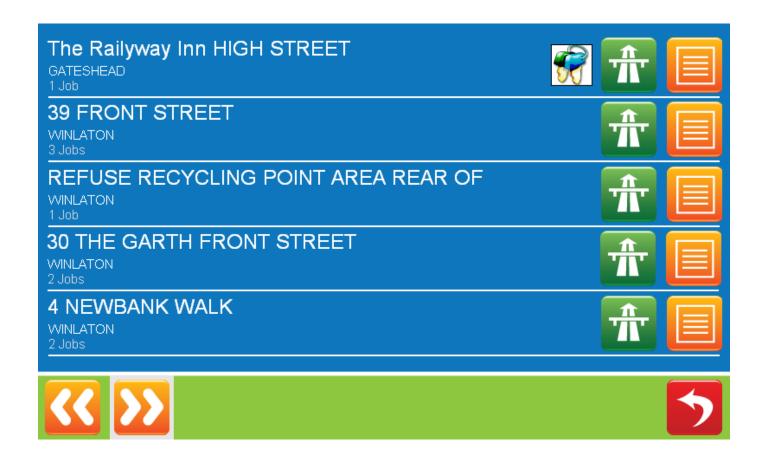
- Assisted collections
- Multiple bins
- Previously missed bins
- Hazards





Special Collections View

Display automatically switches to show job list





Special Collections View

Special collections require positive reporting to confirm collection. Exceptions events also supported.





Reporting Exception Events

Crews can select one or more premises to record information about. Data from the truck immediately updates the back-office application.





Reporting Sub-Events

Sub-events can also be reported, for example the type of contaminants. Multiple sub-events are also supported.





Messaging

New jobs / recalls can go to the crew within minutes.

Round automatically updates.

Missed bins can be resolved on the same day.

Crew get a message to ensure they know the route has changed.





Route Alerts

Route alerts are also relayed to the crew

- Schools
- One side collections
- Road closures



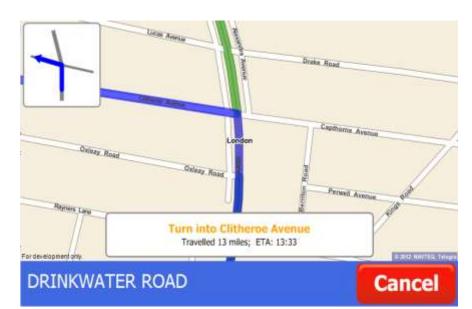


Satellite Navigation

Allows simple, one-click access to the best appropriate route to

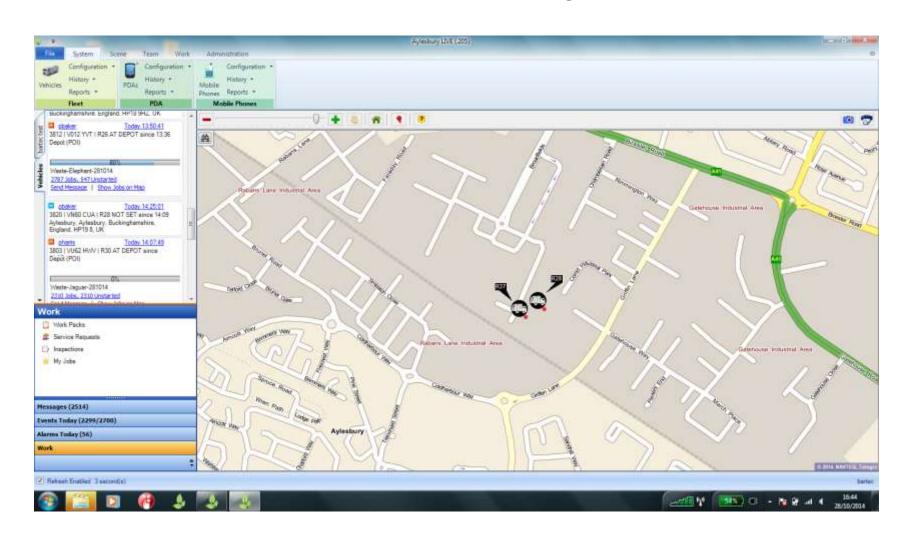
- Start of route
- Depot
- Tipping site(s)
- Points of Interest (rest stops, fuel point etc)

System selects an appropriate route for the size of vehicle, using up-to-date traffic restriction information.





