

# How Severn Trent tackled the bi-laterals conundrum with C&C Group



## Q Background

From 1st April 2017, more than 1.2 million businesses, charities and public sector customers in England, from micro businesses and SMEs to large corporates and the public sector, can now choose their water Retailer for the first time.

This followed the successful delivery of an industry-wide change programme involving DEFRA, Ofwat, Water Companies and the Market Operator Services Limited (MOSL).

In the lead up to Market Opening the Water Companies were involved in significant activity ranging from

separating their Retail and Wholesale businesses, procuring/developing new IT systems and a key focus on undertaking Market Readiness testing to prove that they can meet their Market Code obligations and interoperate with the Central Market Operating System (CMOS).

Whilst, this was understandable, it meant that other aspects of the new market arrangements didn't receive the same focus. This included the Operational Terms which describe how the Wholesaler and the Retailer co-ordinate operational activities such as metering and disconnections.

**The Operational Terms are often referred to as “bi-laterals”. This is because the information does not flow back and forth via a central system such as MOSL’s CMOS but rather bi-laterally between individual Wholesalers and Retailers. It is down to the participants themselves to agree on how to exchange information, leading to some confusion in the early days of the Open Water programme.**

## 🧩 The Challenges

Both Wholesalers and Retailers want to avoid labour intensive processes, re-keying of data and using many different systems across the markets.

For Severn Trent this meant a solution which is closely coupled with their SAP backend processes. They needed to give Retailers the option of interacting with them via a rich and interactive user interface as well as via “B2B” exchange through XML.

Large Retailers don't want to log on to over 20 different Wholesaler portals and need their own system which can integrate with their CRM and billing systems but can also interface to any Wholesaler.

Retailers with a smaller customer base would rather keep their costs down and therefore would choose not to have their own bi-laterals system. What they would need is all the information exchange relating to a given bi-lateral process in one place.

The challenges were compounded by the lack of detail in this area of the published Operational Terms. The Market Code only went so far as to define the forms within each process but did not, and does not, define how to exchange information relating to the rest of the process.

Furthermore, the Code did not define the data items within the forms and processes in the same way

that is applied to the CMOS market transactions in CSD0301 (Data Catalogue). The lack of an agreed data structure made it difficult to determine how data could be exchanged across systems.

The last and arguably biggest challenge was time. There was not a lot of time left to have a fully functioning and operating system in place by the beginning of shadow operations on 1st October 2016.

## The Solution

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In November 2015, instead of waiting for a solution to present itself, Severn Trent Wholesale partnered with the specialist utilities IT firm C&C Group to drive forward an innovative solution which could benefit the whole market. The objective would be to make the class leading product that a large proportion of participants would get behind and it therefore becoming the de-facto market standard.

Both Severn Trent and C&C Group quickly understood that although primary market messaging to MOSL and bi-laterals processes are distinct

and have different end points they are part of the same business process. It would be important to design a solution which would incorporate all market transactions in a single hub regardless of whether those transactions were with MOSL or with another participant. C&C Group had already developed its **SWIM-Ware** product for primary market messaging between participants and the Market Operator, it was therefore sensible to extend this to incorporate bi-laterals.

It was also essential to change the thinking of legacy, monopoly company

behaviour and instead to think of the customer, which is by proxy, the Retailer. This would mean focusing on the end user experience and giving them multiple options on how to engage rather than purely focusing on back end system integration.

**The key was to work together in a collaborative and agile way. This involved business analysts from Severn Trent working hand in glove with C&C Group analysts and developers to interpret the Operational Terms.**

Whilst the developers got to work on the nuts and bolts of the solution, the C&C Group analysts sat down with key staff at Severn Trent. It would have been easy to create a simple set of data entry web forms with little or no validation and to only focus on the bi-laterals forms. Instead, together we conceptualised a system which would:

- Drive user behaviour to meet the operational performance KPIs by warning when they were about to fail;
- Focus on the bi-lateral processes more than the forms themselves;
- Give a richer user experience via a message interface similar to proprietary instant messaging services for smartphones;
- Integrate bi-lateral processes with primary market messages so that they can be seen holistically from a business standpoint;
- Be omni-channel for both Retailers and Wholesalers;
- Automatically populate data from the market data set and validate data entry against this;
- Alert users when an interfacing party has updated a process;
- Have a flexible and configurable security module which could reflect the differing organisational structure of each interfacing market participant

In addition, C&C Group and Severn Trent worked with other parties to define an optional data standards catalogue. This was published on the MOSL website so that those parties electing to develop their own solution would have the option to adopt this data catalogue. Should those companies then offer a B2B

interface then there should be no data transformation required between opposing systems.

