SWIFTNet Phase 2
RMA roadshow

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Financeware – SWIFT Business Partner
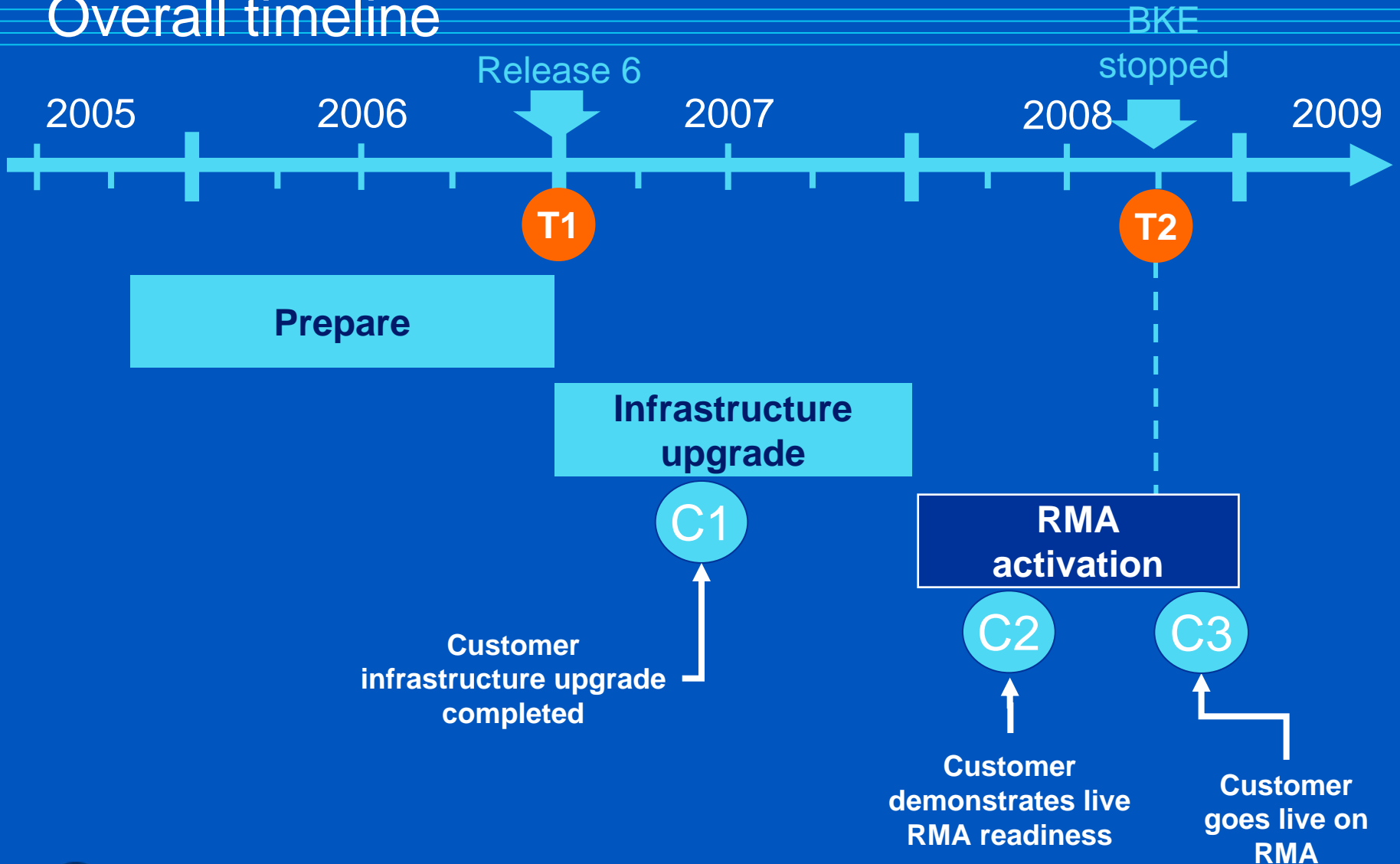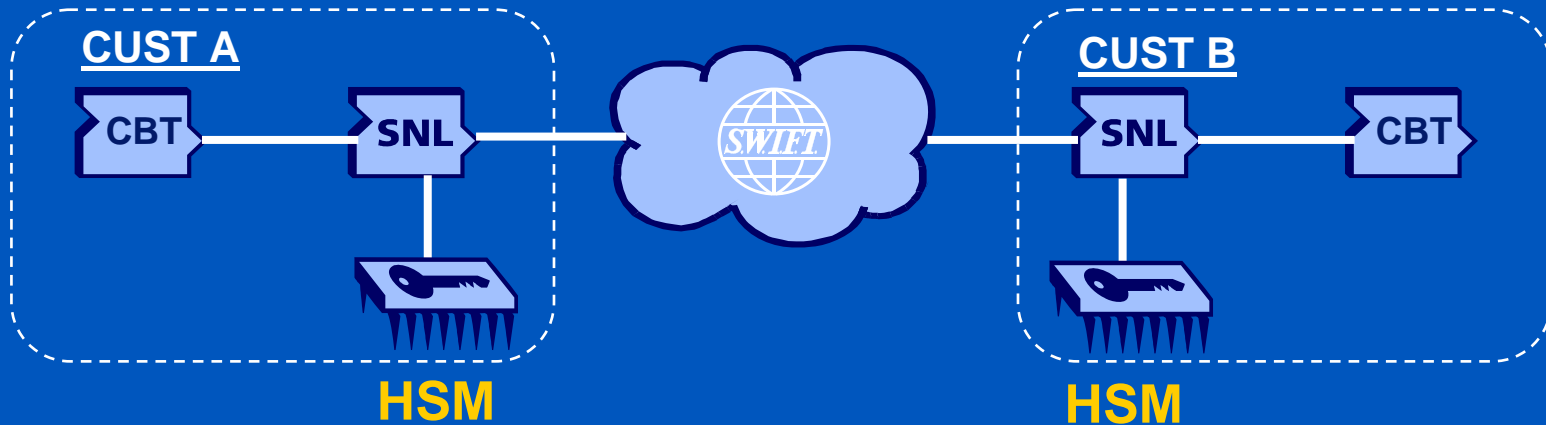
GNU SWIFT – Febraban – May/07

Agenda

- **What is RMA all about**
- **How does the migration work**
- **SWIFTAlliance offering for RMA**
- **Pricing**
- **Advanced RMA topics**
- **Where to find information**

SWIFTNet FIN Phase 2
Overall timeline

Release 6

BKE
stopped

2005   2006   2007   2008   2009

T1

T2

Prepare

Infrastructure upgrade

C1

Customer infrastructure upgrade completed

RMA activation

C2

C3

Customer demonstrates live RMA readiness

Customer goes live on RMA

SWIFTNet_Phase 2_RMA_roadshow_v3.ppt

New relationship management in 2008

CUST A

CBT — SNL — HSM

SWIFT

CUST B

SNL — CBT — HSM

FIN access control security
PKI

FIN user-to-user security
PKI

Relationship management
B ~~X~~ E → RMA

Relationship Management Application (RMA)

■ Managing correspondents in a many-to-many world

– RMA as mechanism to control WHO can send you traffic

■ Managing the correspondent's business

– RMA as mechanism to control WHAT a correspondent can send to you

Objective: preventing unwanted traffic

RMA usage for FIN

- Replaces BKE

- Only applies to authenticated FIN message types
  - E.g. MT 999 is sent and received without RMA authorisation

- Granularity: message categories/types

- At BIC8 level

- Optional for FIN Test & Training
  - User decision

- Optional for FINCopy
  - FINCopy Service Administrator decision

RMA – future proof

- RMA is designed not only for FIN
- RMA will be applied to other many-to-many SWIFTNet InterAct/FileAct services
  - will be decided by Service Administrator
  - criteria will vary per service (Request Types, MX types, …)

RMA messages on SWIFTNet InterAct store-and-forward

- Timing
  - RMA for FIN – 2008
  - RMA for other InterAct/FileAct services – as of 2009

Establishing a relationship
business example

Bank A in NL

Bank B in BR

I'm looking for a correspondent in the Netherlands. Are you interested ?
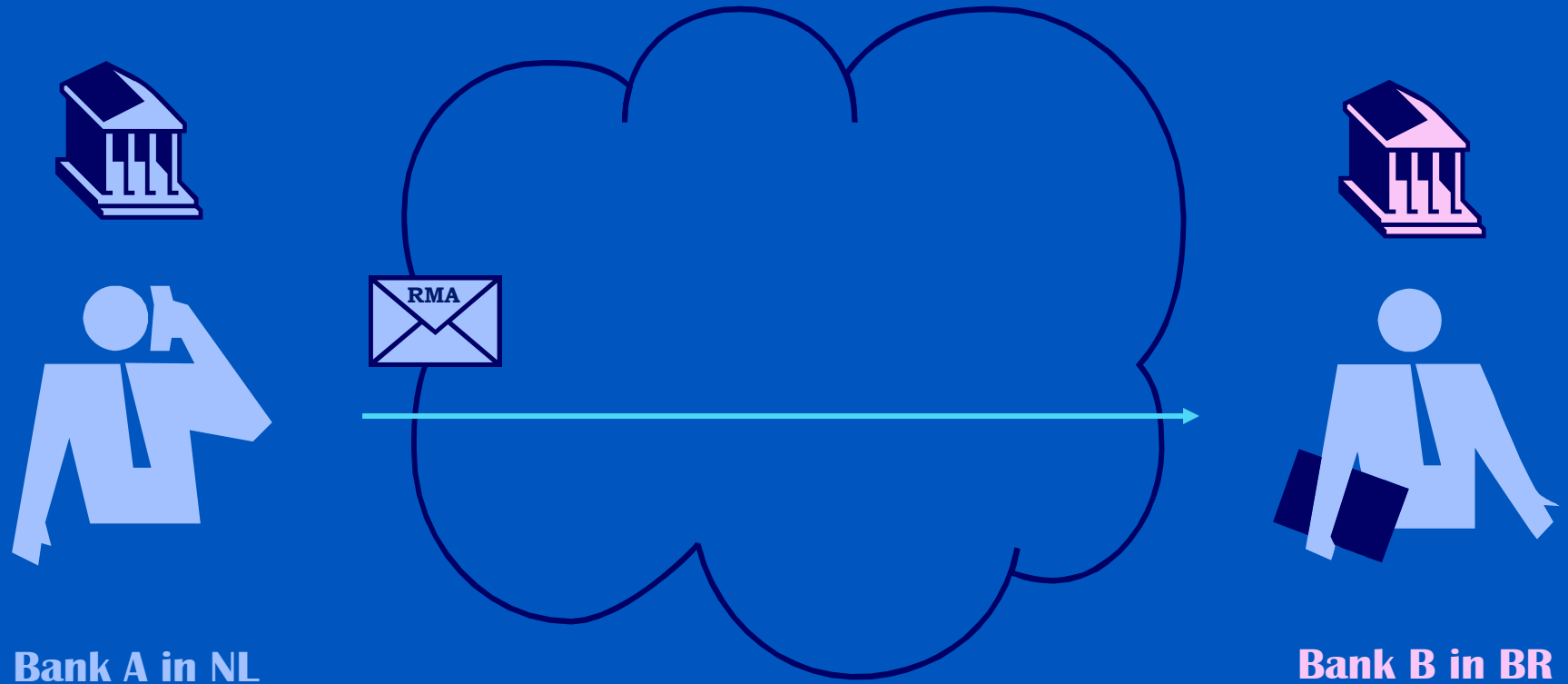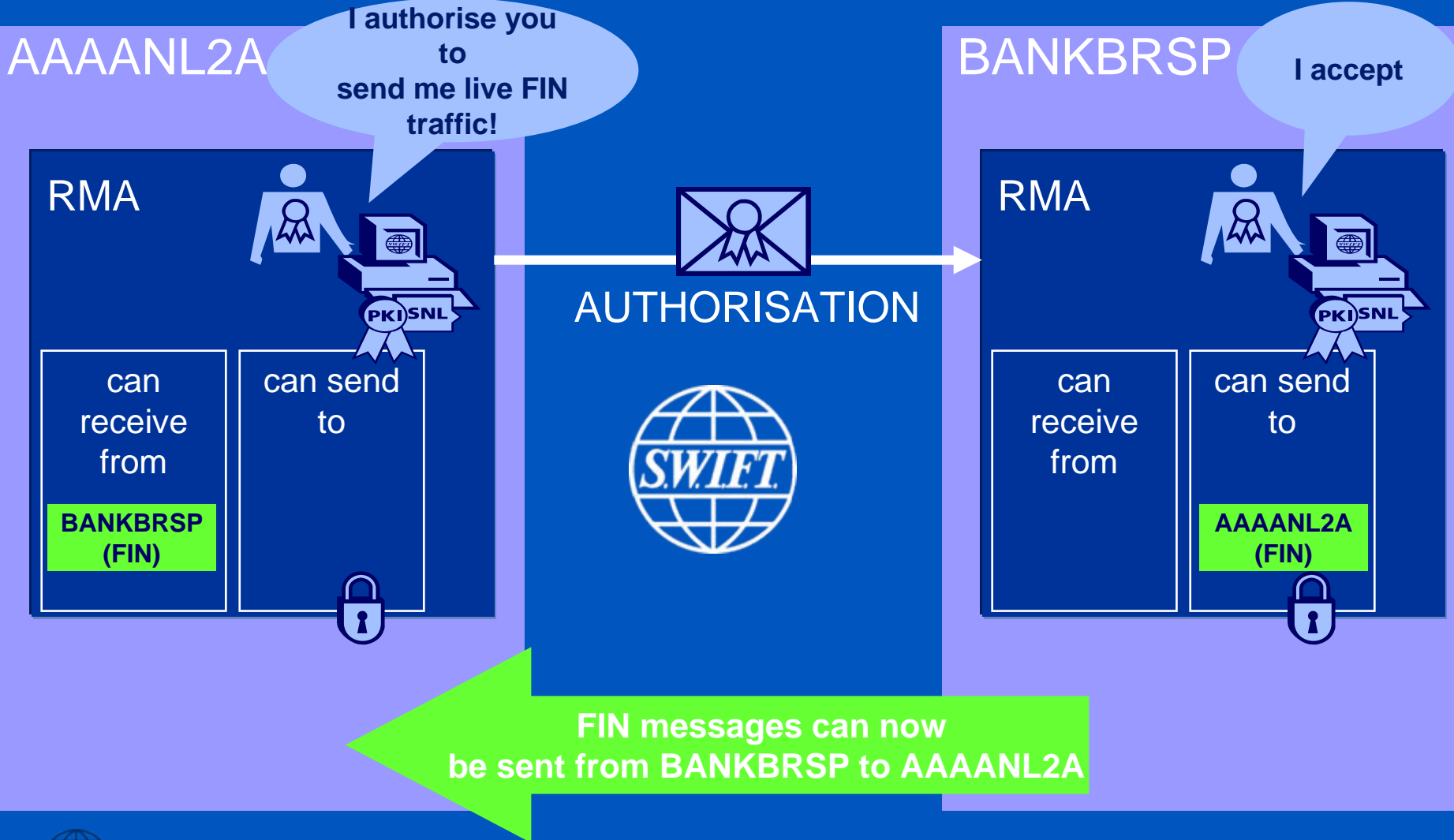
Yes, I give you permission to send me traffic.

