



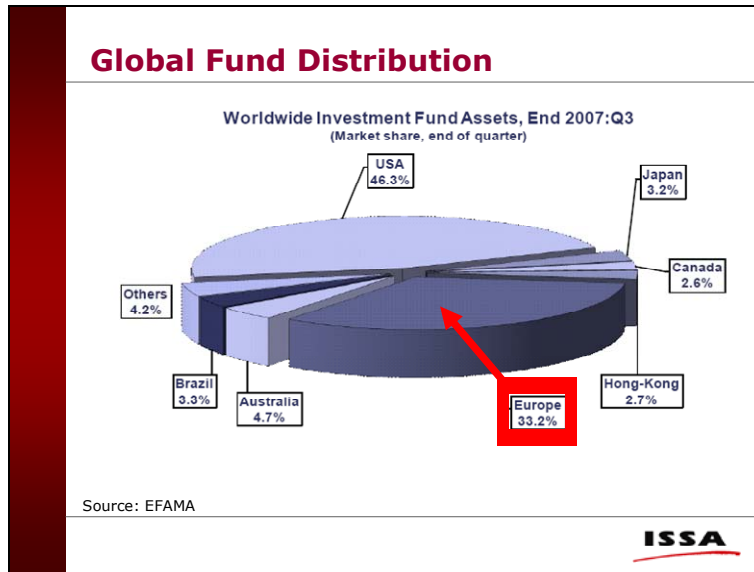
## **Setting the Context**

After more than twenty years since my first participation in an ISSA symposium, I note that we are discussing the same challenges and we use the same terms, but the issues have changed.

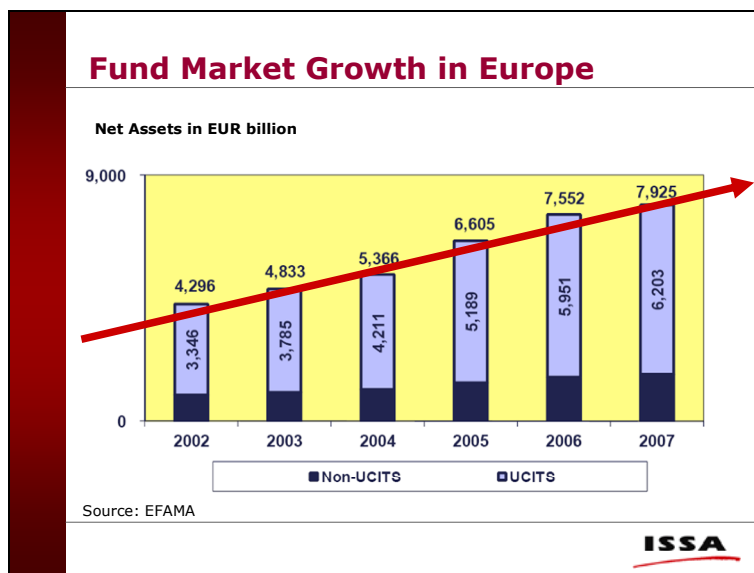
Looking back on those past twenty years, a lot of progress has been achieved. ISSA and pressure exerted on the market by ISSA members no doubt played a role in it. Let's hope that this continues during the next twenty years while we address the difficult issues identified yesterday. I recall some of yesterday's messages:

- Our challenge is to face increased complexity and risk, growing from the upper or front-end layers in the asset servicing chain.
- The acceleration of wealth creation around the world will continue to drive strong growth of the mutual funds industry.
- To cope with the increasing risk, our industry must find ways to decrease complexity, and this must start at the lower layers, meaning in the infrastructure and by adopting more standardized market practice in operations. It is in this context that the ISSA Fund Working group has the mandate to respond to the challenge.

The global fund management industry is growing. This is where the major portfolios are:




The USA and Europe have the major world market shares: very roughly equal in size. One market – the US – is highly organized and streamlined; the other – Europe – is not. That is why Europe is our priority.




The European fund market has experienced strong growth. Assets invested in mutual funds doubled over a five year period and this trend continues.

