

# How to Cost-Effectively Satisfy UK FSA Requirements for Single Customer View

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# About the Author



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With over 3,000 members globally, Data Quality Pro is dedicated to providing expert insight and support across a broad range of data quality related issues.



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## Purpose and Target Audience

This report explains how you, as a UK Deposit Taker, can cost-effectively satisfy the UK Financial Service Authority requirements to deliver and verify an electronic Single Customer View (SCV) of eligible Deposit Holders. The target audience of this report is the person(s) responsible for delivering Single Customer View.

You may also find this document useful if you are:

- **External Reference data supplier:** You may be able to assist clients with eligibility, data consolidation and cleansing etc.
- **Data Quality solution supplier:** You may be able to assist clients understand the data they already have via data profiling and quality measurement. You may be able to assist with data cleansing.
- **Financial Services Systems supplier:** You may need to incorporate SCV provision in your upgrade path.
- **Anti-Money Laundering (AML), Anti Fraud, CRM solution supplier:** You may bring value add to existing clients, since they already require an SCV for AML, Anti-Fraud and CRM to operate effectively.

## Background

In accordance with the [EU Deposit Guarantee Scheme Directive \(DGSD\)](#)<sup>1</sup>, the UK has a deposit guarantee scheme in place that guarantees deposit holders with deposits up to £50,000 with any one financial institution. In the event that a bank or other deposit taker fails, eligible deposit holders are guaranteed their money back, together with interest due. The Financial Services Compensation Scheme (FSCS), first established in 2001, plays a key role in the provision and delivery of the deposit guarantee scheme.

In order to assess the scale of exposure, and to facilitate fast payout, the UK FSA issued proposal documents in 2009 for consideration by the British Bankers Association (BBA) and UK deposit taking institutions.<sup>2</sup> The main proposal was for each deposit taking organisation to deliver a “Single Customer View Report” with details of each eligible deposit holder, with the net value of the deposits held by each deposit holder, and the total compensation due. In addition to the report itself, deposit holders must supply details of how they planned, implemented and tested their new “SCV System”.

In November 2009, despite feedback rejecting the proposals, the UK FSA issued [Policy Statement 09/18](#)<sup>3</sup> confirming that it was proceeding with the SCV requirements. UK Deposit taking institutions, except those with less than 5,000 customers are required to conform to the requirements in two main stages, the first by July 31<sup>st</sup> 2010, and the second by January 31<sup>st</sup> 2011.

This report explains how to:

- Cost-effectively plan and implement the required system changes
- Deliver the data governance controls required to satisfy the FSA SCV verification requirements

## Executive Summary

If you are a Deposit Taker with more than 5,000 deposit holders, you are required to deliver Single Customer View information about each of your eligible deposit holders to the FSCS. The FSCS requires this information

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<sup>1</sup> FSA document on EU DGSD <http://www.fsa.gov.uk/pages/About/What/International/pdf/DGSD.pdf>

<sup>2</sup> CP 09/3, CP 09/11 and CP 09/16

<sup>3</sup> PS 09/18 [http://www.fsa.gov.uk/pubs/policy/ps09\\_18.pdf](http://www.fsa.gov.uk/pubs/policy/ps09_18.pdf)

to assess the scale of its exposure under the Deposit Guarantee Scheme, and to enable payout to eligible deposit holders within 7 days of a deposit taker going into default.

Your ability to deliver a Single Customer View of your deposit holders will be indicative of your ability to deliver critical business information on a day to day basis (e.g. your ability to provide staff working on “Arrears Management” with a Single Customer View of customers in arrears, their securities, repayment schedules etc.). Your ability will depend on your history of systems acquisition and development, and the maturity of your [“Data Governance Processes”](#).

If your organisation is large, you may have developed or inherited multiple systems over decades, possibly from different companies that have merged over the years. You may have multiple sources of customer information, in different formats, and to differing degrees of completeness and accuracy. You will face many challenges creating a Single Customer View from such disparate systems in the short timeframe required by the FSCS.

If you are fortunate enough to have a corporate culture that has always treated data as a valuable corporate asset, you may have mature Data Governance processes in place, and you may find it relatively easy to meet the FSA requirements for SCV. Few organisations have mature Data Governance processes. You, like most organisations, will encounter many data issues as you seek to deliver your SCV. You may only have time to achieve compliance with a tactical project, creating workarounds to handle the data issues that will arise, on an as required basis.

The good news is that you are not alone, or unique. The data issues you will face, are common across the world, and impact all data dependent programmes. They are challenging, but not insurmountable.

The key to delivering this requirement is to “know your data”, i.e. understand what “Single Customer View” data you have, and what it currently contains. Once you know and understand what you already have, you can easily determine the work you must complete to provide the FSCS with the information required. This document tells you how to “get to know your data”, and deliver your SCV, in a cost-effective manner.