RMA protocol
Open a relation

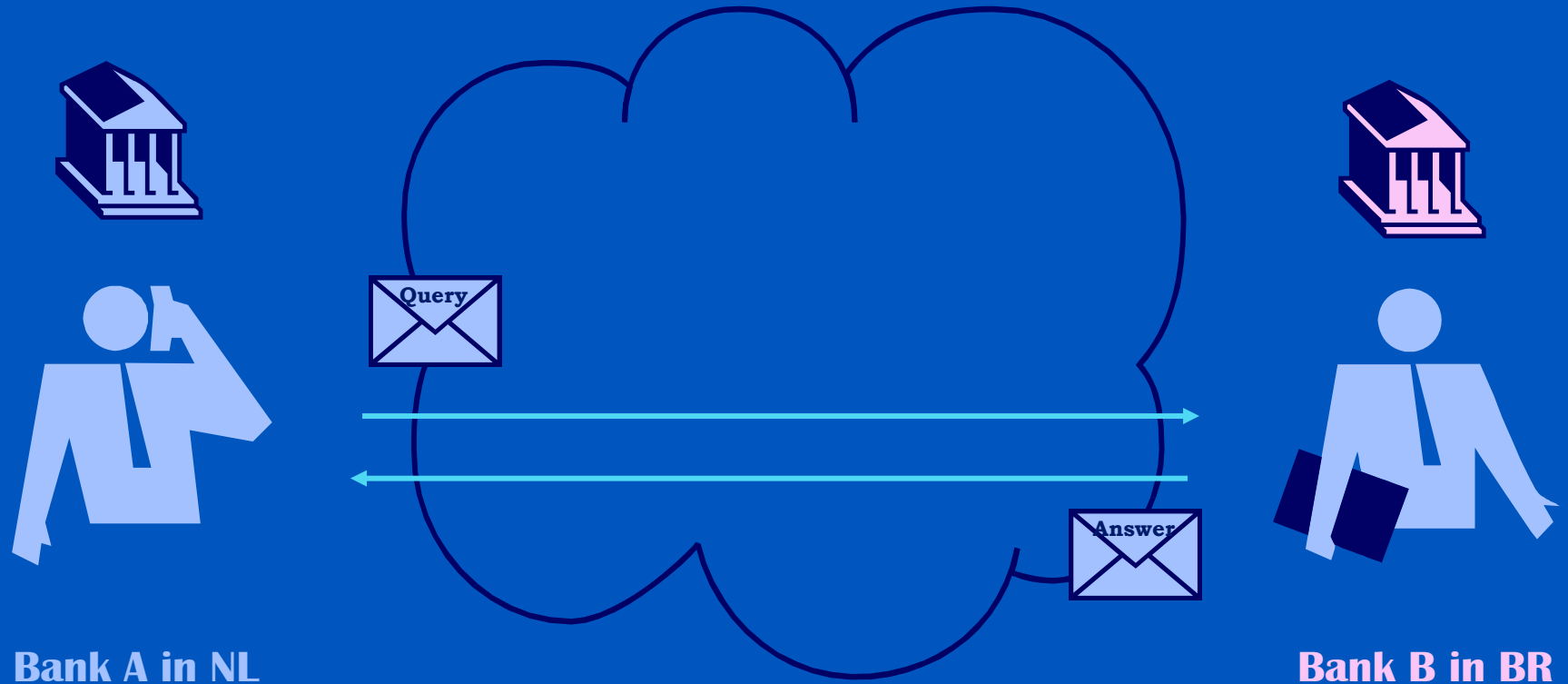**Bank A in NL**

Bank B in BR

RMA protocol
Sending an authorisation

RMA protocol
Query/Answer mechanism

Query

Answer

Bank A in NL

Bank B in BR

RMA query and answer: to contact another institution related to RMA

RMA protocol
Rejecting an authorisation
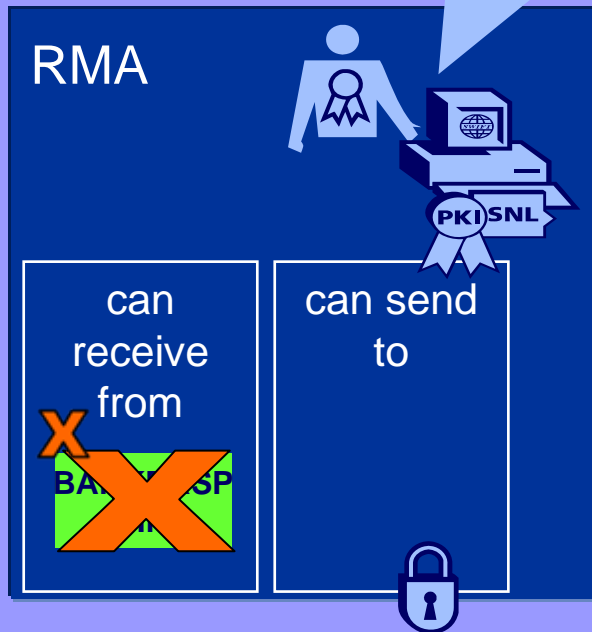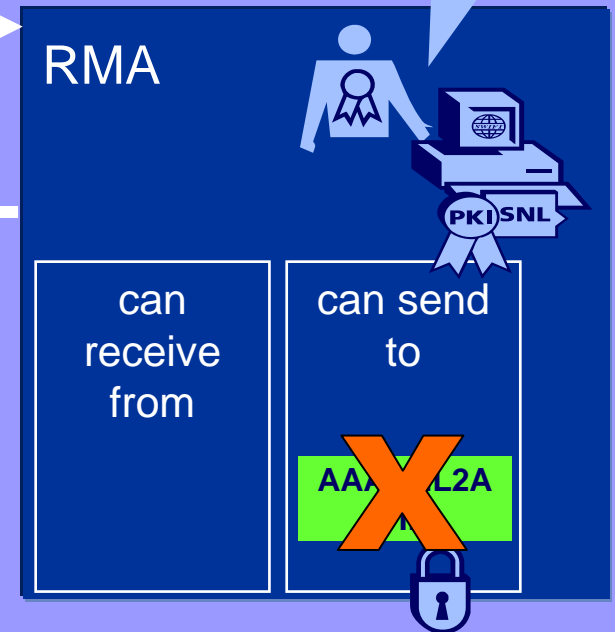
RMA protocol
Stopping business – revoking an authorisation
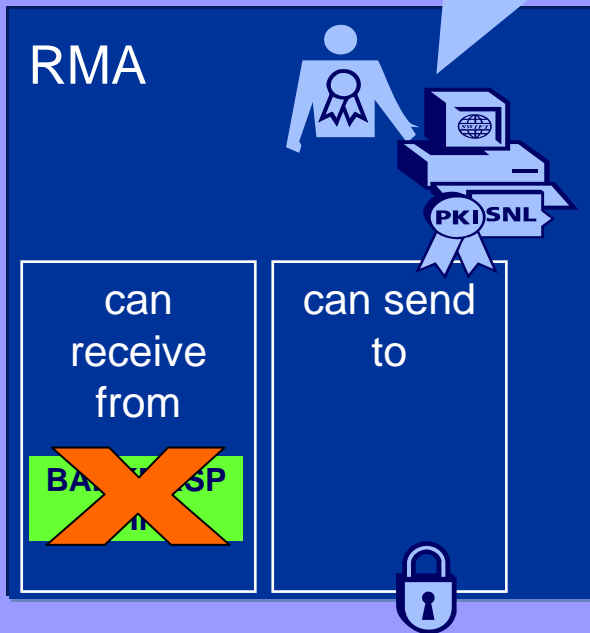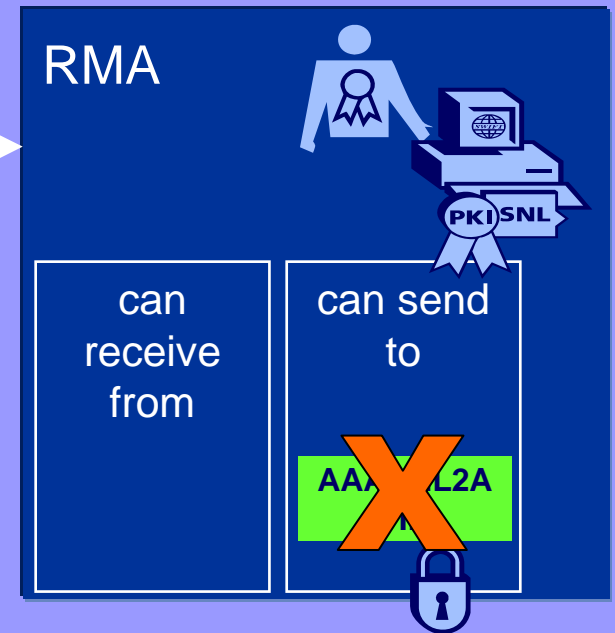
RMA protocol
Stopping business – deleting an authorisation
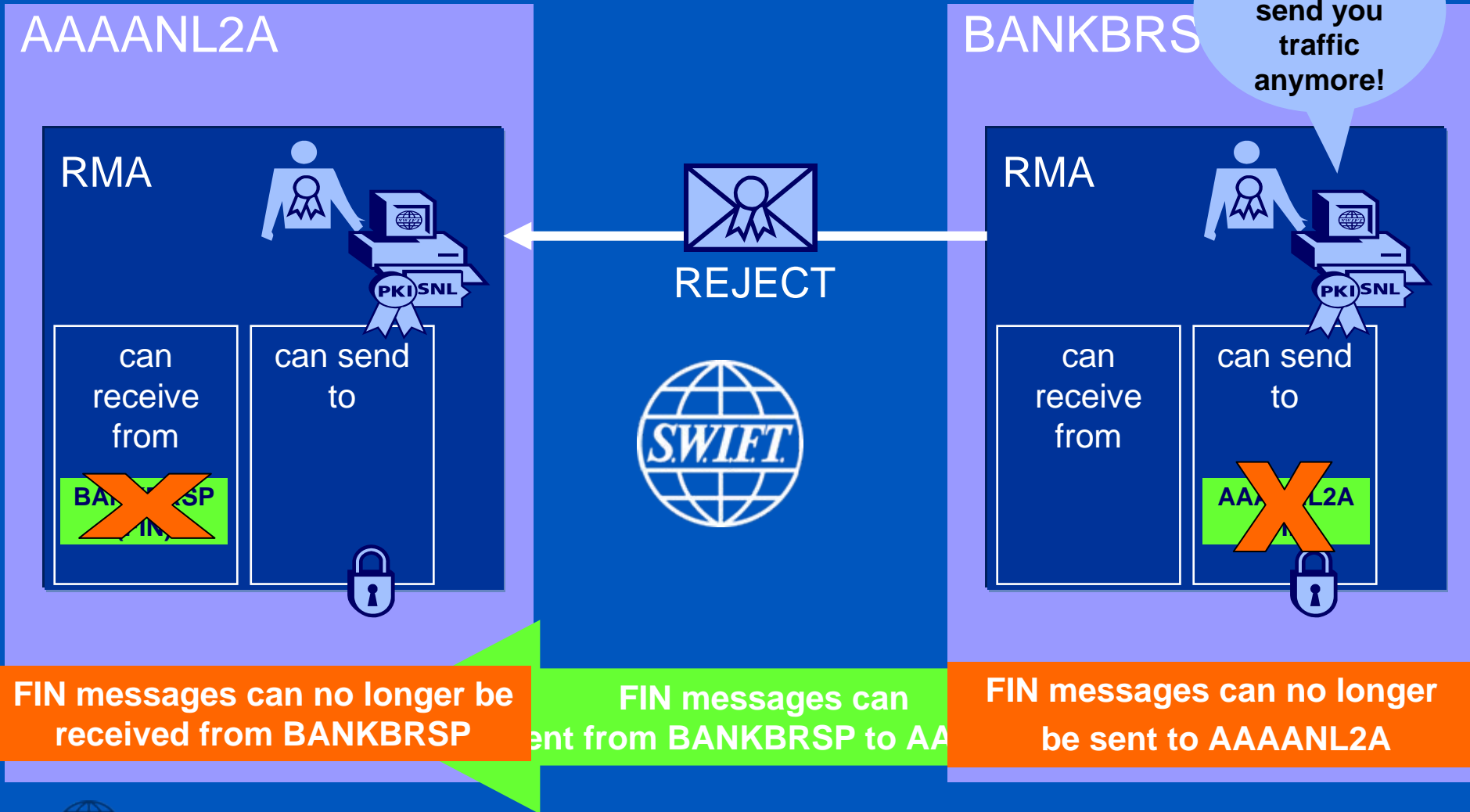
RMA protocol
Summary

- Involved parties
  - Issuer and Correspondent : BIC8
- RMA messages
  - Authorisation
  - Query
  - Answer
  - Reject
  - Revocation

RMA protocol
Actions

Issue

The issuer sends an authorisation to a correspondent

Accept

The correspondent accepts the authorisation-to-send

Reject

The correspondent rejects the authorisation before the authorisation was ever accepted

Revoke

The issuer revokes a previously issued authorisation

Delete

The correspondent deletes a previously accepted authorisation-to-send

RMA protocol
Rules of the game

User-to-user obligations similar to BKE policy

1. Users must read and empty their RMA queues **every day**

2. Users must process, i.e., accept or reject, incoming RMA messages (authorisations, queries) **within maximum six (6) business days**
    In this time, the authorisation must be distributed to the FIN Interfaces that need it, and a return authorisation must be issued to the other party (if bilateral traffic was agreed)

3. Users must process incoming RMA revocations as soon as possible and **maximum within one (1) business day**.

Applicable as of T2

Establishing a relationship two-way

(RMA query): I'm looking for a correspondent in Brazil. Are you interested ?