### The European Fund Market Today

- **Rapid and continued volume growth**  
 > currently some 50 million trades per year
  
- **Very high transaction cost**  
 > EUR 40-50 if manual, could fall to EUR 10-12 if fully automated (1)  
  
 > Equity market: Europe domestic      EUR 0.35 – EUR 0.80  
                          Europe cross-border      EUR 0.55 – EUR 35      (2)  
                          USA domestic                      EUR 0.10
  
- **High complexity, risk and associated cost**  
 > Custodians report that up to 80% of their total operational losses are nowadays caused by fund trades



Sources: (1) SWIFT  
(2) NERA Consulting




Behind the invested assets, there are individual transactions, and associated transaction costs. Currently, some 50 million fund transactions are processed annually in Europe, at an estimated average cost of EUR 40-50. An estimate by SWIFT says that this figure could be reduced to EUR 10-12 in a fully automated processing environment. Even then, those costs are far away from today's transaction costs in the equity world.

Transaction costs are one issue, risk is another. European custodians exposed to cross-border business generally rate it as high. Some major custodians even report that 80% of their total operational losses are nowadays caused by fund transactions.

To give a picture of the dimension of fund operations: A large and globally active bank serving retail, private and institutional clients may distribute 1,000 funds which are serviced by 100 transfer agents. The bank may have 100,000 client portfolios holding those funds, generating one million transactions per year. That is the scope of the global challenge for a large fund distributor.

### The European Fund Market Today (continued)


- **Fragmented infrastructures**
  
- **No cross-border consolidation or convergence**
  
- **Some promising initiatives, but still a very long way to go!**



➡ **The European fund market is like the securities market used to be 20-30 years ago**

➡ **We achieved vast improvement in the securities market**

















➡ **We can do the same for funds!**




The European fund processing infrastructure is fragmented. Cross-border consolidation and convergence of market practice is still slow. The equities world looked the same twenty years ago. The industry came a long way towards solving the problem for equities. We are confident that the same can be achieved in the funds world.

### The ISSA Fund Working Group – Mandate and Principles

This project represents phase two in an ongoing initiative. As many of you will recall, phase one was led by Neil Henderson and its objective was to identify and describe the problems. That phase was completed. The findings were presented and discussed during the last ISSA Symposium. Work resumed in October 2007, this time with a smaller group of experts but still covering all domains:

<b>Working Group Members</b>			
<b>Fund Manager</b>	<b>Custodian Distributor Transfer Agent</b>	<b>Central Depository</b>	<b>Messaging</b>
  	     	   	  <b>Partner:</b> 
			


Our informal partnership with EFAMA, the European Fund and Asset Management Association, is maintained for the mutual benefit of all parties involved.

<b>Mandate for the Working Group</b>
<p><b>"To propose practical ways of gradually reducing barriers to operational efficiency in pan-European cross-border funds processing;</b></p> <p><b>aiming to reduce costs and risks to investors, fund distributors, asset managers, custodians and other providers of securities services."</b></p>


The group's self-given mandate emphasizes a practical, realistic, step-by-step way forward. The aim is to achieve cost and risk reductions for all stakeholders and all counterparties in the funds processing chain.

### Guiding Principles

- **Functional approach**  
**Not driven by service provider type!**
- **Market driven, guided by infrastructure user needs, pragmatic, oriented towards quick wins**
- **Re-use existing practice and infrastructures**  
**No reinvention of the wheel!**
- **Bottom up approach: leverage domestic best practice for pan-European use**



We started by defining some guiding principles. The typical and "politically correct" European way calls for addressing functions rather than particular business models or even individual institutions. The objective is not to identify the best business model among competing ones, because it is a given that several exist in Europe today and they are here to stay for a long time. The objective therefore is to stay model neutral and identify and address the business functions common to all models, and seek ways to improve and streamline the processes performed in each.

We emphasize a market-driven approach guided by user needs; in particular the needs of those banks acting as custodians for their clients and at the same time as fund distributors.

A pragmatic and low-cost approach is important: Where the funds world does not have efficient solutions in place, we seek to re-use infrastructure, processes and practices that already exist in the securities world and adapt them as necessary to the requirements of the funds industry.


The group pursues a bottom-up approach: start on the domestic level and work up to a European and eventually a global level. In many areas, local market initiatives exist. Know-how gained locally must be used to cross-fertilize the industry, as it has the potential to be used elsewhere without the need for another local initiative to reinvent the wheel. Once local solutions are optimized, convergence towards a European solution is the next step.