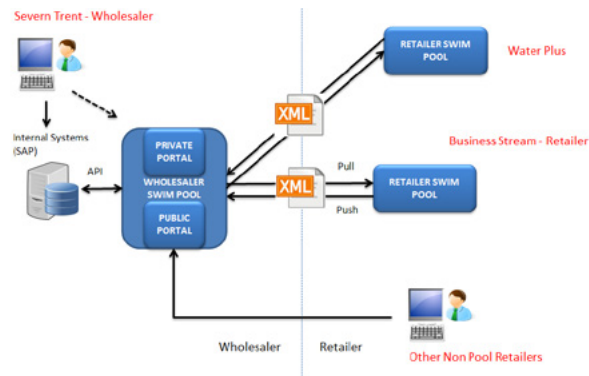
A concept system was quickly established and demonstrated to a wide range of market participants in February 2016. All Wholesalers and Retailers were invited including those

who were developing / procuring their own solution, the aim being to share ideas and ensure a level playing field remained intact.

It was explained to the participants that there would be two editions of a new system to be called **SWIM-Pool**.

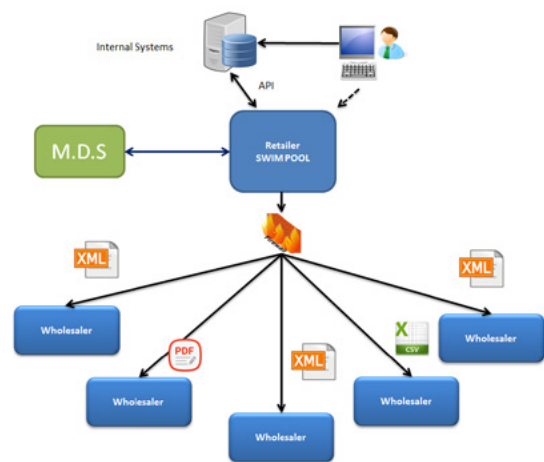
A Wholesaler edition, as illustrated in the technical architecture diagram, would contain a public facing portal for Retailers to logon to and interact with the Wholesaler. Crucially it would also have a suite of web services for the consumption and processing of forms and end to end processes. A similar suite of web services would be available for back end integration into SAP or other work management systems.

## SWIM-Pool Wholesaler



A Retailer edition for those companies with a large customer base. This would provide the Retailer with their own system which can be used standalone or integrated in with a CRM or billing system as appropriate. It would identify the agreed transport mechanism for each Wholesaler and then transform the form and process data as appropriate – PDF, CSV or XML.