(RMA answer): Yes, sure and I would like to do business with you in Europe.

(RMA authorisation): OK, you can send me traffic.

(RMA authorisation): In return I give you permission to send to me.

Bank A in NL

Bank B in BR

RMA protocol
two-way
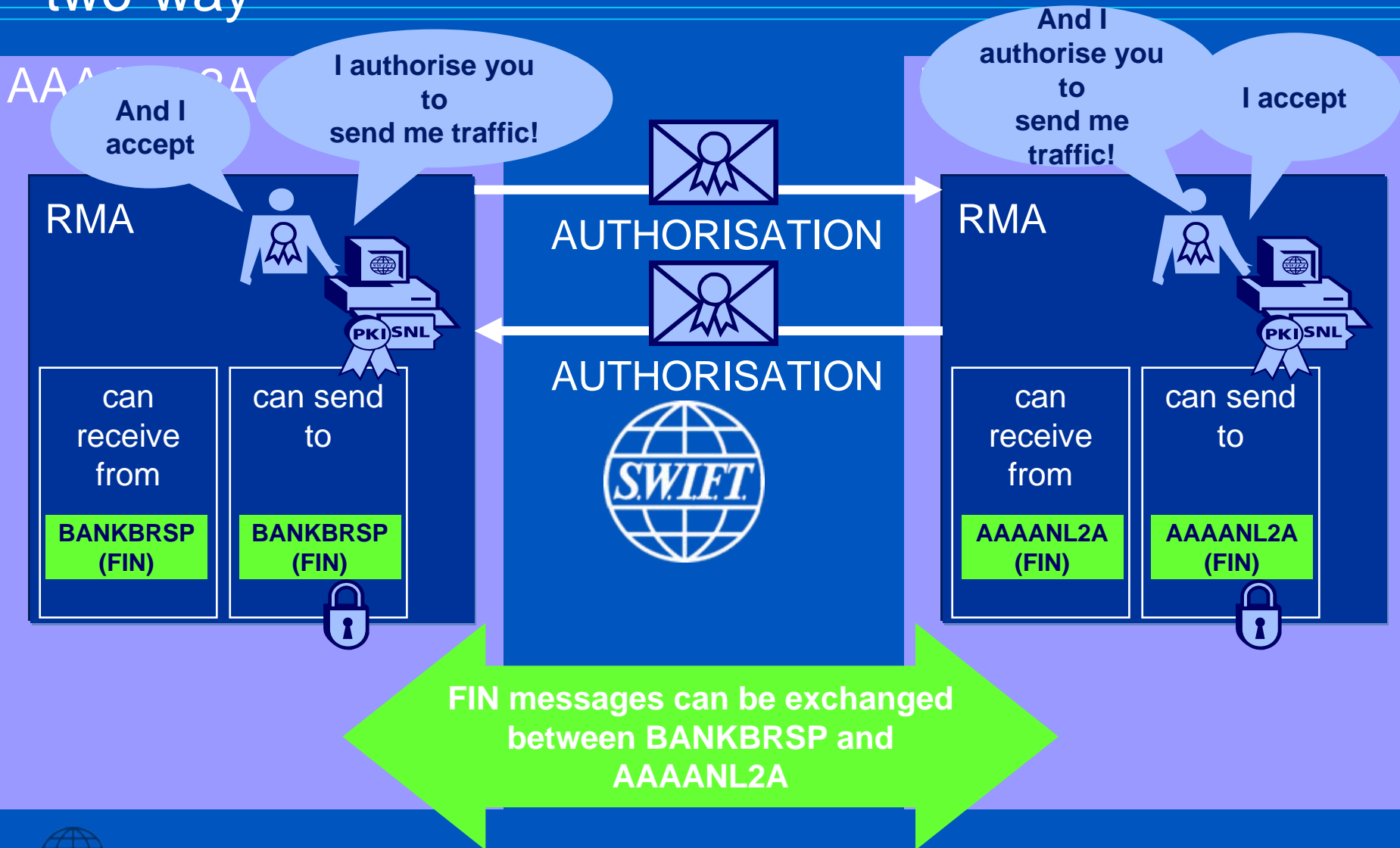
Establishing a relationship granularity

Bank A in NL

Bank B in BR

(RMA query) : My client X has a contract to import goods from a Brazilian company Y. The parties would like to pay with Collections. Are you interested ?

(RMA answer) : Yes. The Brazilian company Y is one of our good clients.

(RMA authorisation) : I authorise you to send me MT Category 4 'Collections and Cash Letters'

(RMA authorisation) : Same here and I authorise you to send the related payments in MT 202

RMA protocol granularity
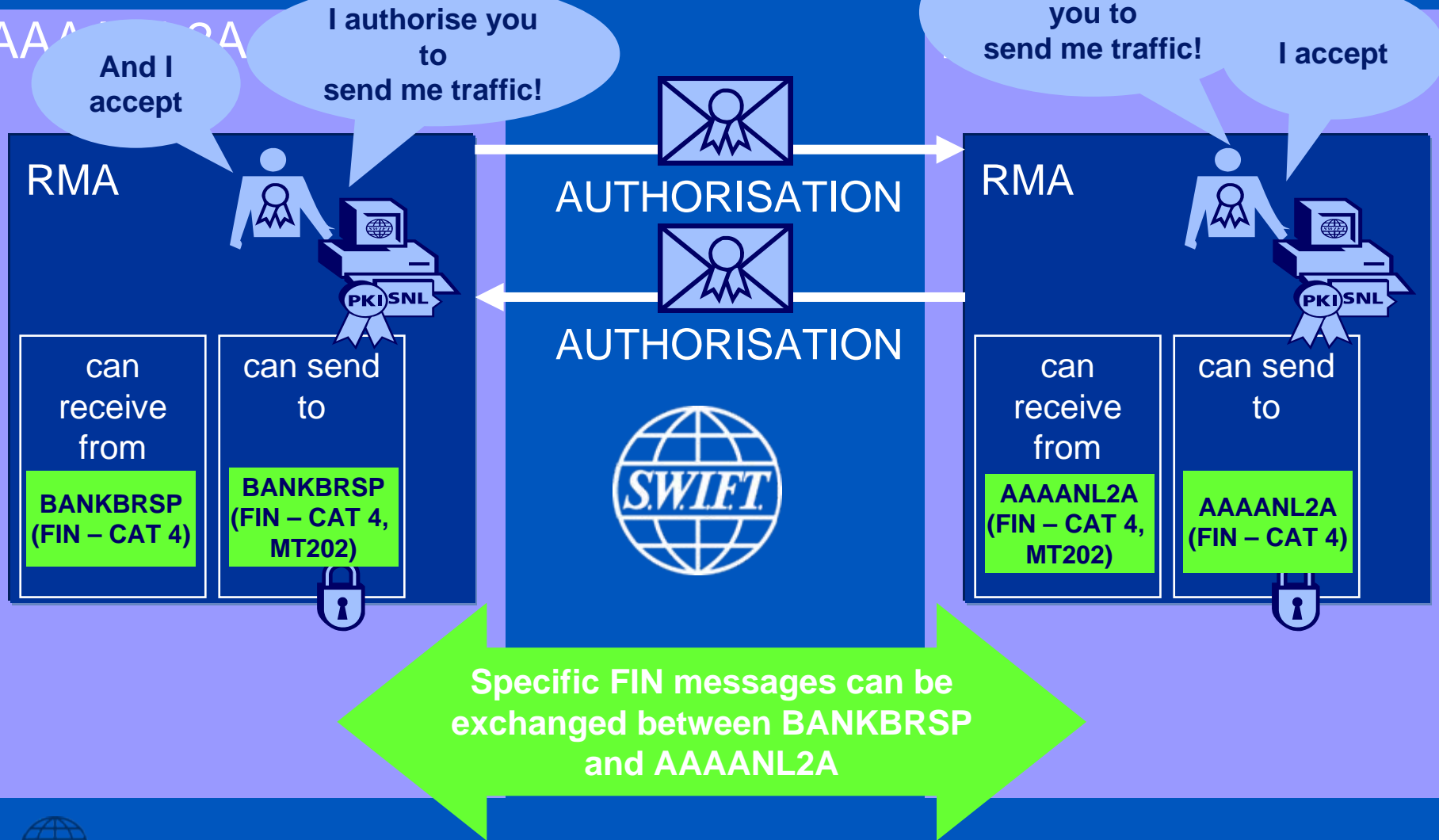
Establishing a relationship start/end date

(RMA query) : My client X has a 6 month exclusive contract to import the new "summer collection Brazilian T-shirts" from a company Y. The parties would like to pay with Collections. Are you interested ?

(RMA answer) : Yes. The Brazilian company Y is one of our good clients.

(RMA authorisation) : I authorise you to send me MT Category 4 from January 1st to June 30th

(RMA authorisation) : Same here + MT202

BANK A in NL

BANK B in BR

Establishing a relationship
modifying an existing relationship
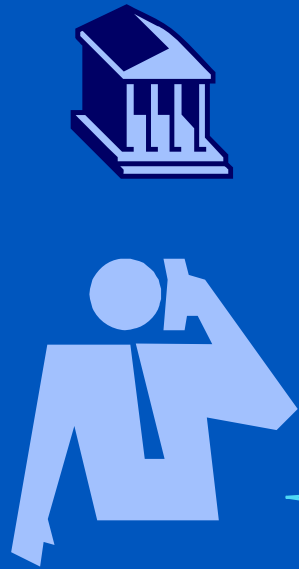
(RMA query) : Hello! We are very happy about our collaboration for Collections. Now, we are interested to also do Documentary Credits.

(RMA answer) : OK – fine with me

(RMA authorisation) : we extend our relationship to MT Category 7.

(RMA authorisation) : same to you.

Bank A in NL

Bank B in BR

RMA protocol
modifying an existing relationship
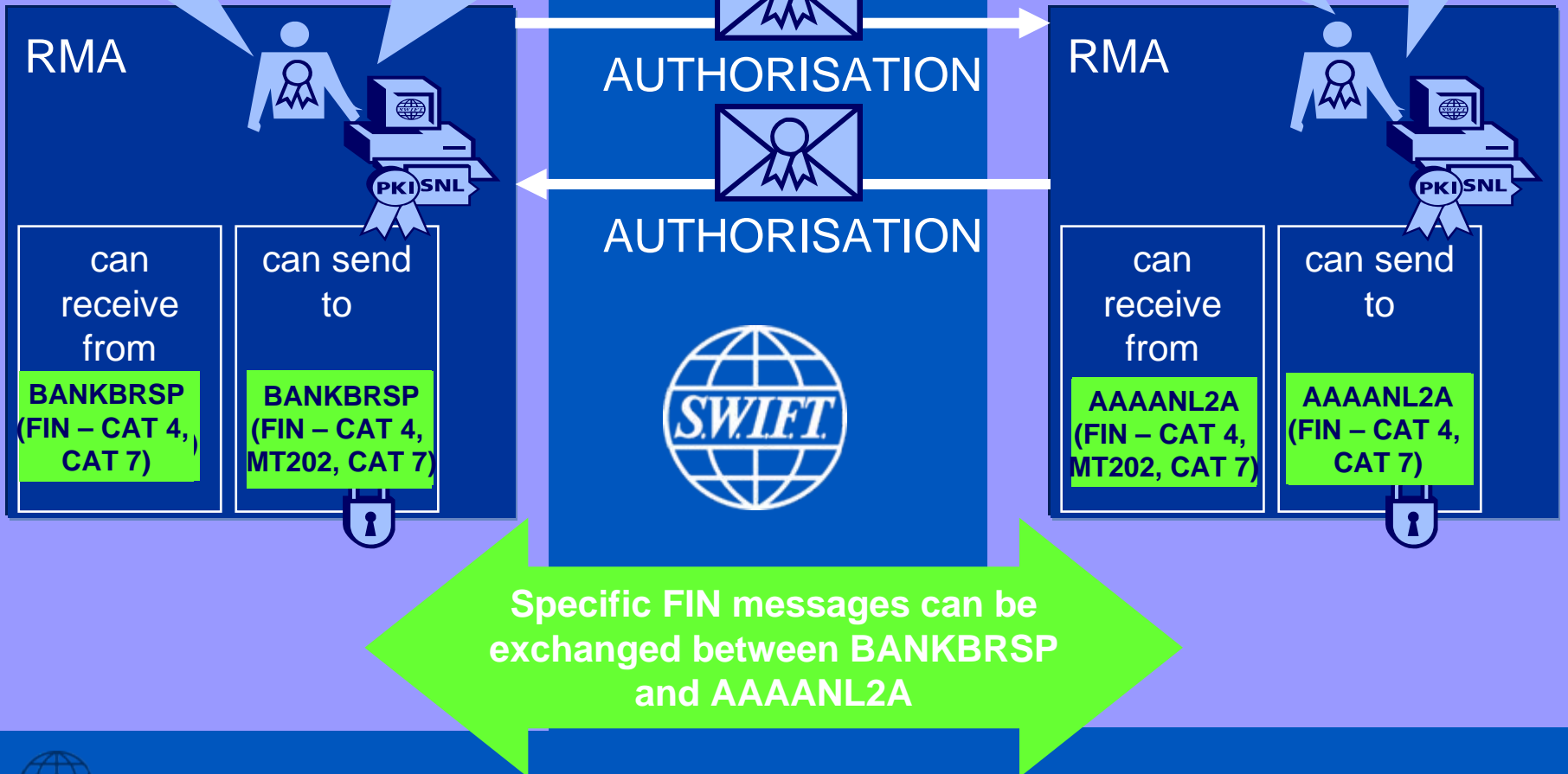
Establishing a relationship
Live/T&T difference
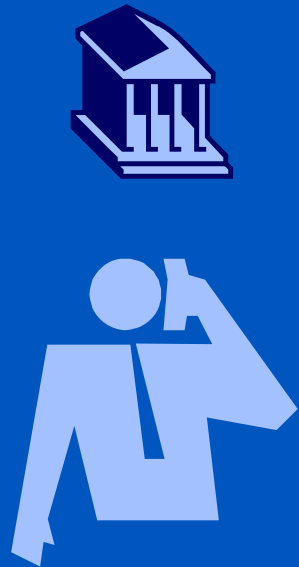
(RMA query): Since you are a new correspondent, can we test first ?