The ten barriers identified during the earlier phase were then allocated to five generic functions for further discussion:

### Scope of Analysis

**Ten barriers, examined under a functional approach**

<ol style="list-style-type: none"> <li>1. Technology and interfaces</li> <li>2. Identifiers and reference data</li> <li>3. Process life cycle</li> <li>4. DVP and finality</li> <li>5. Know Your Customer issues</li> <li>6. Complex fund features</li> <li>7. Distribution agreements</li> <li>8. Corporate actions</li> <li>9. Tax processing</li> <li>10. Trailer fee issues</li> </ol>	}	<ol style="list-style-type: none"> <li>1. Reference data and messaging standards</li> <li>2. Order routing and execution</li> <li>3. Settlement</li> <li>4. Registration and custody</li> <li>5. Distribution</li> </ol>
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Select Discussion Items

1) Reference Data and Messaging Standards

**Reference Data and Messaging Standards**

**Issues**

- The generation, collection, and distribution of fund reference data along the intermediary chain to the user lacks efficiency and standardization.
- The EFAMA Funds Processing Passport initiative is a promising start, but needs more and broader support.

**Approach**

- Bring all stakeholders to the same table
- Propose a generic fund data base model for Europe
- Re-use existing infrastructure
- Use the EFAMA FPP and ISO standards as key building blocks

**ISSA**

Reference data and, closely related to them, messaging standards, were unanimously selected as the first priority. Efficient transaction processing starts with the availability of unique identifiers for the fund, all counterparties and intermediaries involved, and with the essential data required to process a trade, such as the cut-off time for submitting a subscription or redemption order.

**Reference Data and Messaging Standards**

**Elements of a comprehensive fund data base**

**ISSA**

There are already market initiatives to expedite the wide availability of fund reference data, notably driven by EFAMA who also considers reference data a high priority. EFAMA developed the Fund Processing Passport (FPP) which is a standardized template to collect some 100 data items required by a distributor or a custodian to process a fund order. Defining the essential data is the first step.

The second step involves the collection of those data and making them widely available to the fund distributors and the investors' custodians. This is a major challenge.

Acting as a central data provider for financial instruments is a commercial business. We did not want to recommend the creation of a dedicated data provider for funds, but address the existing ones with the issue, by inviting them to the same table. Naturally this is tricky, as they are all competitors.


Our group intended to propose a generic fund data base model, re-using the existing infrastructure for financial instruments reference data processing, while seeking to incorporate the EFAMA FPP, and with all communication based on ISO standards as far as possible.

The FPP should not be maintained in isolation. It is one brick, essential to build the house, but it is just one element. Other elements are essential too, such as the fund's net asset value (NAV), corporate action information, tax information, prospectus data, performance data and more. To maximize benefits, all those data should be kept in a coherent and comprehensive structure. In other words, the FPP should interact with all other data elements that are used in the different processing steps by various parties.

**Reference Data and Messaging Standards**

**ISSA Roundtable with Data Providers**

- Fininfo (France)
- FundConnect (Denmark)
- KNEIP Communication (Luxembourg)
- Telekurs Financial Information (Switzerland)

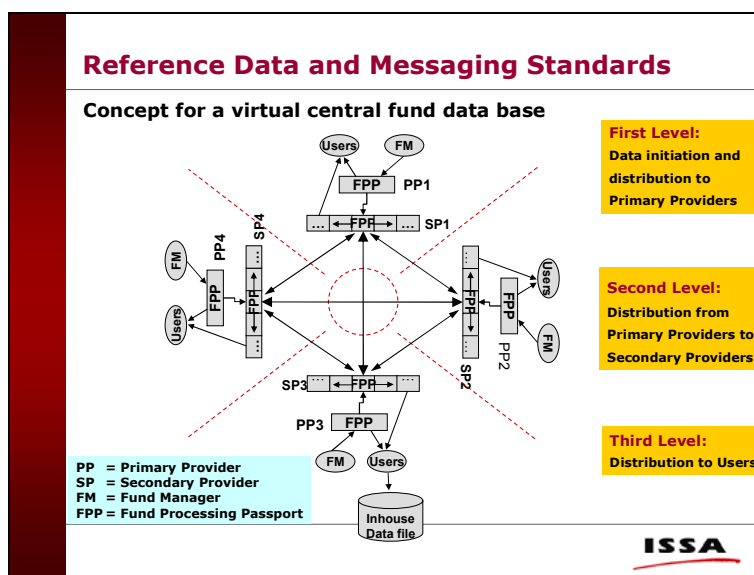
**EFAMA**  **ISSA**

Discussions held outside the roundtable meeting with:

- CCLux (Luxembourg)
- NYSE Euronext (France)
- Swiss Fund Data (Switzerland)
- WM Datenservice (Germany)

**ISSA**

The ISSA working group convened an industry roundtable in March 2008, bringing most of its own members, EFAMA, and a selection of Europe's key financial instrument data providers together. The generic model we presented was along the following lines:



Intuitively, one central fund data base for Europe is the target solution. However, reality is much more complex. The first task is to persuade each fund manager to generate the FPP data sets. There are approximately 40,000 funds registered for distribution in Europe. So in a first step, the funds and the local markets must get organized and find a local data collector. The local data collectors then need to connect to data wholesalers who aggregate the local data and distribute them onwards to professional market intermediaries and eventually to the end users.

In acknowledgment of the existing reality, we proposed a "virtual" rather than an "actual" central data base model which is based on a two tiered structure of intermediaries for data collection on the one hand, and data dissemination on the other hand.

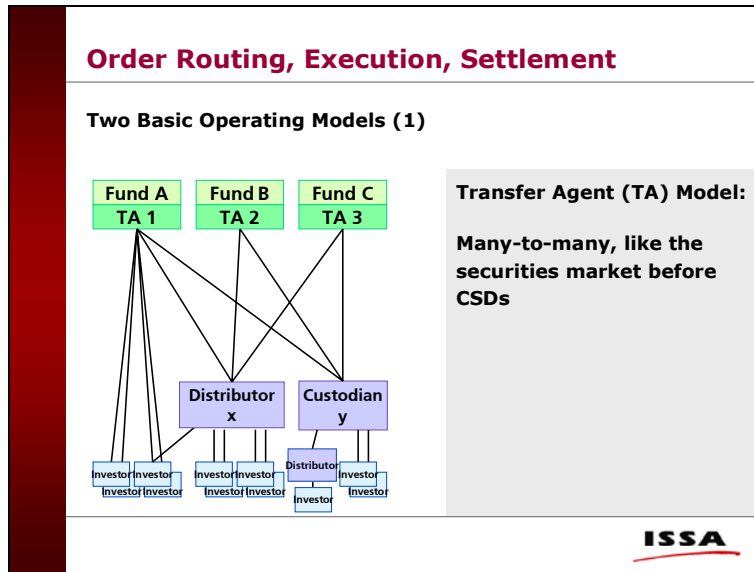
The Primary Providers maintain a direct connection to the fund managers. They collect the FPPs, or compile them on behalf of the funds, and they have a mandate to distribute the FPPs. The Secondary Providers (the existing large data vendors such as Telekurs, WM Data Services etc.) will then collect the FPPs from the primary providers, merge and repackage the data into their existing product offering and make that available to their clients.

Once the parties in the individual markets or market regions are identified and operational, they must be connected in an efficient way. Here is where we see a major role for SWIFT and for ISO standards. The FPP itself needs to be transformed from an Excel table into an industrial-strength ISO format. And then we need messages based on ISO standards to support the data maintenance process that follows the initial FPP generation. An end-to-end work flow must be defined and mirrored in ISO message format. The awareness for the importance of this issue has been raised, and work is now in progress.

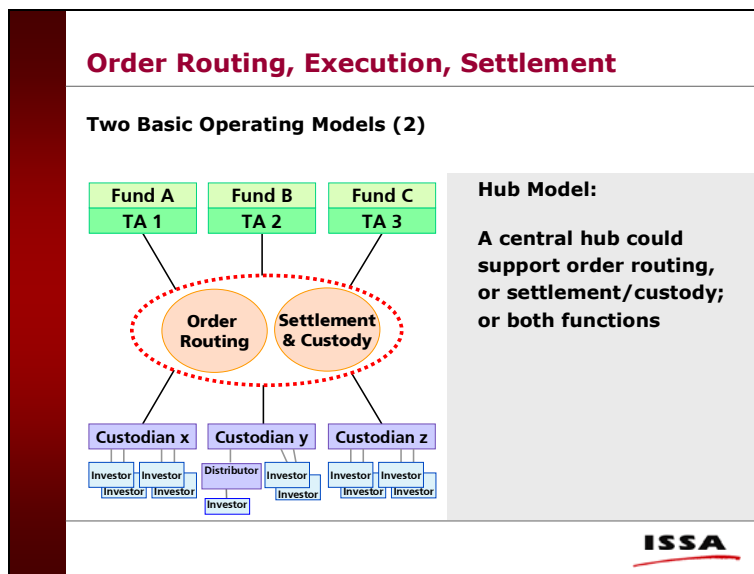
## 2) Order Routing, Execution, Settlement