Collective Core System





Collective Core System

Collective system encompasses:

- Collections round management, live and historic views
 - Scheduled work
 - Reactive work
- Service Request Management
- Comprehensive premises history
- Asset register
- In-cab & mobile communications
- Vehicle tracking and monitoring
- Comprehensive management reports



Premises Manager

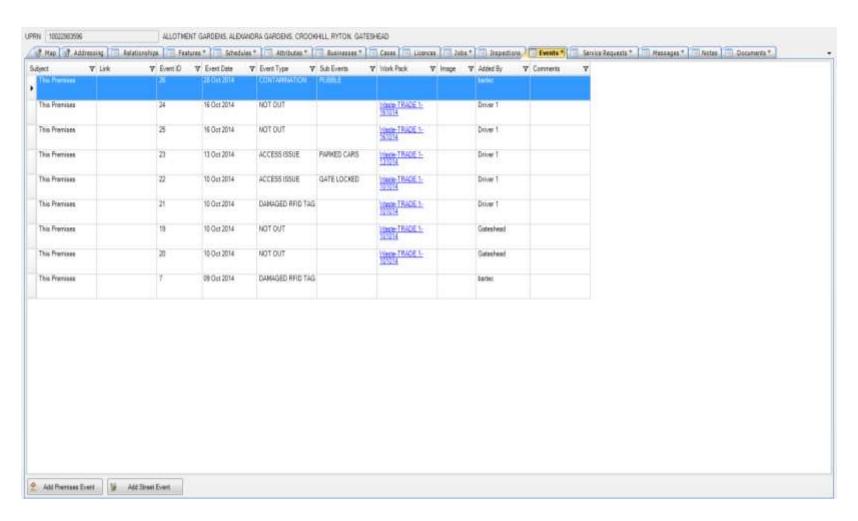
Premises Manager, a single screen enquiry for all aspects of service to a specific premises.

Clearly shows:

- Collections schedule (past and future)
- Bin register
- Service requests
- Documents
- Parent-child relationships
- Attributes
- Reported events
- Customer accounts (finance profile, account balance, billable items, invoices, documents etc.)



Premises Manager Screen





Planned Work

- Configure Crews as members of distinct Work Groups.
- Allocate work on any combination of Crew, Day and frequency
- Plan for public holidays, weather exceptions and special events
- Compare schedules against service standards

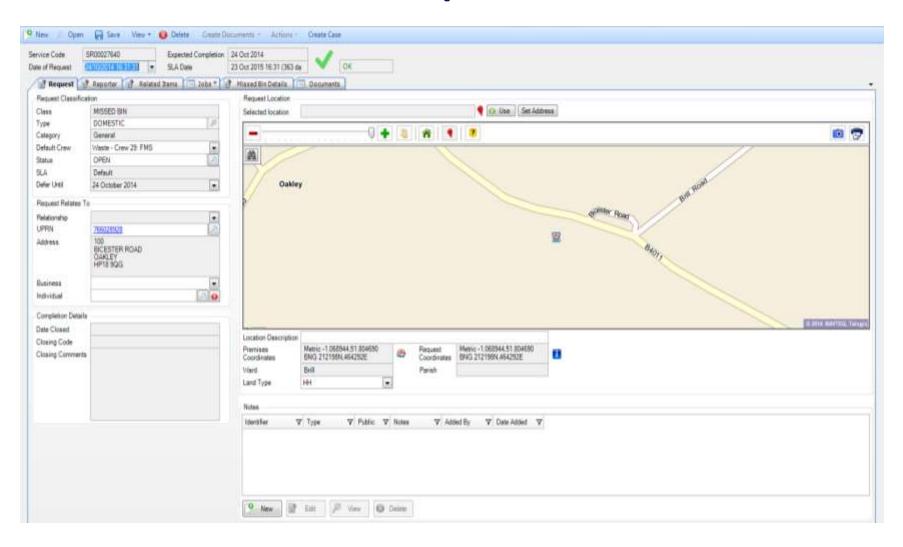


Reactive Work

- Customised forms for each Service Request type
- SLA applied and automatically routed to a Crew or to intervention queue
- SLA monitored and escalated automatically
- CRM ticket updated in real-time



Service Request Form





Service Requests Status View

	Service F					Current View ALLITEMS	→ Delete Save
in (8	List (1) Map	Show coordina	eles for. (a) Plemies Location (f)	Senice Request Location		[/] Store	Terices Legend
¥	Service Code 1	7 UPRN	▼ NorkGroup	▼ SLA Status	▼ Date Requested	▼ Premises	▼ Contact Name
	SR00034037	10070268679	Arboricultural Servi	Breach	1305/2013 16:42	ROXBOURNE PARK VEHICLE ENTRANCE CANNON LANE, PINNER	Quick Custome
	SR00034039	10070265549	Arbonicultural Servi	DK.	13/05/2013 16:58	FLATS 41 TO 47A PETERBORDUGH RDAD, HARROW	Herrow School
	SR00034043	10000001958	Corporate Repairs	OK	13/05/2013 17:57	PUBLIC CONVENIENCE OPPOSITE 659 UXBRIDGE ROAD, PINNER	PierreRoyan
	SR0034065	100023036257	Arbonicultural Servi	DK	14/05/2013 08:30	WESTFIELD COURT 1 MESTFIELD PARK, PINNER, H45 4JJ	DIPEXA PATEL
	SR00034110	10070268656	Parks Horticulture	DK	1405/2013 13:29	KENTON RECREATION GROUND VEHICLE ENTRANCE KEMMORE AVENUE, HARROW	m richardson
	SR00034114	758007041	Responsive + Parks L	DK.	14/05/2013 13:39	STREET RECORD REYNOLDS DRIVE, EDGINARE	martin
	SR00034115	100021313540	Responsive + Parks L	Jeopardy	14/05/2013 13:41	1 ENNERDALE AVENUE, STANMORE, HA7 ZLB	Corinne Gibsor
	SR00034116	768005221	Responsive + Parks L	OK	14/05/2013 13:44	STREET RECORD CHARLTON ROAD, HARROW	martin
	SR00034119	100021258367	Arbonicultural Servi	OK	14/05/2013 14:17	66 CHURCH DRIVE HARROW, HAZ 7NS	Davinder Tah
	SR00034123	100021272733	Responsive + Parks L	Jeopardy	14/05/2013 14:27	2 KENTON PARK CRESCENT, HARROW, HAS BUA	Tina Gilmartin
- f	SR00034125	100021296328	Responsive + Parks L	Jeopardy	14/05/2013 14:38	139 SOMERVELL ROAD, HARROW, HAZ 8TZ	S Gardner
	SR00034128	100021290261	Arboricultural Servi	DK.	14/05/2013 14/52	125 THE RIDGEWAY, HARROW, HA2 708	Manesh Patel