(RMA answer): Sure – testing all FIN messages is OK. But for live traffic, I would like to do only FIN Cat. 5 messages

(RMA T&T authorisation): you can send me any FIN Test & Training (swift.fin!p) traffic

(RMA authorisation (live)) : you can send me FIN Live (swift.fin) Cat. 5 messages

Bank A in NL

Bank B in BR

BKE compared to RMA

BKE	RMA
■ Bilateral	■ Unilateral
■ Renewal	■ Permanent
■ Manual key possible	■ No manual key possible
■ FIN	■ InterAct store-and-forward
■ BIC4/6/8	■ BIC8 only
■ BKE for T&T	■ RMA optional for T&T
■ Previous/Current/Future	■ Current only
■ Pre-agreements	■ No pre-agreements
■ Weekly distribution	■ Daily/Real-time distribution

RMA typical set-up
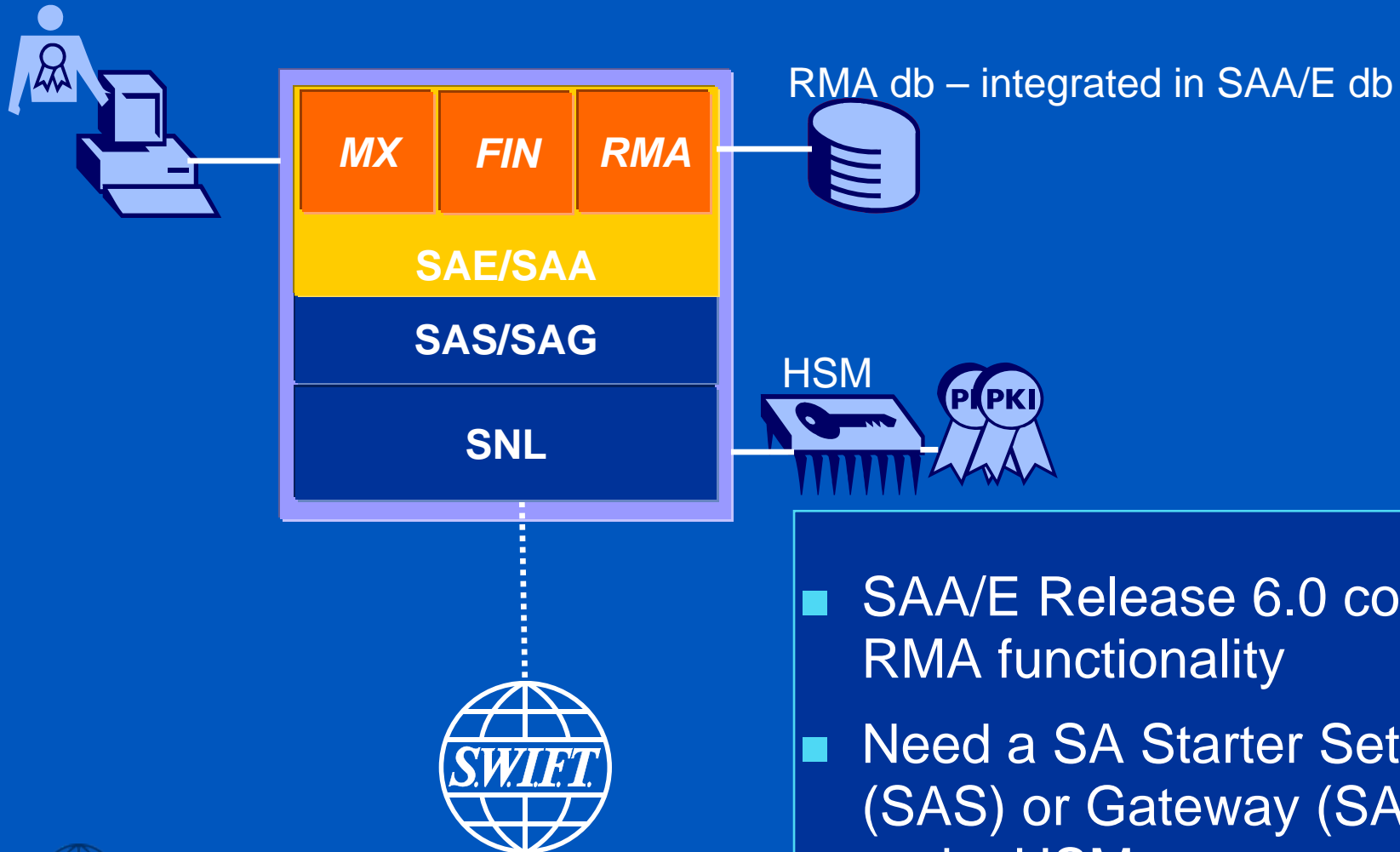
RMA db – integrated in SAA/E db

| MX | FIN | RMA |

SAE/SAA

SAS/SAG

SNL

HSM

PKI

S.W.I.F.T.

- SAA/E Release 6.0 contains RMA functionality
- Need a SA Starter Set (SAS) or Gateway (SAG), and a HSM

Agenda

- **What is RMA all about**
- **How does the migration work**
- **SWIFTAlliance offering for RMA**
- **Pricing**
- **Advanced RMA topics**
- **Where to find information**

From BKE to RMA
Migration principles

- **No big bang**

  - Migrate BIC8 by BIC8

  - Migrate independently of correspondents and of central institutions

- **Existing BKE keys converted into RMA authorisations**

  - No need to manually recreate authorisations for existing correspondents

  - Automated clean-up of your existing bilateral key file

From BKE to RMA
Overall timeline

RMA live
service available

BKE
stopped

2007

Q1

Q2

Q3

2008

T2

**Contingency
penalty period**

Q4

2009

Test RMA Train staff	Demonstrate live RMA readiness every month	Process live RMA every day

Continue BKE exchange

No BKE exchange

C1

C2

T2

C3

Customer confirms readiness &
Demonstrates live RMA

All customers ready
Start of live RMA obligations

Customer converts
BKE keys
to RMA

From BKE to RMA
Between C1 and C2

RMA live
service available

BKE
stopped

2007   **2008**   **2009**

Q1   Q2   Q3   Q4

T2

Contingency penalty period

**Test RMA
Train staff**

Demonstrate live RMA readiness every month

Process live RMA every day

Continue BKE exchange

Continue BKE exchange

No BKE exchange

C1   C2   T2   C3

Customer confirms readiness &
Demonstrates live RMA

All customers ready
Start of live RMA obligations

Customer converts
BKE keys
to RMA

From BKE to RMA
Between C1 and C2 : RMA configuration setup

- Install RMA software, if it is not part of your FIN Interface

  – Not required for SAA/E users : RMA is part of SAA/E 6.0

- Certificates and RBAC roles

  – RBAC roles to "send" on RMA and to "read" RMA SnF queues

  – See *RMA Planning Guide*

- SAG/SAS/SAA-E configuration

  – See *SAA/E SWIFTNet Phase 2 Migration Guide*

- RMA InterAct store-and-forward service

  – See *RMA Planning Guide*

  – No need to subscribe to test RMA : SWIFT has already activated all BIC8s for testing RMA (service *swift.rma!p*, queue *yourbic8_rma!p*)

From BKE to RMA
Between C1 and C2 : Test RMA & Train staff

- **Test RMA**
  - Test RMA with yourself
  - Test RMA with RMA Sparring Partner
  - At least perform the minimum test scenarios (see www.swift.com)
  - SWIFT will monitor

- **Train your staff**
  - Staff must be ready to process incoming RMA

- **Learn rules**
  - Before T2, no live RMA with correspondents
  - After T2, live RMA must be processed every day
    - according to user-to-user obligations

From BKE to RMA
Before and at C2

RMA live
service available

BKE
stopped

2007

2008

2009

Q1

Q2

Q3

T2

Q4

Contingency
penalty period

Test RMA
Train staff

Demonstrate live RMA
readiness every month

Process live
RMA every
day

Continue BKE exchange

No BKE
exchange

C1

C2

T2

C3

Customer confirms readiness &
Demonstrates live RMA

All customers ready
Start of live RMA obligations

Customer converts
BKE keys
to RMA

From BKE to RMA
Before C2 - Prepare live RMA

- After 1 Jan 2008
  - Configure for live RMA (live RBAC roles, live queue, live certificate on HSM)

- Latest at C2 – 6 weeks
  - Customer submits RMA readiness form on www.swift.com
  - Formal confirmation of live RMA readiness & acceptance of rules

- After form submitted
  - SWIFT activates customer for live RMA (ADW)

From BKE to RMA
At C2 – demonstrate live RMA readiness

■ **After SWIFT activated you on live RMA**

   – Send a live RMA message to your own BIC8

      – On the live service `swift.rma`

■

   – Receive this live RMA message

      – read from live RMA SnF queue `yourbic8_rma`

■ **Do this for every live BIC8**

■ **Do not send to correspondent BIC8s !**

From BKE to RMA
Between C2 and T2

RMA live
service available

BKE
stopped

2007

2008

2009

Q1

Q2

Q3

T2

Q4

**Contingency
penalty period**

Test RMA
Train staff

**Demonstrate live RMA
readiness every month**

Process live
RMA every
day

Continue BKE exchange

No BKE
exchange

C1

C2

T2

C3

Customer confirms readiness &
Demonstrates live RMA

All customers ready
Start of live RMA obligations

Customer converts
BKE keys
to RMA

Between C2 and T2 –
monthly demonstration of live RMA readiness

■ At least once every month

  – Send a live RMA message to your own BIC8
    – On the live service `swift.rma`

  – Receive this live RMA message
    – read from live RMA SnF queue `yourbic8_rma`

■ Do this for every live BIC8

■ Do not send live RMA authorisations to your existing correspondent BIC8s !

From BKE to RMA
When is C2 ?

■ Linked to C1 date

C1 date	Q2 2007	Q3 2007	Q4 2007
C2 date	April 2008	May 2008	June 2008

■ **BRASIL C2 deadline is 31/05/2008 !**

From BKE to RMA
What if you miss C2

- **RMA live readiness demonstration (C2)**
  - Contingency period Q3 2008: penalty/BIC8
    - July 2008: 5,000 EUR
    - Aug 2008: 10,000 EUR
    - Sep 2008: 20,000 EUR

Guiding principles before T2

- BKE is the primary method to maintain relationships

- Continue BKE renewals

- Don't send live RMA messages to existing correspondents (with whom you have a BKE key)

- No obligation to act on received live RMA messages from correspondents (do not blindly Reject !)

- Test RMA on Test & Training !

- Each live BIC8 needs to demonstrate live RMA readiness on a monthly basis

Optional exception: to establish a *new* relationship (no BKE key yet), live RMA can be used *if* both parties agree, (or all three parties, in case of FIN Copy) are sure they will not fall back to Phase 1

From BKE to RMA
Overall timeline

RMA live
service available

BKE
stopped

2007   Q1   **2008**   Q2   Q3   **T2**   Q4   **2009**

Contingency penalty period

Test RMA Train staff	Demonstrate live RMA readiness every month	Process live RMA every day

Continue BKE exchange   **No BKE exchange**

RMA recording

C1 → C2   T2   C3

Customer confirms readiness &
Demonstrates live RMA

All customers ready
Start of live RMA obligations

Customer converts
BKE keys
to RMA
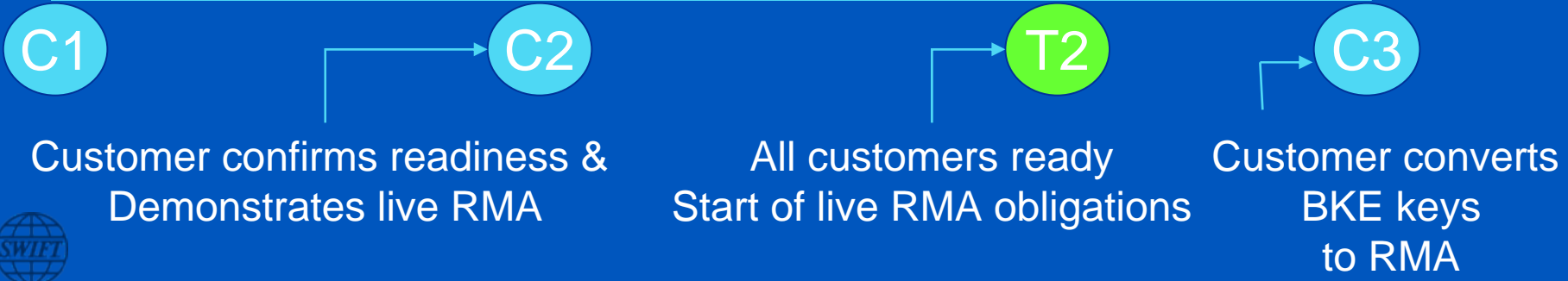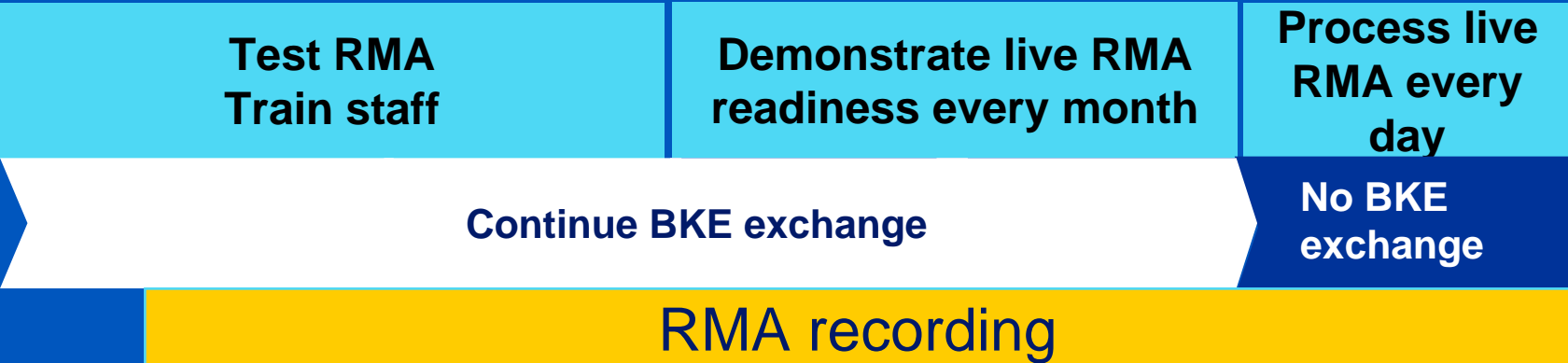
From BKE to RMA
How will BKE keys be converted into RMA ?