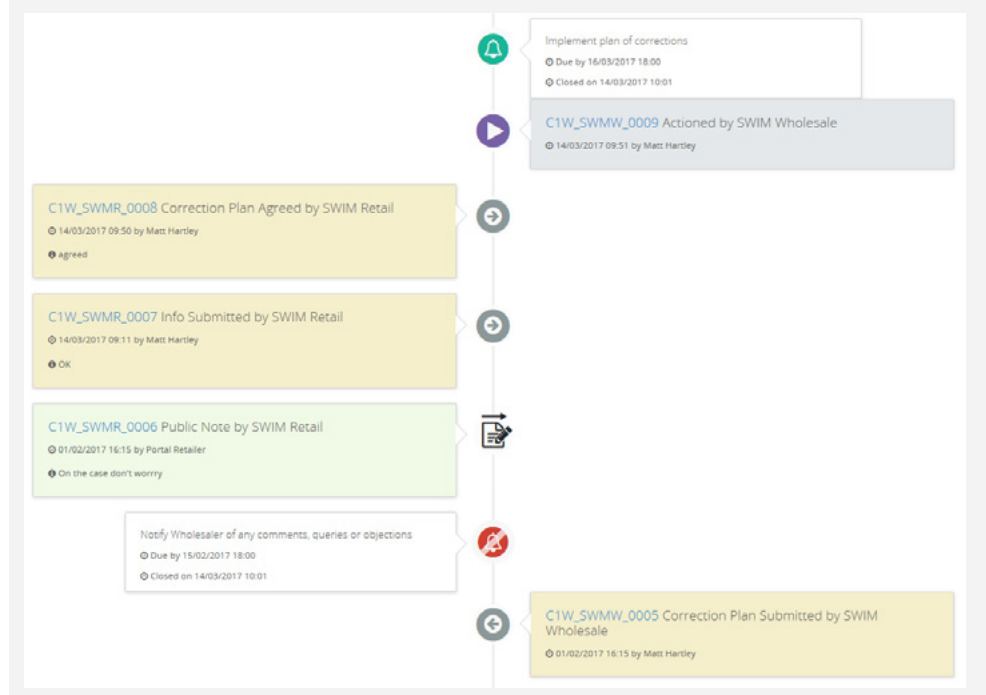
## SWIM-pool retailer



The XML interface would come out of the box for any Wholesalers and Retailers both electing to have the SWIM-Pool platform but could also be used by competing systems were they to come to the market at a later time.

The meeting was a success with Yorkshire Water and Affinity Water deciding to join the product platform on the Wholesale side and two large Retailers in Business Stream and Water Plus also signing up. Together the five participants represented 51% of SPIDs served as either a Retailer or a Wholesaler meaning that SWIM-Pool would be the market leading product in bi-laterals and the de-facto standard.

**The instant messaging type interface follows the MOSL Operational Terms swim lanes making it easy to closely follow the process all the way through to successful conclusion.**



## Outcome

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**SWIM-Pool was delivered on time before the opening of the Shadow Market for all forms and processes.**

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Severn Trent Wholesale have integrated their SAP system into their SWIM-Pool implementation which has meant that there have been few changes to the current business processes. Severn Trent continue to operate in SAP and let SWIM-Pool transform the data into the correct

operational processes and present this to their Retailers.

Both Water Plus and Business Stream, who have their own Retailer Edition of SWIM-Pool are interacting with Severn Trent over the SWIM-Pool high volume interface (HVI / XML).

## The C&C Group bilateral solution has delivered considerable benefits and innovation:

- Users have avoided labour intensive processes and the associated headcount;
- The market leading product, many organisations who have not chosen to implement SWIM-Pool have adopted the voluntary data catalogue. This standardisation of data is helping all participants to exchange data and not just the SWIM-pool customers. Integration between the MOSL primary market messaging system – SWIM-ware – and bi-laterals – SWIM-Pool – means that a business user has a holistic view of the process rather than a fragmented system view
- Work flows have been tailored in SWIM-Pool to work in accordance with existing internal structures and requirements and are integrated with existing back office systems. There has been very little change to the Severn Trent back office teams which means that they can serve their Household and Non-Household customers in a consistent and efficient way;
- Use of the timeline simplifies the user experience and minimises the need for complex training;
- Consistent and simplified means of communication between different parties;
- Allows current status/progress of each transaction to be viewed in real time and a clear audit trail;
- Automatically generates the Market Performance statistics for submission to MOSL; and
- Facilitates accessibility by small Retailers (Retail Portal) and reduces the investment required in their own systems.

Significantly, there is now a critical mass and momentum behind the SWIM-Pool consortium product. C&C Group have established a user group which has met several times to discuss how best to work together between Wholesalers and Retailers and to propose market as well as system change. This user group are already thought leaders in "bi-laterals" working together to drive efficiency in this fledging market.

## History note

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C&C Group demonstrated to Severn Trent how it as a company revolutionised the electricity market in 2002 with the design and delivery of MPAS-online – now [www.ecoes.co.uk](http://www.ecoes.co.uk). In the first 4 years of the competitive electricity market it was necessary for Distributors (Wholesalers in water market parlance) to provide busy call centres for suppliers to enquire about their metering points. Recognising the inefficiency of this approach, what was then Northern Electric and East Midlands partnered with C&C Group to build an online enquiry service on metering points in their geographical areas. Traffic to the call centres dropped overnight and a significantly enhanced service was provided to Suppliers. It was so successful that it was then rolled out in 2005 to cover all British electricity points and is now a regulated and mandated system. It took the vision and risk of Northern Electric, East Midlands and C&C Group to actually build and demonstrate a working process. It was this 'build it and they will come' approach that attracted Severn Trent to work together with C&C Group.

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