## Key SCV Requirements and Dates

On 6 November 2009, the FSA published **Policy Statement 09/18** ([www.fsa.gov.uk/pubs/policy/ps09\\_18.pdf](http://www.fsa.gov.uk/pubs/policy/ps09_18.pdf))

This confirmed that the FSA was proceeding with the proposed SCV reporting and verification requirements set out in the consultation papers. The key requirements and due dates are listed below:

### SCV reporting requirements

Reporting requirement	Due
Smaller deposit takers (those with fewer than 5,000 accounts held by eligible depositors) to notify the FSA if they do not intend to comply with the electronic SCV requirements	From 6 December 2009
SCV pre-implementation report – as tailored for smaller and other deposit takers	By 31 July 2010
SCV report – as tailored for smaller and other deposit takers	By 31 January 2011
SCV implementation report – as tailored for smaller and other deposit takers	By 31 January 2011
Submit a sample of SCV data for FSCS sign-off – deposit takers subject to the electronic requirements only	By 31 January 2011

Section 1.4 of the Policy Statement 09/18 provides an overview of the reporting requirement, including:

*“The production of an electronically submitted SCV will require systems changes, including the flagging of eligible accounts, data cleansing and collation of the information required in a format which is capable of being submitted to the FSCS electronically.”*

The CP 09/16 newsletter ([www.fsa.gov.uk/pubs/cp/cp09\\_16\\_newsletter.pdf](http://www.fsa.gov.uk/pubs/cp/cp09_16_newsletter.pdf)) sets out the verification requirement:

*“We and the FSCS would need to verify that the SCV information being collated and stored by a deposit taker was adequate and fit for purpose”.*

CP 09/16 (Section 2.11) cites “accuracy rate” as one of the deliverables in the SCV Implementation report, to facilitate verification:

**The accuracy rate of the information contained in the deposit taker’s SCV system.**

*“There may be a number of reasons why SCV data is not 100% accurate. This might be due to defects in the systems used to compile the SCV, but we would expect such defects to be picked up and rectified during the course of the systems’ development. But there may also be problems with the underlying data, which it might not be practicable to expect firms to be able to put right - for example, a firm might try to contact a customer at their last known address to confirm a piece of data, but receive no reply.”*

PS 09/11 (section 2.3) provides insight into respondents’ feedback regarding the importance data management will play:

*“Those respondents with a data speciality focus generally thought that, overall, SCV implementation would be technically possible but a significant challenge.”<sup>4</sup>*

By implication, organisations lacking a “data speciality” focus may struggle to satisfy the requirements.

The following sections highlight key requirements regarding:

- Identification of eligible accounts
- Calculation of compensation
- Required system changes
- Data cleansing and processing requirements

## Identify depositors’ accounts eligible for FSCS compensation

You must identify which of your deposit holders qualify for compensation and you must flag, or mark, the deposit accounts held by each eligible customer. You must review your deposit holders’ candidacy for compensation at least annually.

<sup>4</sup> CP09/11 section 4.20 [http://www.fsa.gov.uk/pubs/policy/ps09\\_11.pdf](http://www.fsa.gov.uk/pubs/policy/ps09_11.pdf)

You may find identifying eligible deposit holders, and excluding ineligible ones challenging. For example, how do you currently distinguish smaller entities from larger entities within your existing customer data?

Eligibility can be separated into three broad categories<sup>5</sup>:

1. Natural Persons
2. Smaller Entities
3. More difficult cases (for example, where a person may have a claim on behalf of someone else)  
Difficult cases must be flagged by the deposit taker.
  - a. directors and managers of the relevant person in default, if they are a natural person or not a large entity;
  - b. close relatives of the above
  - c. auditors of the relevant person in default, if they are a natural person or not a large entity;
  - d. persons who have contributed to the default if they are a natural person or not a large entity; and
  - e. persons holding 5% or more of the capital of the deposit-taking firm in default if they are a natural person or not a large entity.

Regarding cases where identification may be difficult:

These accounts would have to be flagged on the deposit taker's system, but the deposit taker would not 'flag' the underlying client as eligible or not – that would only be identified upon investigation by the FSCS.<sup>6</sup>

Accounts that are in dispute, dormant or subject to sanctions must be flagged for eligibility purposes but excluded from the SCV.

## Calculation of compensation

For each eligible deposit holder, you must calculate:

- Aggregate balance of deposits held, including interest due on the date of default.
- Total compensation due  
This is the lesser of the aggregate balance or the current limit of £50,000<sup>7</sup>. There may be exceptional circumstances in which the limit may exceed £50,000 such as:
  - a. When deposits are held with two deposit takers that merged
  - b. When deposits are held with two entities within group ...

The FSA has changed the rules for calculating compensation<sup>8</sup> from calculating compensation on a net to a gross basis while continuing to pay per eligible depositor per authorised entity. Gross payout would allow the FSCS to ignore the depositor's debts (including mortgages, personal loans, credit cards and overdrafts) and simply pay compensation for the aggregate of deposits held within the same authorised entity.