Conversion of BKE keys to RMA authorisations

- BKE-to-RMA conversion based on existing bilateral keys *and* actual traffic observed

- Sender and receiver do this independently

- No need to exchange RMA messages with correspondents to convert existing BKE keys

- BIC4/BIC6 keys will only generate BIC8-BIC8 RMA records actually used

  – only RMA records for "true" correspondents

  – clean-up of bilateral keys

From BKE to RMA
RMA recording
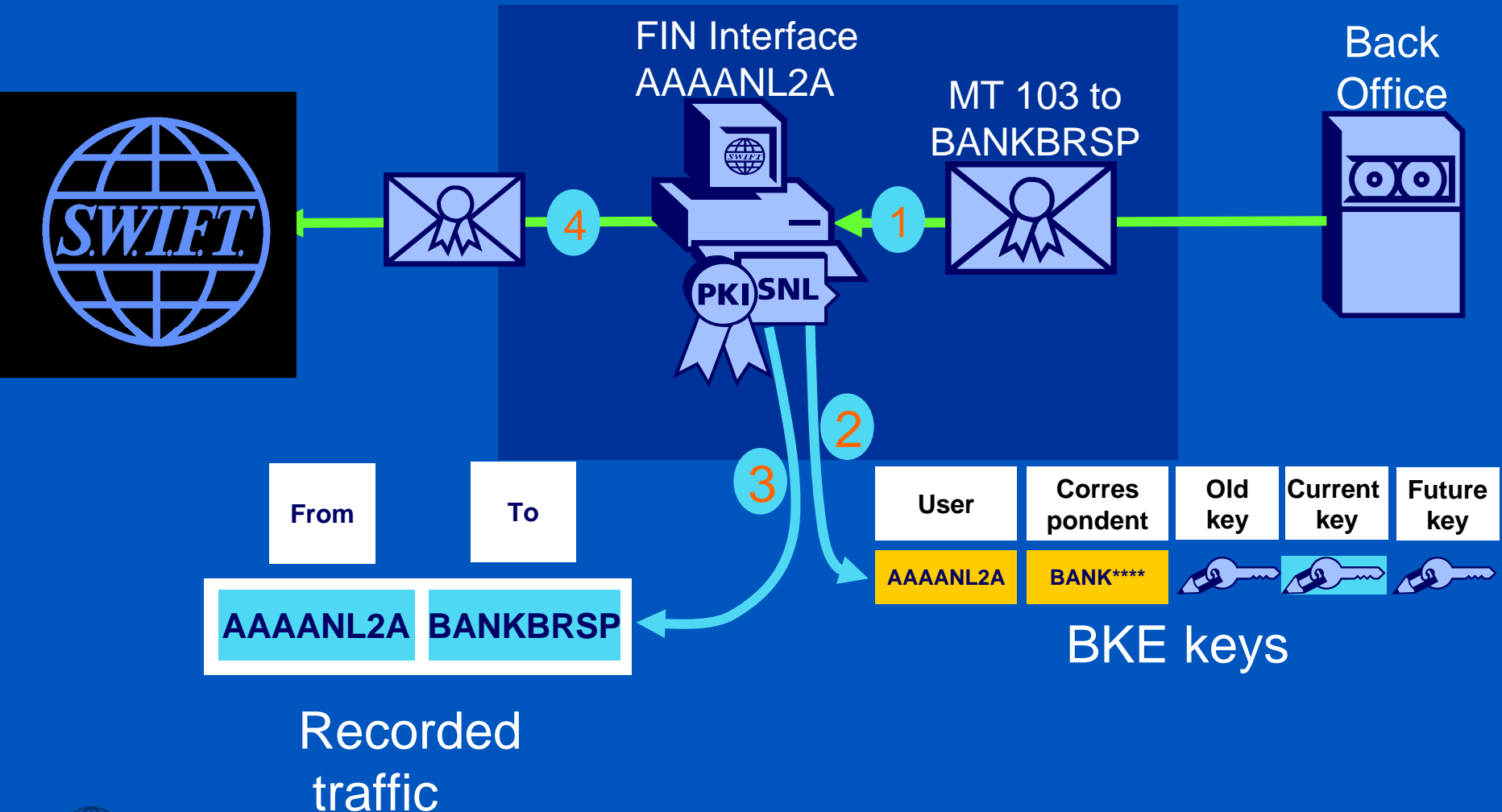
- **Recording occurs on your FIN Interface (eg. SAA/E)**

- **Recording starts automatically**
  - as soon as you login on FIN with PKI & HSM with your BIC8 (C1)

- **Migration status reports can be consulted to monitor your recording progress**

- **Recording does not create RMA authorisations**

- **Recording continues until C3, i.e. > 1 year**

FIN interface
RMA recording – traffic **sent** between C1 and C3

FIN Interface
AAAANL2A

MT 103 to
BANKBRSP

Back
Office

4

1

PKI SNL

2

3

From	To
AAAANL2A	BANKBRSP

User	Corres pondent	Old key	Current key	Future key
AAAANL2A	BANK****			

BKE keys

Recorded
traffic

FIN interface
RMA recording – traffic **received** between C1 & C3

FIN Interface
AAAANL2A

MT 103 from
BANKBRSP

Back
Office

1 **4** **3** **2**

PKI SNL

From	To
AAAANL2A	BANKBRSP
BANKBRSP	**AAAANL2A**

Recorded
traffic

User	Corres pondent	Old key	Current key	Future key
AAAANL2A	BANK****			

BKE keys

From BKE to RMA
At T2

RMA live
service available

BKE
stopped

2007

2008

2009

Q1

Q2

Q3

T2

Q4

Contingency
penalty period

**Test RMA
Train staff**

**Demonstrate live RMA
readiness every month**

**Process live
RMA every
day**

Continue BKE exchange

**No BKE
exchange**

RMA recording

C1

C2

T2

C3

Customer confirms readiness &
Demonstrates live RMA

All customers ready
Start of live RMA obligations
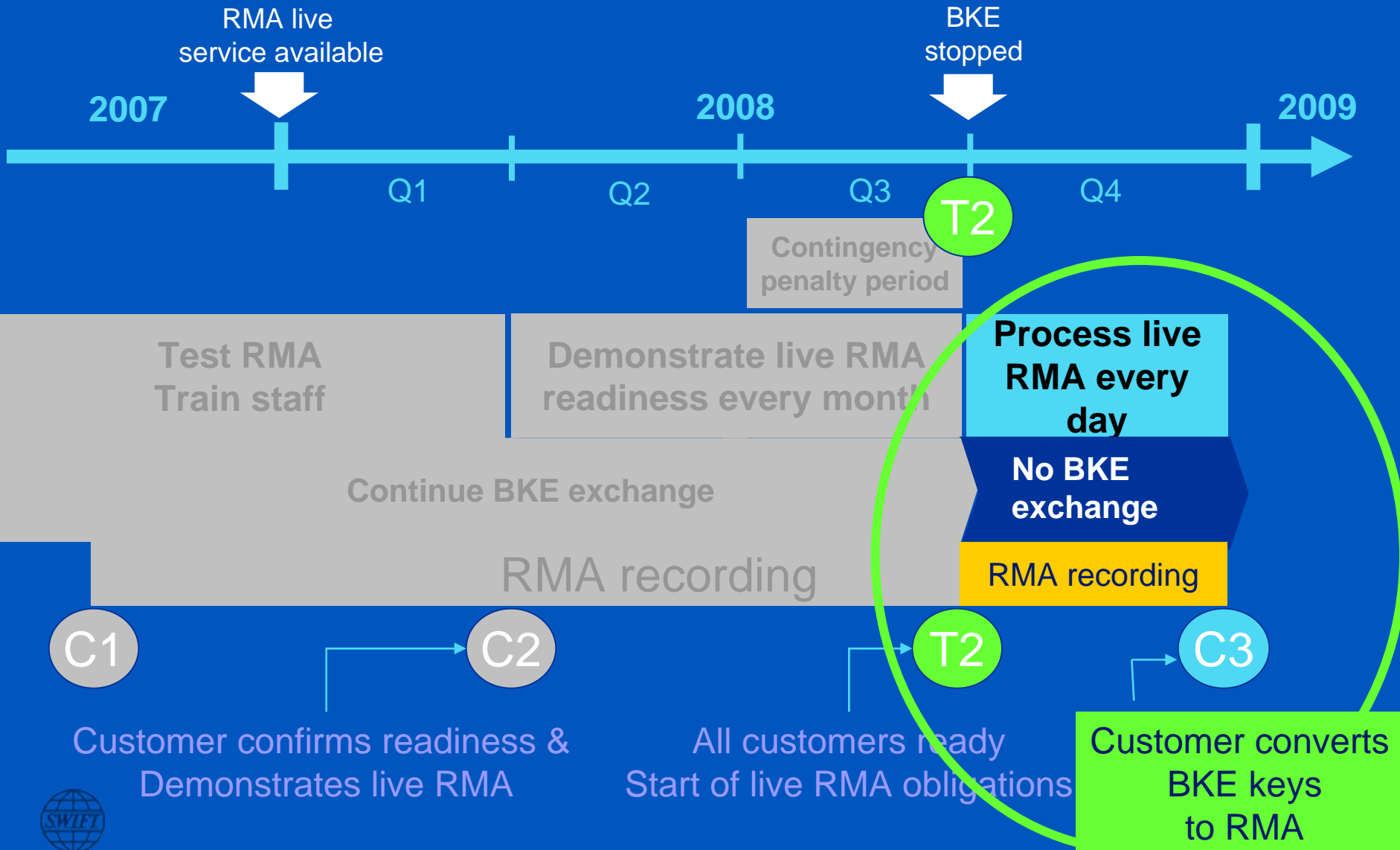
Customer converts
BKE keys
to RMA

From BKE to RMA
At T2

- **At T2, SWIFT will**
  - Start refusing BKE messages (MT96x)

- **At T2, make sure you**
  - Stop BKE
  - Start processing incoming live RMA every day

- **After T2, USE equipment is redundant**
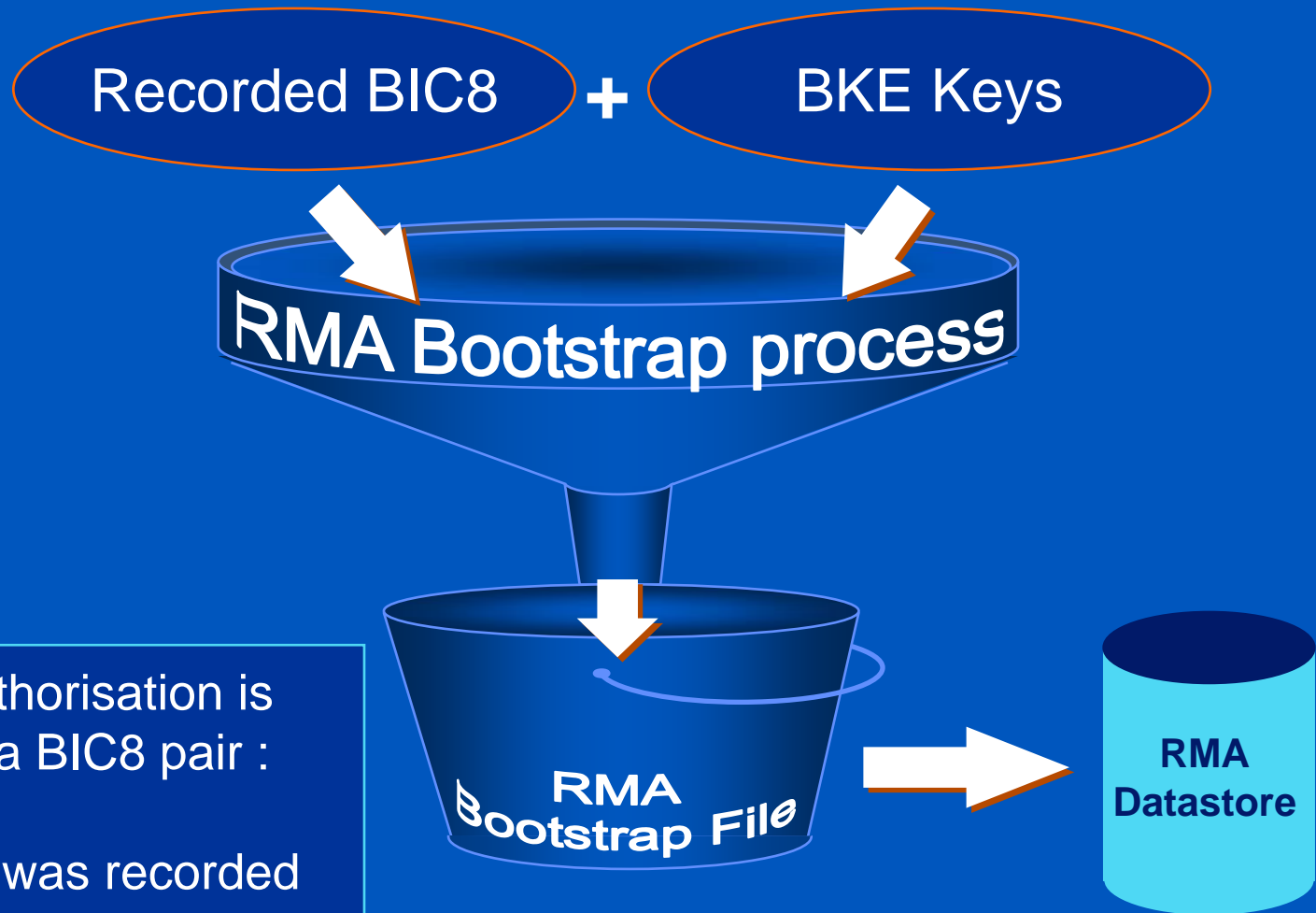 - Destroy SCR & ICCs, do not return to SWIFT