<b>Order Routing, Execution, Settlement</b>	
<b>Issues</b>	<ul style="list-style-type: none"> <li>▪ Multiple operating models; two major well-established types</li> <li>▪ Many-to-many relationships, both domestically and cross-border</li> <li>▪ Little standardization and automation</li> <li>▪ No best practice models like G30 Recommendations for equities</li> </ul>
<b>Approach</b>	<ul style="list-style-type: none"> <li>▪ Step-by-step analysis of the entire processing chain</li> <li>▪ Identify best practice irrespective of model or market</li> <li>▪ Apply model-neutral principles to optimize processes</li> <li>▪ Re-use existing infrastructure</li> <li>▪ Aim for bottom-up convergence; from domestic to pan-Europe</li> </ul>
<b>ISSA</b>	

The European fund market is characterized by a broad variety of order routing possibilities. All models broadly fall into one of two types: the Transfer Agent (TA) Model, or the Hub Model.

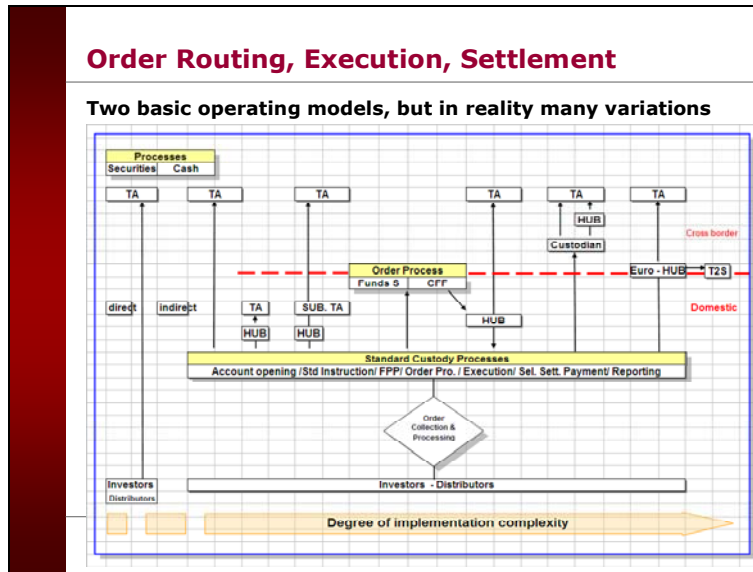


The historically grown TA model is based on many-to-many relationships, comparable to a securities market before the emergence of central clearing houses and depositories. The TA model fits the needs of a distributor if the number of transfer agent relationships to cover is rather limited, transaction volumes are low and the transfer agents are not scattered throughout the world. If each transfer agent insists on the use of proprietary processes, standards and systems, the cost and risk the distributor incurs to manage multiple relationships becomes an issue.



The younger hub model comes in two main variations: A hub can support order routing only, or settlement and custody, with or without the order routing function integrated.

In the real world, many variations exist. The following picture shows a number of solutions in place today, both locally and cross-border, with their implementation complexity rising from the left to the right hand side.



The challenge is to define best practice solutions which, from a distributor/custodian's point of view, result in largely identical processes, irrespective of the nature of the intermediary chain which the order will flow through.


## Findings and Recommendations

As stated at the outset, all discussions confirmed that efficiency gains in Europe can only be achieved in a step-by-step approach. It was stated several times that, if a visionary and perfect new model was proposed which required radical change, the market would not be prepared to adopt it. The established infrastructures and major market models must be accepted as a given. However, there are inefficiencies in each, and those must be identified and improved. This will lead to convergence and consolidation over time.


### Key Findings and Recommendations

**Do not try to change the market,  
but address and eliminate its inefficiencies!**

"All national market infrastructures and operating models should become compatible, ideally applying the same, or at least similar, principles to optimize their internal processes. This will facilitate **convergence and consolidation over time** and contribute towards better distribution conditions and lower processing costs."