You are required to implement special handling for certain types of "Offset Mortgages"<sup>9</sup>

You may need to implement special processing for "Temporary High Balances", such as deposits resulting from sale of asset (e.g. family home). The final decision is outside control of the FSA – it lies with EU DGSD<sup>10</sup>.

<sup>5</sup> PS 09/11 section 2.3

<sup>6</sup> PS 09/11 section 2.19

<sup>7</sup> PS 09/11 section 4.27, 4.28

<sup>8</sup> PS 09/11 section 3.2 to 3.7

<sup>9</sup> PS 09/11 section 3.11

<sup>10</sup> PS 09/11 section 10.1

## Changes to the Systems of Deposit Takers

This section is an extract from the November 2009 Policy Statement, setting out the expected system changes required.

### Systems changes for firms<sup>11</sup>

4.2 We (The FSA) looked at each component of the system changes considered necessary for deposit takers in order for the FSCS to achieve fast payout. These were:

- Data cleansing – to increase the likelihood that the FSCS has accurate data to facilitate payout;
- Eligibility account flagging – to reduce the need for the FSCS to investigate claims before paying out; and
- SCV – to enable the FSCS to have ready access to a reliable and consistent view of aggregate deposits for each eligible depositor per authorised deposit taker.

4.3 We (the FSA) regarded data cleansing and eligibility flags as the fundamental building blocks of the systems requirements to facilitate fast payout.

4.4 Even if deposit takers undertook data cleansing and placed flags on eligible accounts, we believed this to be insufficient to allow the FSCS to pay out quickly. The data required by the FSCS to make payout – the SCV fields – would still require too much manipulation or manual intervention before it could be loaded onto the FSCS systems for this to be a viable option to achieve fast payout for all but the smallest of credit unions.

4.5 We regarded it as essential for deposit takers to be able to supply the data fields in the SCV electronically, so the FSCS would not have to calculate from scratch each eligible depositor's compensation entitlement. The SCV would enable the FSCS to begin paying compensation (or give access to funds) shortly after the default.

4.6 We proposed the systems changes needed to facilitate the electronic submission of the SCV should be implemented by all deposit takers over approximately 18 months, to be completed by 31 December 2010.

## Data Cleansing

You are required to “ensure the **existence, completeness and accuracy** of all data required for each depositor to facilitate fast payout”.

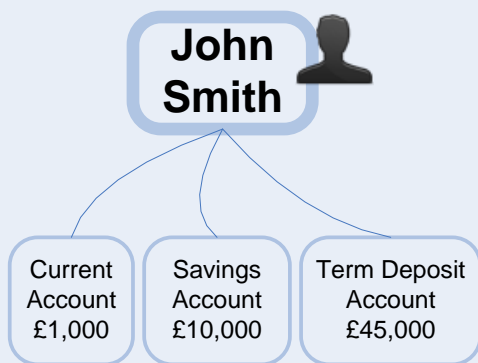
You may have multiple instances of the same deposit holder in different deposit systems in your organisation. You will need to merge these instances to deliver the required Single Customer View.

Data Cleansing is the term given to the process of matching and de-duplicating multiple instances of the same data. The success of your data cleansing will depend on the existing details you hold for each deposit holder.

The following figure is a simplified illustration of the best and worst case scenarios you may face.

<sup>11</sup> PS 09/11 section 4.20 [http://www.fsa.gov.uk/pubs/policy/ps09\\_11.pdf](http://www.fsa.gov.uk/pubs/policy/ps09_11.pdf)

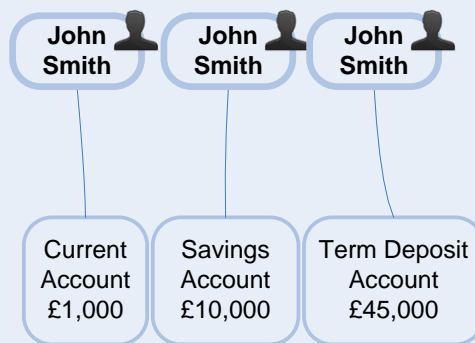
## Best Case Scenario



### Single Customer View

John Smith	
Current Account:	£1,000
Savings Account:	£10,000
Term Deposit Account:	£45,000
Aggregate Balance:	£56,000
Compensatable Amount:	£50,000

## Worst Case Scenario



### Single Customer View

John Smith	
Current Account:	£1,000
Aggregate Balance:	£1,000
Compensatable Amount:	£1,000

John Smith	
Savings Account:	£10,000
Aggregate Balance:	£10,000
Compensatable Amount:	£10,000

John Smith	
Term Deposit Account:	£45,000
Aggregate Balance:	£45,000
Compensatable Amount:	£45,000

### What happens if you execute the matching and de-duplication process incorrectly?

**Scenario 1:** Let's assume the three accounts are actually held by the same John Smith

You must cap the compensation due at £50,000 (as shown in the "best case scenario")