From BKE to RMA
After T2

RMA live
service available

BKE
stopped

2007 **2008** **2009**

Q1 Q2 Q3 **T2** Q4

Contingency penalty period

Process live RMA every day

Test RMA
Train staff

Demonstrate live RMA readiness every month

No BKE exchange

Continue BKE exchange

RMA recording

RMA recording

C1 C2 **T2** C3

Customer confirms readiness &
Demonstrates live RMA

All customers ready
Start of live RMA obligations

Customer converts
BKE keys
to RMA

From BKE to RMA
At C3 - RMA Bootstrap – export

Recorded BIC8 **+** BKE Keys
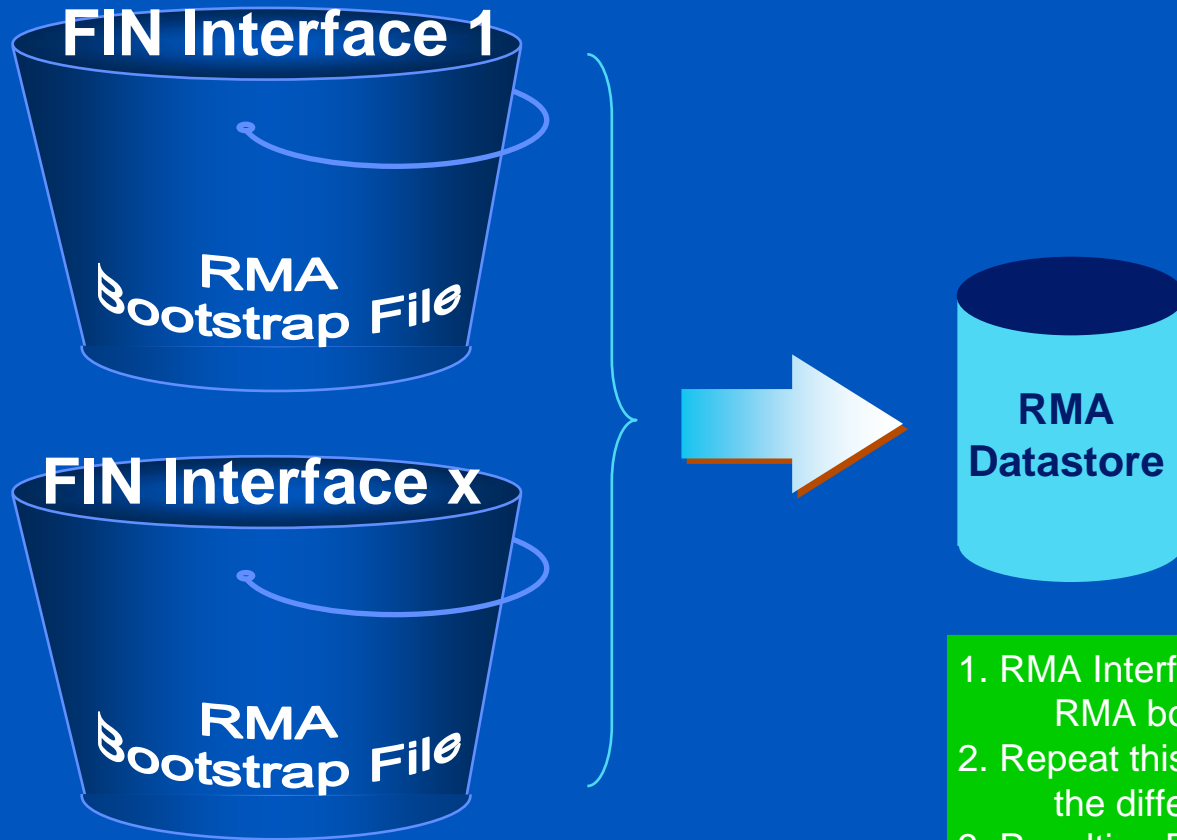
RMA Bootstrap process

RMA Bootstrap File

An RMA authorisation is created for a BIC8 pair :

1) if FIN traffic was recorded
2) a valid BKE key exists

RMA Datastore

From BKE to RMA
At C3 - RMA Bootstrap – import

FIN Interface 1

RMA
Bootstrap File

FIN Interface x

RMA
Bootstrap File

**RMA
Datastore**

1. RMA Interface is instructed to do import of
   RMA bootstrap file
2. Repeat this for each RMA bootstrap file, from
   the different FIN interfaces that recorded
3. Resulting RMA datastore is the merger

From BKE to RMA
At C3 - RMA cut-over – stop using BKE keys

- **After bootstrap import**
  - Instruct FIN Interface to stop using BKE keys
    - On SAA/E : set migration status to 'Finalised'
  - SWIFT will monitor usage or absence of MAC

Your migration is completed !

RMA activation timing summary

Task	Deadline	C1 in Q2 2007	C1 in Q3 2007	C1 in Q4 2007
Perform RMA test scenarios, train staff, learn rules	**As of C1**	**In 2007 and early 2008**		
Submit readiness confirmation form on www.swift.com	**C2 – 6 weeks**	Mid March 2008	Mid April 2008	Mid May 2008
Send live RMA message to yourself	**C2**	End of April 2008	End of May 2008	End of June 2008
Demonstrate live RMA readiness on a monthly basis				
Stop BKE Destroy USE equipment	**T2**	**End Q3 2008**		
Process live RMA messages every day				
Convert BK keys to RMA (bootstrap) Stop using MAC / BK keys	**C3**	**During Q4 2008**		

Agenda

- **What is RMA all about**
- **How does the migration work**
- **SWIFTAlliance offering for RMA**
- **Pricing**
- **Advanced RMA topics**
- **Where to find information**

SWIFTAlliance offering for RMA

SWIFTAlliance Access/Entry

FIN + RMA interface

SAA/SAE FIN customers get the RMA functionality for free , as part of their maintenance, in Release 6.0

SWIFTAlliance RMA

RMA-only interface

Non-SAA/E customers, or SAA/E customers with a need for a dedicated RMA system (eg. for centralisation), can obtain a SWIFTAlliance-for-RMA-only, at an attractive price. Includes a free SNL and SAS license.

RMA Plus as a licensable option on both offerings: can be purchased per BIC8, permitting to issue *granular* authorisations
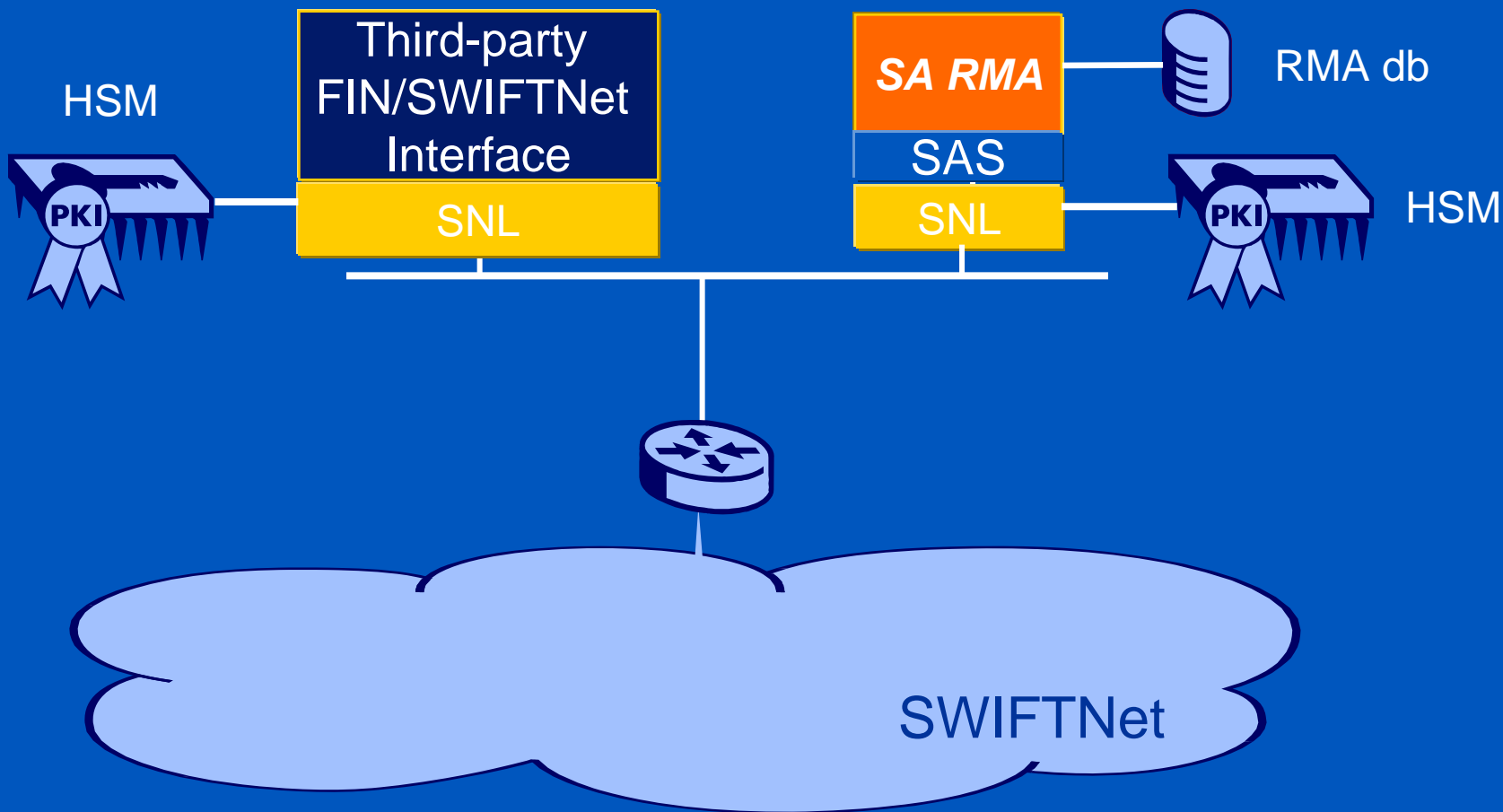Allows to control WHAT type of traffic can be sent by a correspondent
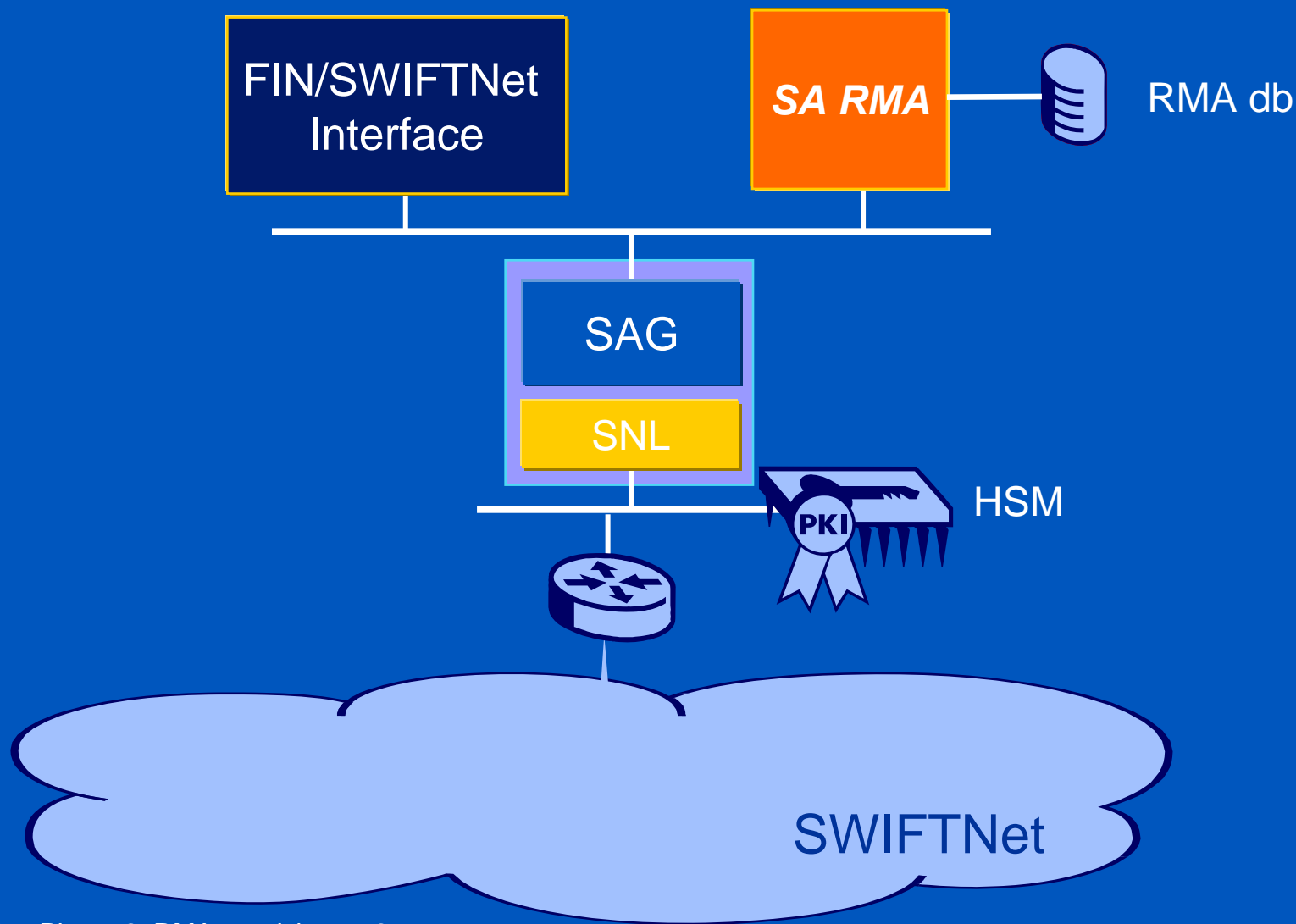
SWIFTAlliance Access/Entry for FIN & RMA
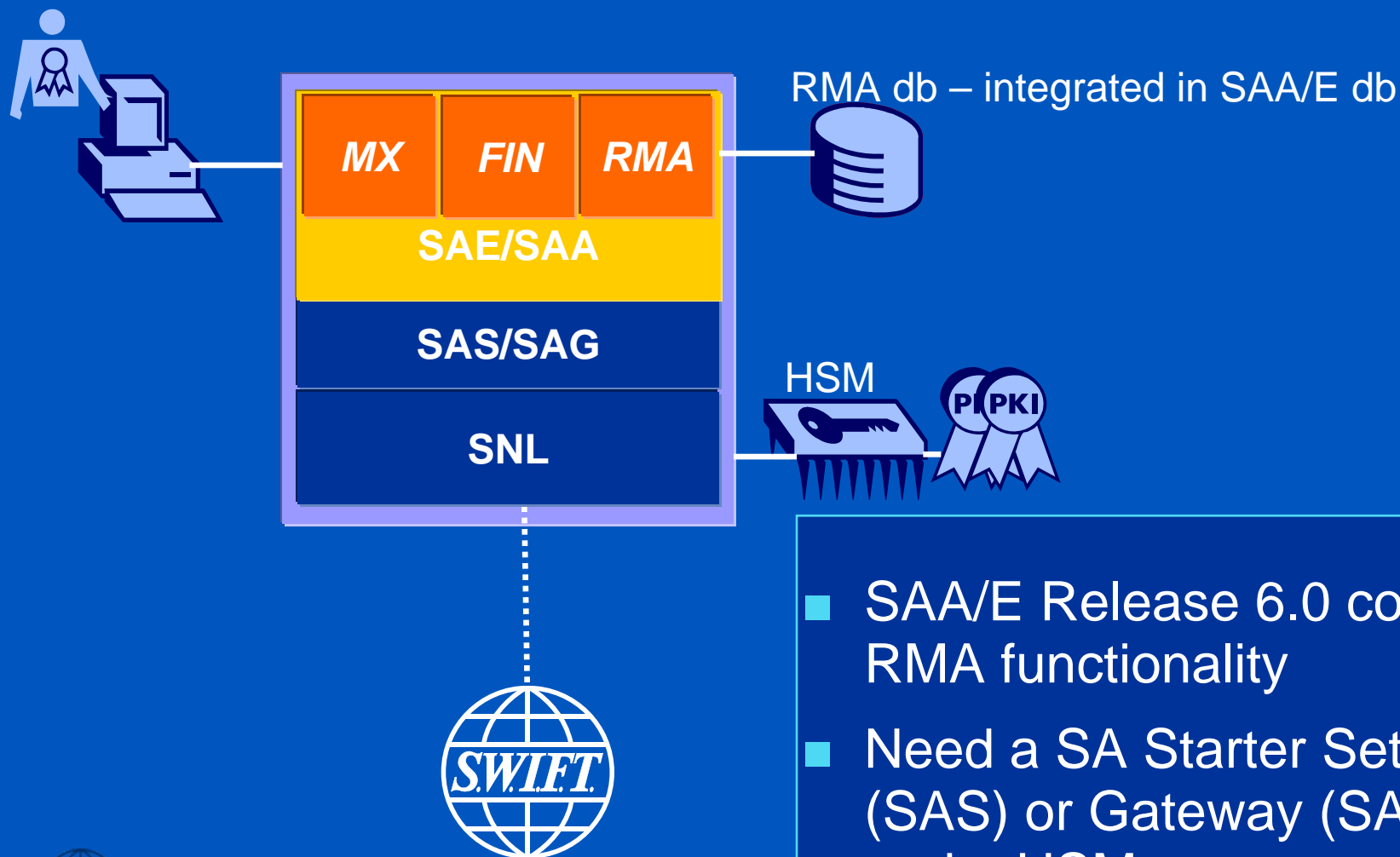
RMA db – integrated in SAA/E db