Work Packs

- Collective automatically creates work packs for each crew,
- Work packs can be a combination of Scheduled work and Reactive work.
- Work packs are automatically transferred to the in-cab or mobile computers and displayed in sequence order.



Work Packs & Progress View

ork -	Work Pa	02/06/2014	7							
okgroup V	Стем	▼ Workpack Name / 1	▼ Crew Size ▼	Completion ▼	Progress		▼ Job Count ▼			
Waste	Crew 29	Waste-FMS-020614	1			100%	0			
Waste	Crew 6	Waste-Fox-020614	4			100.2	0			
Waste	Crew 35	Waste-Garden 10-020614	2			18%	656			
W/aste	Crew 22	Waste-Garden 1-020614	2			77.%	478			
¹ W aste	Crew 36	Waste-Garden 11-020614	3			50%	474			
Waste	Crew 23	Waste-Garden 2-020614	1			20%	1026			
Waste	Crew 24	Waste-Garden 3-020614	1			02	701			
Waste	Crew 25	Waste-Garden 4-020614	1			100%	621			
Waste	Crew 26	Waste-Garden 5-020614	1			69%	941			
Waste	Crew 27	Waste-Garden 6-020614	1			0%	842			
Waste	Crew 32	Waste-Garden 7-020614	1			99.%	947			
Waste	Crew 33	Waste-Garden 8-020614	1			0%	540			
¹ Waste	Crew 34	Waste-Garden 9-020614	1			100.2	725			
Waste	Crew 21	Waste-Garden Narrow-020614	1			99.%	450			
Waste	Crew 7	Waste-Gorilla-020614	4			100.2	0			
Waste	Crew 8	Waste-Hippo-020614	4			100%	0			
Waste	Crew 9	Waste-Impala-020614	4			100.2	0			
Waste	Crew 900	Waste-Inspections-020614	1			100.2	0			
Waste	Crew 999	Waste-Intervention-020514	1			02	293			
W/aste	Crew 10	Waste-Jaguar-020614	4			100%	0			
Waste	Crew 11	Waste-Kangaroo-020614	4			100.2	0			
Waste	Crew 12	Waste-Lion-020614	4			100%	0			
Waste	Crew 30	Waste-Missed Bins-020514	2			100.2	0			
Waste	Crew 31	Waste-Missed Garden-020614	2			100%	0			
Waste	Crew 13	Waste-Monkey-020614	4	T.		100%	0			
Waste	Crew 28	Waste-Mop Up 1-020614	1			100%	0			
Waste	Crew 14	Waste-Newt-020614	3	1		100%	0			
W/aste	Crew 100	Waste-DPS-020614	2			100%	0			
Waste	Crew 15	Waste-Otter-020614	4			100%	0			
Waste	Crew 16	Waste-Panda-020614	3			100%	0			
Waste	Crew 17	Waste-Qual-020614	4	1		100.2	0			
Waste	Crew 18	Waste-Rhino-020614	3			100%	0			
Waste	Crew 19	Waste-Shark-020614	3			100%	0			
Waste	Crew 20	Waste-Tiger-020614	3	1		100%	0			
Waste	Crew 37	Waste-Trade-020614	3			02	1			



Customer Testimonials

Harrow Council

Missed bin call volumes down by 25% Outbound follow up calls reduced by 95% £3.2 million to be saved over 10 years

Tamworth & Lichfield

Missed bins down by 35% 95% customer enquiries dealt with in first contact Recycling up by 2% £51K annual savings

Exeter City Council

Capital Savings - £340K – reduced fleet, then avoided costs for c. 5,000 new homes Revenue Savings - £350k over past 3 years

Bolton

Recovered 3000 recycling bins Cut contamination costs Retrieved £60,000 bin assets

South Hams

Trade system saves 400 hours in invoicing administration alone