If you treat John Smith as three separate customers, you will submit details of three John Smiths to the FSCS, telling them that John Smith is entitled to compensation of £56,000, and you will have failed to comply with the regulation,

**Scenario 2:** Let's assume the three accounts are held by TWO different John Smiths at the same address (e.g. Father and SON). If you "over-merge", you will have a litany of errors, including:

- One of the John Smiths will lose their compensation entitlement completely.
- The total compensation due will be incorrectly capped at £50,000.
- You will have failed to comply with the regulation

You can reduce the risk of over-merging by ensuring you record a unique identifier for each Customer (e.g. Social Security Number)



### Do you already possess systems that depend on SCV to provide meaningful results?

These systems may include CRM, Anti-Money Laundering, Anti Fraud, BASEL II, MiFid, KYC etc. You may be able to leverage on investments you have previously made in these systems to deliver a solution for the FSA “SCV” requirements.

#### **Data cleansing<sup>12</sup>**

*4.5 Our research has shown the data firms hold is not always accurate or complete enough to enable fast payout. As part of their data cleansing, deposit-taking firms would be required to ensure the existence, completeness and accuracy of all data required for each depositor to facilitate fast payout (see table 4.1 below). Where firms use a number of systems they may also need to improve the consistency of data fields across these systems. The extent of manual effort required by a deposit taker will depend upon its current data quality.*

*4.6 Without data cleansing, the FSCS would have to contact a large number of claimants to seek further details and to check the accuracy of information before paying out. This would make a fast payout unmanageable.*

## Verification requirements

You must not only deliver the required SCV data, you must provide clear evidence of the process and controls you use to deliver, and to verify it. I include below an extract from the FSA’s “Overview of verification requirements for deposit takers subject to the SCV electronic requirements”<sup>13</sup>

#### **Stage One: Pre-Implementation:**

##### **By 31 July 2010: SCV Pre-implementation report**

- *Whether the deposit taker has a plan for implementing the SCV requirements.*
- *How the deposit taker proposes to transfer to the FSCS a single customer view for each eligible claimant, including the transfer method and format of the SCV file.*
- *The dates the deposit taker started implementation and plans to end implementation and whether implementation is on time.*
- *Whether the deposit taker’s board of directors believes implementation will be completed by 31 December 2010, and if not why not.*
- *Any issues that may affect the deposit taker’s ability to implement by 31 December 2010.*

#### **Stage Two: Implementation:**

##### **By 31 Jan 2011: SCV Implementation report**

- *A description of the deposit taker’s SCV system and how it has been implemented.*

<sup>12</sup> CP 09/3 section 4.5

<sup>13</sup> FSA Policy Statement: PS 09/18 (Nov 2009) [www.fsa.gov.uk/pubs/policy/ps09\\_18.pdf](http://www.fsa.gov.uk/pubs/policy/ps09_18.pdf)

- How the deposit taker proposes to transfer to the FSCS a single customer view for each eligible claimant, including the transfer method and format of the SCV file.
- The testing undertaken with respect to the deposit taker's SCV system.
- The accuracy rate of the information contained in the deposit taker's SCV system.
- The number of single customer views in the deposit taker's SCV system.
- The deposit taker's plan for the ongoing maintenance of the SCV system.
- How the deposit taker's board of directors will ensure that they remain satisfied that the SCV system continues to satisfy the requirements.
- An explanation of any code or keys used internally by the deposit taker, so that the FSCS can easily identify which accounts are held by eligible claimants and which accounts are held on behalf of beneficiaries who are or may be eligible claimants.
- Any other factors relevant to the design of the deposit taker's SCV system or to an assessment of whether the deposit taker's SCV system satisfies the FSA's SCV requirements.
- The implementation report will be shared with the FSCS.
- How the deposit taker will apply the limit check required under COMP 17.2.5R.

### **31 Jan 2011: SCV report**

- **A statement signed on behalf of the relevant deposit taker's board of directors confirming that the SCV system satisfies the requirements.**
- The date when the deposit taker's SCV system last produced a single customer view for each of the deposit taker's customers that are eligible claimants.
- The date when the deposit taker's SCV system last produced sample single customer views and the sample size.
- The number of single customer views in the deposit taker's SCV system.
- A statement of whether the deposit taker's SCV has been reviewed by external auditors and, if so, the findings of that review.
- A statement of whether there has been a material change to the deposit taker's SCV system since the date of the previous SCV report.

### **31 Jan 2011: FCSC SCV data transmission**

A sample of 10,000 SCV records or 10% of total SCV records to the FSCS. The representative sample should include all types of accounts and customers across any brands of each authorised deposit taker.

### **Stage Three: Post-Implementation:**

An updated SCV report must be delivered during the ARROW review cycle (if applicable) of a deposit taker or every 4 years. In the event of a material change, a revised implementation report must be submitted.

FSCS will carry out a "Thematic review" on an ongoing basis, in which the FSCS will review a sample selection of deposit takers' SCV systems, as appropriate.