MX	FIN	RMA

SAE/SAA

SAS/SAG

SNL

HSM

PKI

S.W.I.F.T.

- SAA/E Release 6.0 contains RMA functionality

- Need a SA Starter Set (SAS) or Gateway (SAG), and a HSM

SA RMA stand-alone – typical config 1

SA RMA stand-alone – typical config 2

SAA/E RMA Pricing

- **If SAA/E used for FIN : RMA license included**
  - Automatically, as of Release 6.0
  - **Free** of charge
  - For all FIN BIC8s
  - Optionally, customer can add BIC8s for RMA-only **free** of charge
- **RMA Plus (Granularity)**
  - One-time fee: 2,000 USD per BIC8

Agenda

- **What is RMA all about**
- **How does the migration work**
- **SWIFTAlliance offering for RMA**
- **Pricing**
- **Advanced RMA topics**
- **Where to find information**

RMA Service fee

- Yearly fee, applicable to every live BIC8

- Covers the use of RMA for *any* service (FIN and all other services that adopt RMA in the future)

- **Free** for the whole period of migration, only applicable after T2

- Reflects the value of the service : ability to protect and manage correspondent relationship and ensure a secure environment

- Depends on BIC8's global tier : varies between EUR 400 (Tier 01) and EUR 2,700 (Tier 20)

RMA message pricing

- All RMA Messages **free** for the whole period of migration, including the first 3 months after T2

- RMA messages are required only once (no regular renewal required, unlike recurring BKE messages)

- **No** RMA messages needed for the migration from BKE keys to RMA records

- Very **low volume** of RMA messages expected

- RMA message price reflects the value of the underlying action and aims to prevent misuse

Message	Up to end of 2008		As from 2009	
	Price/message	Charged to	Price/message	Charged to
Authorisation	Free		5 EUR	Sender
Revocation	Free		5 EUR	Sender
Reject	Free		5 EUR	Receiver
Query	Free		0.5 EUR	Sender
Answer	Free		0.5 EUR	Sender

Agenda

- **What is RMA all about**
- **How does the migration work**
- **SWIFTAlliance offering for RMA**
- **Pricing**
- **Advanced RMA topics**
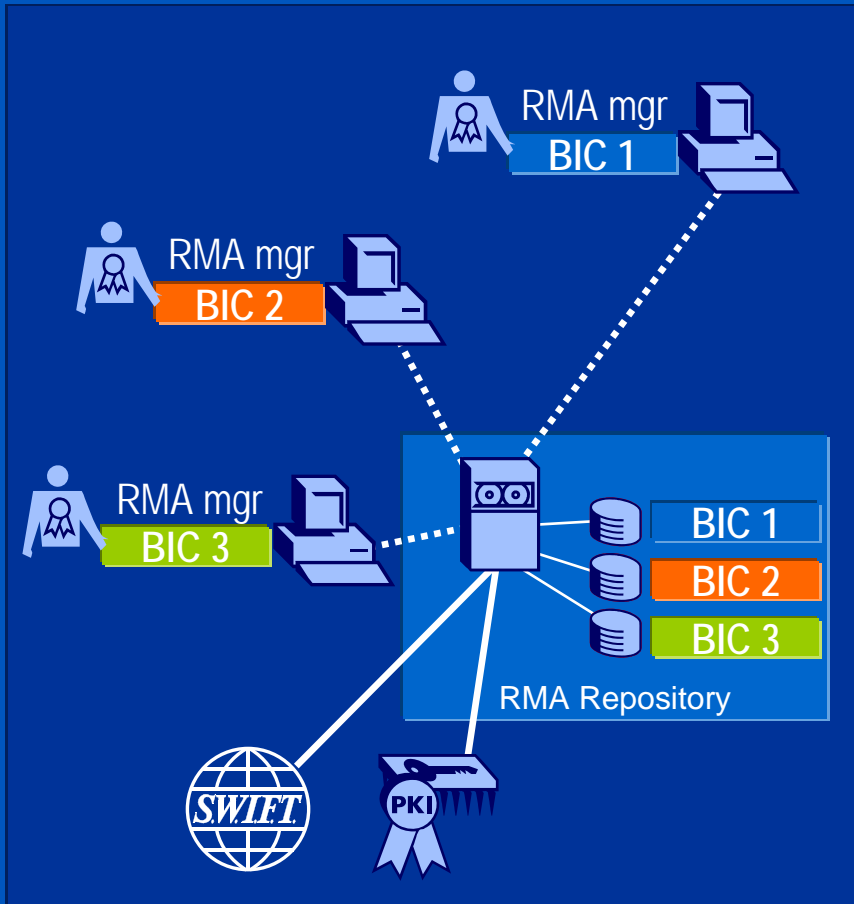- **Where to find information**

Advanced RMA topics

- **Centralised RMA is possible**

    – See *RMA Planning Guide*

- **A FINCopy service can decide not to use RMA in their CUG**

    – See *RMA Planning Guide*

RMA and Service Bureaux
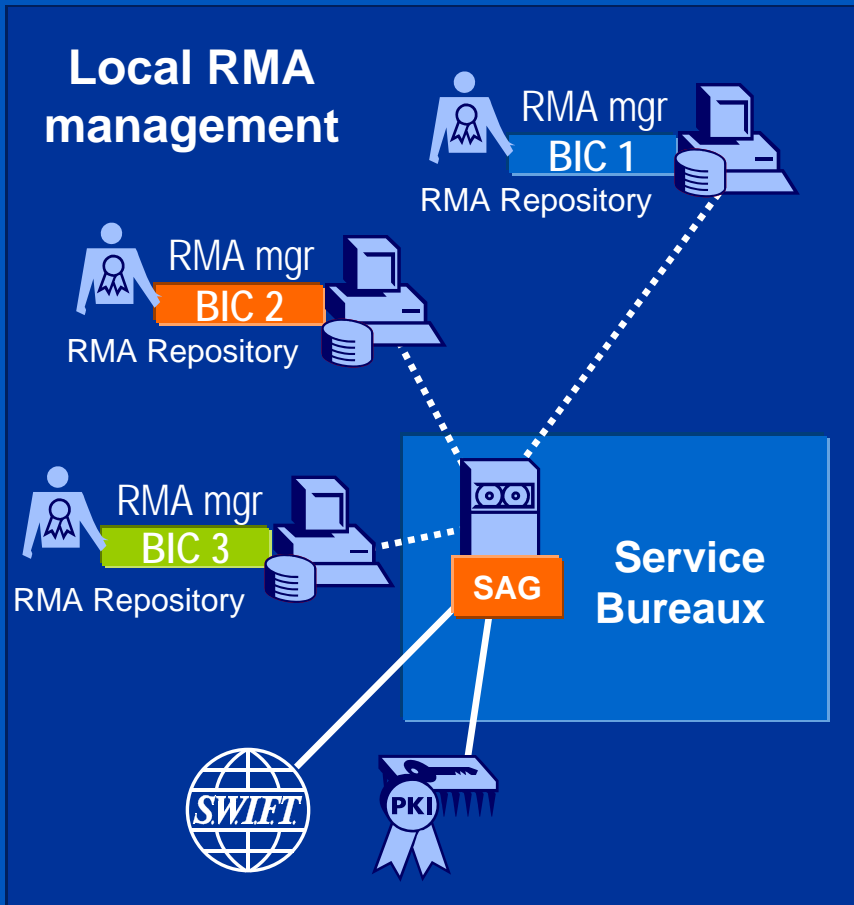## Remote RMA management done by customers

- RMA repository resides at Service Bureau

- Transparent access to part of repository

RMA and Service Bureaux
Local RMA management done by customers

Local RMA management

RMA mgr
BIC 1
RMA Repository

RMA mgr
BIC 2
RMA Repository

RMA mgr
BIC 3
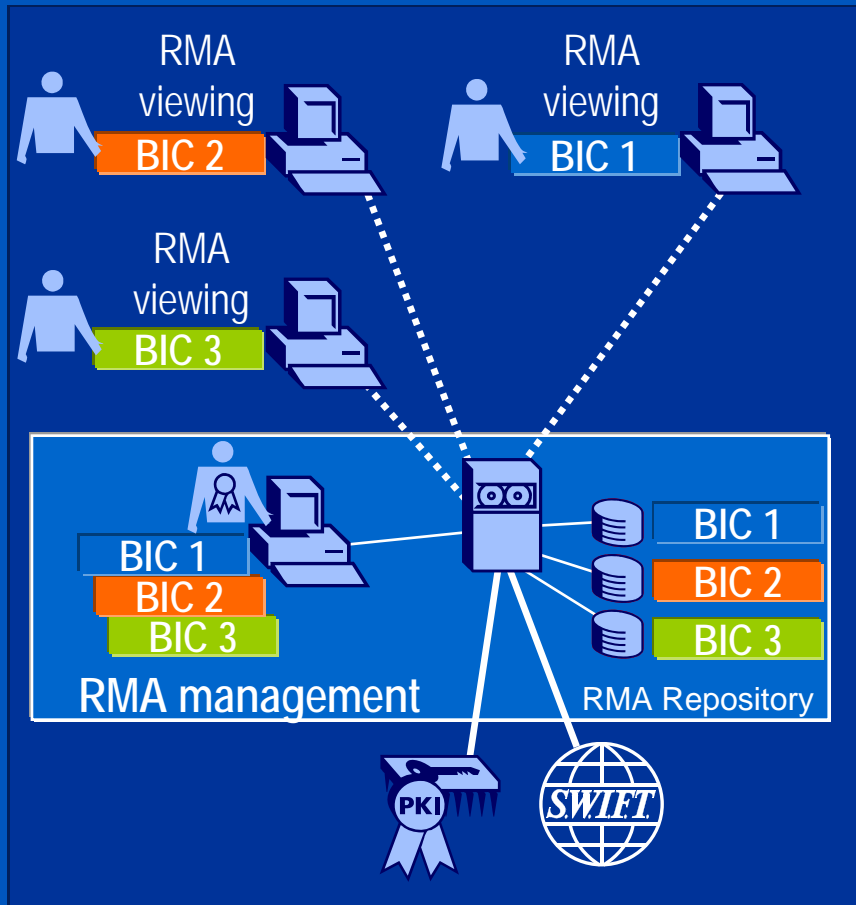RMA Repository

SAG

Service Bureaux

SWIFT

PKI

■ RMA repository resides at customers' interface
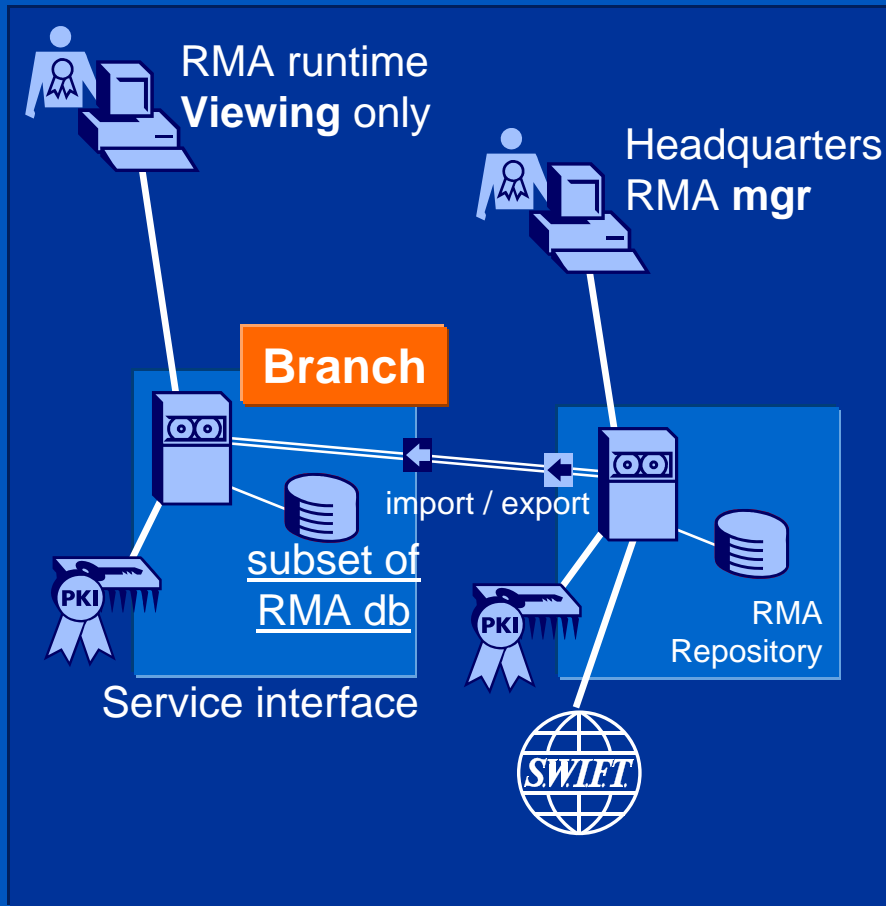
RMA and Service Bureaux
RMA management done by Service Bureaux