**Convergence and consolidation.....**




The key findings in each function addressed to date follow below:

### Reference Data and Messaging Standards



**Key findings:**

1. The need for a central European fund data base is agreed
2. A "virtual" central database is currently the preferred way
3. The EFAMA Fund Processing Passport (FPP) is the first major building block. EFAMA, ISSA and others should now expedite its roll-out.
4. An industry market practice group is needed to define an end-to-end FPP process, based on ISO 20022 standards. SWIFT and EFAMA should be involved. **Role of ISSA?**




The momentum created with the March 2008 ISSA roundtable to raise the awareness for the need of a central fund data base must be maintained. The commercial data vendors must be kept alert to the fact that the lack of a comprehensive fund data base is a common industry problem that justifies joint work towards implementing a solution for the industry at large.

ISSA should continue to support EFAMA in persuading the fund managers to now rapidly complete more FPPs. Up to now, the FPP was completed in a small number of markets within the framework of pilot projects, which yielded passports for some 2,000 funds. A slightly amended second and final version of the FPP was released in May 2008. The relevant industry associations and the large distributors (being the main beneficiaries) should now encourage a quick FPP roll-out to cover the entire European fund universe as soon as possible.

An industry market practice group should define an end-to-end process covering all data traffic around the FPP. ISSA's role in it is yet to be defined.


The main preliminary findings for the order routing, execution, settlement, registration and custody function are self-explanatory. More detailed work in those areas is necessary.

### Order Routing, Execution, Settlement




**Key findings:**

1. A common business practice for the TA account opening process needs to be agreed.
2. Common identifiers for a) the custodian and b) the applicable distribution agreement in the books of the TA are needed, irrespective of the business model. Preferably an ISO standard.
3. Order routing and settlement messages should adhere to ISO standards.
4. True DVP for settlement as in the equity market is not a priority. A process that links payment and share movement is essential.
5. Leverage existing national or pan-European infrastructures; learn from others; promote "cross-fertilization".




### Registration and Custody



**Key findings:**

1. **Account transfers between custodians to be advised to the TA, to support trailer fee processing.**
2. **TA's and custodians' accounting systems to support trade date based and settlement date based views to facilitate the reconciliation process.**
3. **Dematerialize, or at least immobilize, all fund shares registered for distribution in Europe.**
4. **Trailer fee reporting, calculation and reconciliation are fields with high potential for harmonization and efficiency gains. Work driven by EFAMA is in progress; ISSA can assist but will not take a lead.**
5. **Custodians' due diligence process for Transfer Agents: hubs could perform operational due diligence on behalf of hub users.**




## Open Issues and Next Steps

The distribution function has not been addressed yet by the group as a separate discussion item. A possibility to consider is to seek alignment between the EFAMA FPP initiative (which ties into the distribution process), and an initiative introduced to the last ISSA Symposium that aims at the dematerialization and automated transmission of fund sales agreements.


A number of additional issues were raised which are not at the core of the functions as defined, but touch on certain processes within them. Those need deeper analysis.

### Issues Raised But More Discussion Needed




- **Distribution Function**  
Suggestion: Seek alignment between EFAMA's Fund Processing Passport initiative, and an initiative launched by Schroders to automate and dematerialize Fund Sales Agreements (→ discussed in ISSA 13!)
- **Secondary market trading of funds issued in the primary market (not ETFs!)**  
A number of issues raised for further discussion, for instance multiple settlement standards for the same fund if traded in multiple locations.  
→ Need best practice recommendations to ensure smooth workflows.
- **Aligning the settlement cycles of funds with those of their underlying instruments**


..... and more



## Next Steps



- Completion and publication of the ISSA WG interim report
- Continue active dialogue with EFAMA (and other key parties) and support EFAMA in promoting rapid and broad FPP implementation
- Maintain the momentum created with the Data Providers' Roundtable to pursue the European Fund Data Base vision
- Define common (model neutral) principles to guide the formulation of best practice for each operational step along the fund processing chain, including distribution
- *[Your views are invited!](#)*
- ISSA WG to propose a work plan for the next phase



The immediate next step is to compile the group's various discussion papers into an interim report suitable for wide publication. This will be completed as soon as practicable after the symposium. The group will then propose to the ISSA board a work plan for the next phase.

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For some discussion points relating to this presentation, see also the summary of **Q&A, Member Feedback, Floor discussion**.