# Overview of How to Cost-Effectively Deliver SCV

As the previous extracts clearly demonstrate, you must:

- Deliver the required SCV data
- Provide clear evidence of the process and controls you use to deliver and verify it

In Sarbannes Oxley (SOX) terms:

*“If your process, or your process control, is not written down, it doesn’t exist”.*

This document explains the process steps you require to successfully, and cost-effectively:

- Locate the required data
- Cleanse it to ensure its “completeness and accuracy”
- Deliver it to the FSCS

Each step produces documentary evidence of your process. By following these steps, you will have the evidence you need regarding your SCV planning and implementation process, complete with process controls.

This document also suggests opportunities for you to leverage from your existing investments in systems that require a “Single view of customer” to operate successfully (e.g. CRM, Anti-Money Laundering, Anti Fraud).

Your Single Customer View project depends on your existing customer and account data, which was captured by existing systems within your organisation. Much of the existing data was first captured many years ago (e.g. customer data captured at account opening time). In this respect, it is similar to other programmes you may have completed, such as Anti Money Laundering, Anti Fraud, CRM, Arrears Management, etc. More importantly, the customer and account data required by SCV is similar to the data required by the above systems. Hence, you may be able to leverage from investments made in systems that already depend on a “Single view of customer”.

Having worked on many data intensive programmes (such as the population of Anti Money Laundering Transaction Monitoring systems), one thing is for certain, as the Paul Simon song says, there’ll be “Incidents and accidents, hints and allegations”. This is normal. To minimise problems due to “misunderstandings”, ensure you are crystal clear in your strategies, policies, standards and processes, and ensure all personnel understand and follow them.

To ensure a successful project, at a high level, you will need to:

- Specify the data you require for the SCV
- Specify the quality level you require of the data
- Locate the data you require within your existing systems
- Measure the quality of your existing data
- If necessary, implement data quality improvement measures to reach the quality level required
- Deliver the data to the FSCS

## How to Cost-Effectively Deliver Your SCV Project

Ensure your SCV project is business driven. Work closely with your compliance area and business users who are expert in your deposit systems.

Ideally, you will have access to staff in a central “Enterprise Wide, Data Management Function” who can assist you with the following data intensive process steps. In practice, few organisations have an “Enterprise Wide, Data Management Function”. Without the benefit of an Enterprise Data Model, Data Dictionary or Business Glossary, you may expect to take longer to deliver your SCV.

To avoid re-inventing the wheel and performing research from first principles, seek to leverage from expertise gained implementing other data dependent programmes such as AML, BASEL II, Anti Fraud, etc.

Here are some process steps that I recommend:

1. Define your SCV project data quality principles
2. Specify data you require for your SCV
3. Define data quality requirements you need for each required data field
4. Locate the data you require within existing systems
5. Measure the quality of your existing source data
6. Determine impact of quality of your existing source data on the SCV project
7. Define your required data quality improvement measures
8. Define your data population process requirements
9. Develop your data population process
10. Test your data population process

## Define your SCV Project data quality principles

Define your SCV data quality principles and get them signed off by your business, your IT project manager, and your project sponsor. Ideally your data quality principles will already be in place, at an enterprise level. You should include details of the standard data quality metrics required for all critical data fields. Base your data quality principles on:

- Data Quality Industry best practice (with pragmatism where appropriate)
- Input from personnel within your organisation with experience of data quality issues on similar programmes such as BASEL II, AML, Anti Fraud, CRM etc.
- Input from personnel with experience of SCV or similar projects in other organizations.

Record the output from this step in ‘SCV Project – Data Quality Principles’ (which may simply refer to your Enterprise wide data quality principles).

## Specify data you require for your SCV

PS 09/11 provides details of the data fields required by the FSCS in the SCV report.<sup>14</sup> Eligibility business rules (requirements) are contained in PS 09/11 and CP 09/3.

Ensure that your requirements are clear, measurable, and testable. Ensure that you include in each of your requirements a unique reference to the original FSA requirement. Use a requirement tracking process to ensure that your requirements are traceable through the development process, into the testing process. This will provide you with the evidence required by the FSA showing that each of the FSA’s requirements was implemented and tested. This approach is known as “Requirements Driven Testing”

You must provide details of the internal fields (“customer segmentation fields”) you use to determine eligibility.<sup>15</sup>:

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<sup>14</sup> SCV – final data fields: PS 09/11 section 4.26 [http://www.fsa.gov.uk/pubs/policy/ps09\\_11.pdf](http://www.fsa.gov.uk/pubs/policy/ps09_11.pdf)

A description of a *firm's SCV system* and how it has been implemented must include an explanation of any code or keys used internally by the *firm* so that the *FSCS* can easily identify which accounts are held by *eligible claimants* and which accounts are held on behalf of beneficiaries who are or may be *eligible claimants*.

You will need to identify customer segmentation fields to determine eligibility of deposit holders, including:

- Natural Persons
- Smaller Entities
- Etc.

You must not only identify and flag eligible deposit holders, and why they are eligible, you will also need to identify and flag **ineligible** deposit holders, and why they are ineligible.

At this time, many of the FSA's eligibility business rules are not granular enough. Given that compliance with this regulatory requirement provides no competitive advantage, you may wish to co-operate with other Financial Services organisations in requesting further clarification. E.g. what exactly constitutes a "smaller entity".

Document the deliverable from this step in 'SCV Project – FSCS SCV Data Requirements'.

## Define data quality requirements you need for each field

Building on your agreed Data Quality Principles, define the data quality you require for each critical data field. Ensure that your data quality requirements are explicit and measurable, as they will 'set the bar' in terms of the minimum quality level you require to make your SCV implementation report "fit for purpose".

Measure your data quality against what each field "should" contain, as defined in your organisation's "Business Rules" (known as Metadata).

Your business rules provide critical details about data, including:

- Business name of the field
- Business purpose of the field
- The values it may hold
- The business meaning of each value
- Interdependencies with other data:

You should also record details about your business rules:

1. Business owner
2. Location of Business rule(s)
3. Change Management process for the Master business rules, and copies.
4. Location of source data.

For example, regarding "National Insurance Number", you might have:

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<sup>15</sup> PS 09/18 Annex C 17.3.7 R

<b>Business name of the field</b>	National Insurance Number
<b>Business purpose of the field</b>	To enable unique identification of personal customers
<b>The values it may hold</b>	As detailed in government standards <sup>16</sup> <ul style="list-style-type: none"> <li>• Must be populated 100% of time, for all personal customers</li> <li>• Must be unique</li> <li>• Must be verified against External reference data provider</li> </ul>
<b>The business meaning of each value</b>	Unique identifier of normal persons
<b>Interdependencies with other data</b>	Dependent on “Customer Type” field Only valid for Personal Customers – Non personal customers must have NULL in field

Document the output from this step in ‘SCV Project – Data quality requirements’. Agree this document and sign it off with your business and IT project managers, and the source data owners.

## Locate the data you require within your existing systems

As stated previously, in an ideal world, you would have access to a central Enterprise Wide, Data Management Function” to help you locate the data you require. A Data Management Function would ideally have access to:

- Enterprise Data Model
- Enterprise Data Dictionary
- Enterprise Business Glossary

In the real world, you will probably have to locate the data yourself. Save yourself time, money and heartache by leveraging from expertise gained implementing other data dependent programmes such as AML, BASEL II, Anti Fraud, etc. Take your FSCS SCV Data Requirements document, and research the availability (or otherwise) of the data you require: Include the following details in your report:

1. Where is your customer information held?
  - a. Is your customer information held on multiple separate systems? If so provide details.
  - b. Do you already have a “Single Customer View” database?
  - c. What does your Anti Money Laundering system use for Single Customer View?  
Would it be possible to use this information to build an SCV?
  - d. What does your Anti Fraud system use for Single Customer View?
  - e. What does your CRM system use for Single Customer View?
2. Are there known issues that may prevent you providing a Single Customer View?
3. What data fields are available
4. What data fields are not available
5. Where is the required data held
6. How many copies of the data exist
7. Where is the Master copy, where are the replicas
8. How are replicas kept “in sync” with the master (if they are kept in sync)
9. Details of source systems that may contain duplicate instances of the same deposit holder
10. How to “map” source data fields to FSCS SCV target data requirements
11. Approach to resolve issues (e.g. Data fields not currently available).<sup>17</sup>
12. Confirmation that the data mapping adheres to the SCV Project Data Quality Principles.

<sup>16</sup> [http://www.cabinetoffice.gov.uk/govtalk/schemasstandards/e-gif/datastandards/identifiers/national\\_insurance\\_number.aspx](http://www.cabinetoffice.gov.uk/govtalk/schemasstandards/e-gif/datastandards/identifiers/national_insurance_number.aspx)

<sup>17</sup> Details on SCV Project RAID Log (Risks Assumptions Issues and Dependencies)

Document your findings in:

- SCV Project - Data Requirements Gap Analysis
- SCV Project – How to Map Source Data to FSCS SCV Data Requirements’.

## Measure the quality of your existing source data

Locating data fields that “*should*” contain the information you require is not enough. You must find out what the source data fields *actually* contain. There are lots of excellent data profiling tools that will help you understand what your data contains.



**Be careful when purchasing data profiling tools** – “A fool with a tool is still a fool”. Clearly define what you want to achieve from data profiling before spending money buying a tool.

If you do not profile your existing data, you are at risk of failing due to what is known as the “Load and Explode” approach to data population. Perform “sample data profiling” as early as possible in your project, to get an indication of issues you may face.

Measure the quality of your existing source data against your defined data quality requirements for each field. If you are lucky, your Data Management Function will already have data quality metrics available, an Enterprise wide standard approach to gathering data quality metrics, and a standard set of Data Quality Measurement tools.

If, like most organisations, you perform data quality measurement on an ad-hoc basis, if at all, you should ask what was, and is done on similar programmes, such as BASEL II, AML, CRM etc.

Document your results in ‘SCV Project – Data Quality Metrics of existing data’

## Determine impact of data quality metrics on your SCV project

Once you understand the data you have available to you, and critically, the quality of that data, you are in a position to determine how easy (or otherwise) it will be to deliver your SCV.

You should now know:

- If you already have an SCV
- Issues that may have arose previously attempting to build an SCV
- What your CRM, Anti-Money Laundering and Arrears Management systems use for an SCV
- The data issues faced, and hopefully resolved by your CRM and AML systems

Perhaps your CRM or Anti-Money Laundering systems contain sufficient information, of sufficient quality to generate the SCV you require?

If you have to develop a “new SCV”, perhaps you could feed this information into your AML and CRM systems to improve the results they generate?

More specifically, you should now fully understand things like:

- Whether you have a customer segmentation field(s) that will enable you to determine eligibility
- How often the eligibility field you wish to use is populated (% populated)

- How often the eligibility field you wish to use contains valid values (% valid )
- What you plan to do when your eligibility field is not populated, or contains an invalid value
  - Have you a workaround?
  - Can you improve the quality of the data?

Assess each field first in isolation, and then in conjunction with other fields.

Document your results in 'SCV Project – Impact of Data Quality Metrics on SCV project'

## Define your required data quality improvement measures

If the quality of your existing data is too low to make your SCV report “fit for purpose”, you should investigate and propose data quality improvement measures, which may include:

- Data Cleansing
- Using alternative data sources (e.g. External reference data)
- Deriving data of required quality from multiple sources

Remember:

**The accuracy rate of the information contained in the deposit taker’s SCV system.<sup>18</sup>**

“There may be a number of reasons why SCV data is not 100% accurate. This might be due to defects in the systems used to compile the SCV, but we would expect such defects to be picked up and rectified during the course of the systems' development.”

You should perform causal analysis to identify the root cause of data quality issues you identify. In addition to cleansing the data within your existing databases, you should seek to “Stop the rot” by implementing “get it right first time” validation at all points of data entry. Recent technology developments enable such verification to be invoked “from the cloud” with minimal impact on legacy systems.

Document the output from this step in 'SCV – Required Data Quality improvement measures'

## Define data population process requirements

At this stage, you have defined the data you require, and located the source data from which you will populate your data. You need to define where you are going to store your SCV data, and your process for generating it on a regular basis (or on request from the regulator). You also need to define how you will generate the sample required by the FSCS (approx. 10,000 records).

You will need to define a “mapping” between your source and target data. For example, you may have to use multiple source data fields to produce a single target data field. Work closely with your compliance area business users, and the source data owners to define your data population requirements (often referred to as Extract Transform and Load (ETL) process requirements).

Ideally, you will have a standard approach to ETL within your organisation, using “industry best practice” data integration technology. Critically, you should ensure that your business rules, and your transformation rules are:

<sup>18</sup> CP 09/16 Section 2.11

- Defined by the business
- Subject to strict change control
- Visible (in a Business Rules Repository)
- Audited

Your ETL process requirements should include:

1. What must happen if the quality of a source data field is below the defined quality measure?
2. How the data quality issue will be rectified, by whom, and within what time span.
3. How corrected source data will be applied to the SCV database.

Your ETL process requirements must also specify the data transformation requirements, such as:

- Business rules for converting source codes to FSCS SCV target values.
- Business rules for converting amounts to FSCS required formats.
- Business rules for converting source Account Types to FSCS Account types.

Document your deliverable in 'SCV Project – ETL Process requirements'

## Develop your data population process

You will need to work closely with your business users and your IT Architecture area to develop a data population process to meet your defined requirements. Where possible, seek to reuse processes already in place for other data dependent projects (e.g. CRM, BASEL II, AML. Arrears Management).

You will have multiple deliverables from this step including:

1. SCV Data Population Process Specification
2. SCV Data Population Process Design
3. SCV Data Population Process Test Approach
4. SCV Data Population Process Executables (Result of 'Build' phase)
5. SCV Data Population Process Test Plan

## Test your SCV Data Population process

If you have followed the above steps, you will have defined your test cases, as you went – since your requirements should be clear, measurable, and most importantly, testable.

If you cannot define how you will test and verify a requirement, then the requirement may be unclear, or open to interpretation. Requirements that are open to interpretation will be misinterpreted.

Within your test cases you may select perhaps:

- Sample customers covering all your customer types  
Business / Personal, Small Entity / Large Entity, Minor, Student, etc.
- Sample Accounts covering all your account types  
Current, Saving, Term...Joint Account,
- "Difficult Cases"

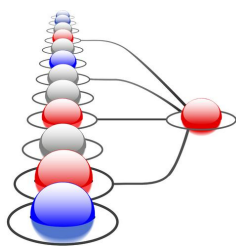
You should verify that your sample customers and accounts in your SCV accurately reflects your source data, making allowance for data cleansing and transformations you may have performed.

Where possible, you should verify your SCV data against reliable external sources of data.

You should include “bulk verifications”, in which you check and cross verify item, for example:

- Total number of customers
- Number of customers flagged as eligible
- Number of customers flagged as ineligible
- Number of customers flagged as “difficult”
- Total number of accounts
- Number of accounts of each type
- Number of accounts flagged as held by eligible customers
- Number of accounts flagged as held by ineligible customers

## Conclusion



Like it or not, if you are a deposit holder with more than 5,000 deposit holders you must comply with the FSA Single Customer View regulations, and time is running short.

If you are fortunate enough to have mature Data Governance processes in place, you may find it relatively easy to meet the FSA requirements for SCV.

Few organisations have mature Data Governance processes in place.

Like most organisations, you will encounter many data issues as you seek to deliver your SCV. You may only have time to achieve compliance with a tactical project, creating workarounds to handle the data issues that will arise, on an as required basis.

The good news is that you are not alone, or unique. The data issues you will face, are common across the world, and impact all data dependent programmes. They are challenging, but not insurmountable.

The key to delivering an SCV is to “know your data”, i.e. understand what “Single Customer View” data you have, and what it currently contains. Once you know and understand what you already have, you can easily determine the work you must complete to provide the FSCS with the information required.

This document tells you how to “get to know your data”, and deliver your SCV, in a cost-effective manner. Remember, **you must submit your plan by July 2010**. You can use this document as a basis for your plan. Alternatively, you can use it as a template against which to evaluate your existing plan.

**In collaboration with Data Quality Pro, I will be running a series of online webinars that will discuss the practical implications of FSA SCV and explore how to prepare for the approaching regulatory deadlines.**

You may contact me directly using the details at <http://kenoconnordata.wordpress.com/contact/>.

**(RESOURCES SECTION FOLLOWS...)**

# Resources

## 1. Overview of EU Deposit Guarantee Scheme Directive:

UK FSA overview of the EU Deposit Guarantee Scheme Directive (DGSD)

<http://www.fsa.gov.uk/pages/About/What/International/pdf/DGSD.pdf>

## 2. Single Customer View Consultation Papers:

The FSA issued a number of consultation papers in 2009 about Single Customer View for UK deposit taking institutions, including:

- CP 09/3 'Financial Services Compensation Scheme reform': [http://www.fsa.gov.uk/pubs/cp/cp09\\_03.pdf](http://www.fsa.gov.uk/pubs/cp/cp09_03.pdf)
- CP 09/11 'FSCS: temporary high deposit balances and implementing changes to the Deposit Guarantee Schemes Directive': [http://www.fsa.gov.uk/pubs/cp/cp09\\_11.pdf](http://www.fsa.gov.uk/pubs/cp/cp09_11.pdf)
- CP 09/16 'Financial Services Compensation Scheme: Verification of the single customer view and changes to deposit compensation': [http://www.fsa.gov.uk/pubs/cp/cp09\\_16.pdf](http://www.fsa.gov.uk/pubs/cp/cp09_16.pdf)

## 3. Single Customer View Policy Statements (the rules):

In July 2009, the FSA issued policy statement 11 which “describes our final policy and makes rules to meet the commitment to achieve fast payout for depositors by the FSCS within a target of seven days. The PS also sets out final rules, aimed at raising awareness of how deposit compensation applies, and of the FSCS generally.

This document sets out details of the required system changes, data cleansing etc.:

[http://www.fsa.gov.uk/pubs/policy/ps09\\_11.pdf](http://www.fsa.gov.uk/pubs/policy/ps09_11.pdf)

In November 2009, the FSA issued Policy Statement 09/18. This Policy Statement reports on the main issues arising from Consultation Paper 09/16 and publishes final rules for SCV:

[http://www.fsa.gov.uk/pubs/policy/ps09\\_18.pdf](http://www.fsa.gov.uk/pubs/policy/ps09_18.pdf)

## 4. Single Customer View Newsletters:

FSA newsletters help explain regulatory requirements.

The CP 09/16 newsletter sets out the verification requirement, including the requirement for details about the accuracy rate of the data.

[http://www.fsa.gov.uk/pubs/cp/cp09\\_16\\_newsletter.pdf](http://www.fsa.gov.uk/pubs/cp/cp09_16_newsletter.pdf)

## 5. Single Customer View Estimated Costs:

In Aug 2008, The FSA, together with the BBA and the FSCS commissioned Ernst & Young to report on the various options, and costs, to facilitate a “Fast Payout”. For details, see:

[http://www.fsa.gov.uk/pubs/other/fast\\_payout\\_report.pdf](http://www.fsa.gov.uk/pubs/other/fast_payout_report.pdf)