- RMA runtime offers viewing functionality for institution's own destination

- Multi destination access and management for RMA at Service Bureau

- Reports for multiple BICs

Distributed RMA – Import / Export of RMA data

RMA runtime **Viewing** only

Headquarters RMA **mgr**

Branch

import / export

subset of RMA db

Service interface

RMA Repository

SWIFT

- Viewing functionality on RMA runtime interface

- Central RMA management of multiple branches

- Secure real-time import/export using SWIFTNet FileAct

Global, multi location RMA management
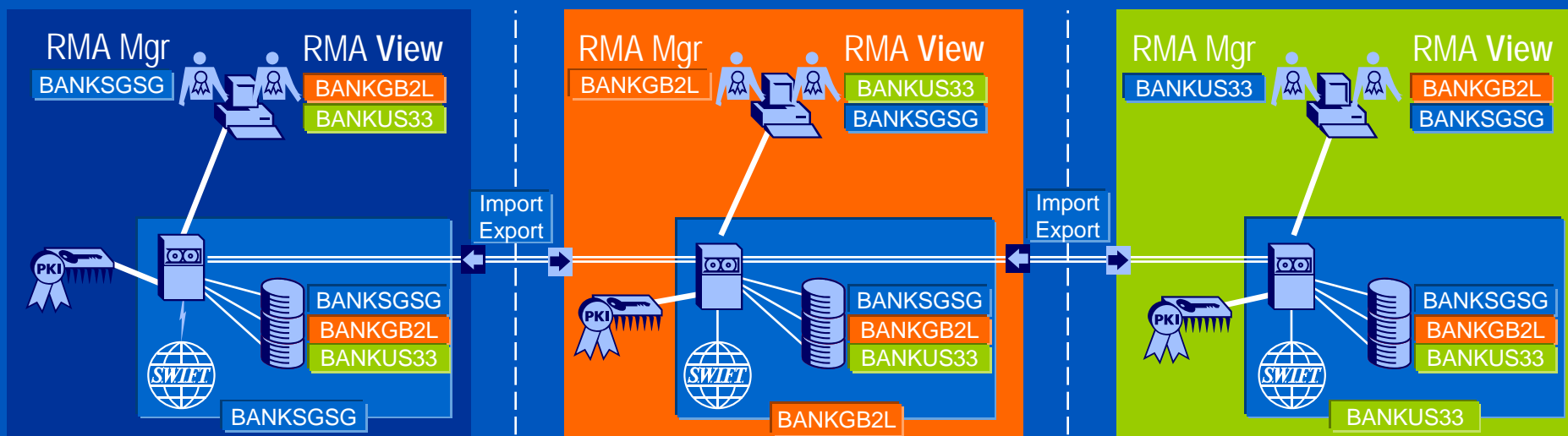
- ■ Regional hubs control local RMA management
- ■ RMA managers have viewing possibility for other hubs

Agenda

- **What is RMA all about**
- **How does the migration work**
- **SWIFTAlliance offering for RMA**
- **Pricing**
- **Advanced RMA topics**
- **Where to find information**

Where to find information

- **www.swift.com/swiftnetphase2**
  - RMA-specific documents
    - RMA Planning Guide
    - RMA Roadshow Presentation
    - RMA Minimum Test Scenarios
    - C2 deadlines
  - SWIFTNet Phase 2 generic documents
    - SWIFTNet Phase 2 Wallchart planner
    - SWIFTNet Phase 2 Detailed Overview
    - SWIFTNet Phase 2 Planning Guide
    - SWIFTNet Phase 2 FAQ

Where to find information

- www.swift.com/support
  - Knowledge Base
- www.swift.com/education
  - BKE to RMA course
- Interface user documentation
- RMA information for SWIFTAlliance users
  - SWIFTAlliance RMA User Guide
  - SWIFTAlliance RMA installation Guide
  - SWIFTAlliance Access/Entry migration to SWIFTNet Phase 2

RMA next steps - summary

- Read the *RMA Planning Guide*

- Test & Train with RMA

- Know your C2 deadline

- Budget and plan resources for 2008

- Train your staff

It's time to prepare !
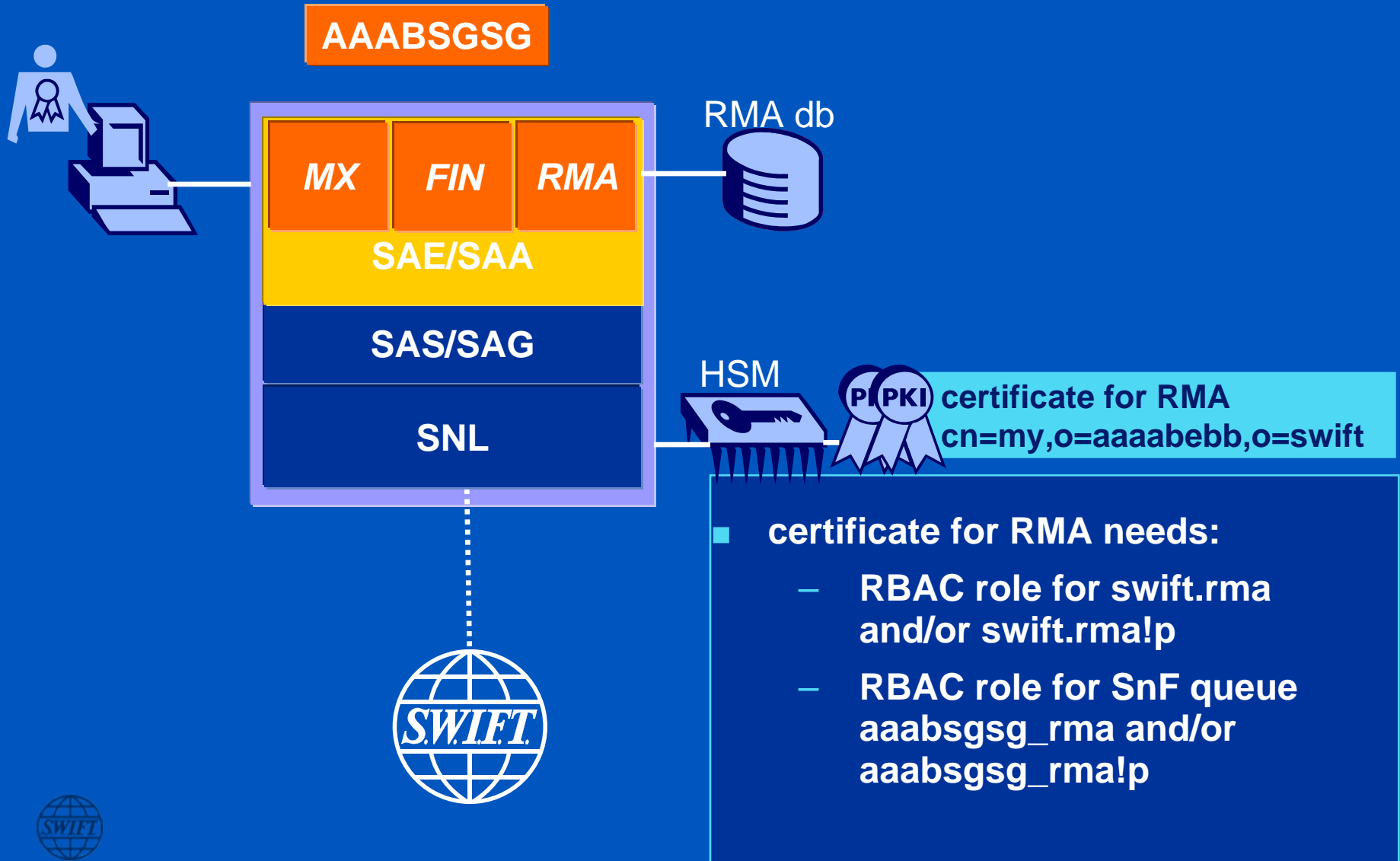
Questions

&**A**nswers

RMA management
local or centralised ?

- Centralised RMA management is possible (i.e. HQ performing RMA on behalf of branches)

- Counterpart is unaware of centralised vs. distributed operations

- Centralised RMA manager requires

  - Certificates for all BIC8s for which it is performing RMA, ie. for the BIC8s of the branches

  - These certificates must have the `swift.rma` RMA role (or `swift.rma!p` RMA role for T&T)

  - These certificates must have the role to read the SnF queues where the RMA messages for the branches arrive
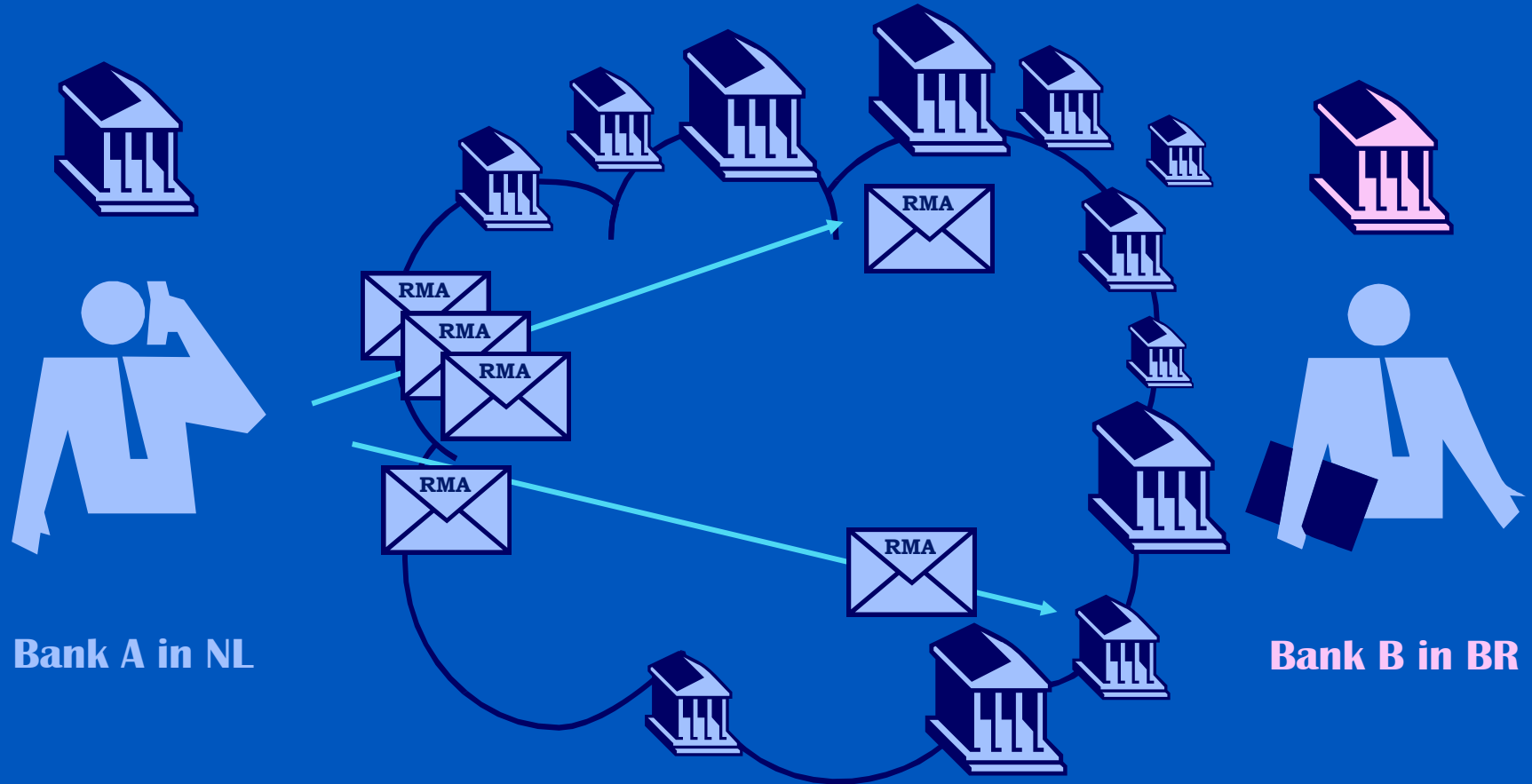
RMA management
Distributed or Local RMA - example

AAABSGSG

MX | FIN | RMA

SAE/SAA

SAS/SAG

SNL

RMA db

HSM

PI PKI **certificate for RMA**
cn=my,o=aaaabebb,o=swift

S.W.I.F.T.

■ **certificate for RMA needs:**

– **RBAC role for swift.rma and/or swift.rma!p**

– **RBAC role for SnF queue aaabsgsg_rma and/or aaabsgsg_rma!p**

RMA management
Managing multiple relations

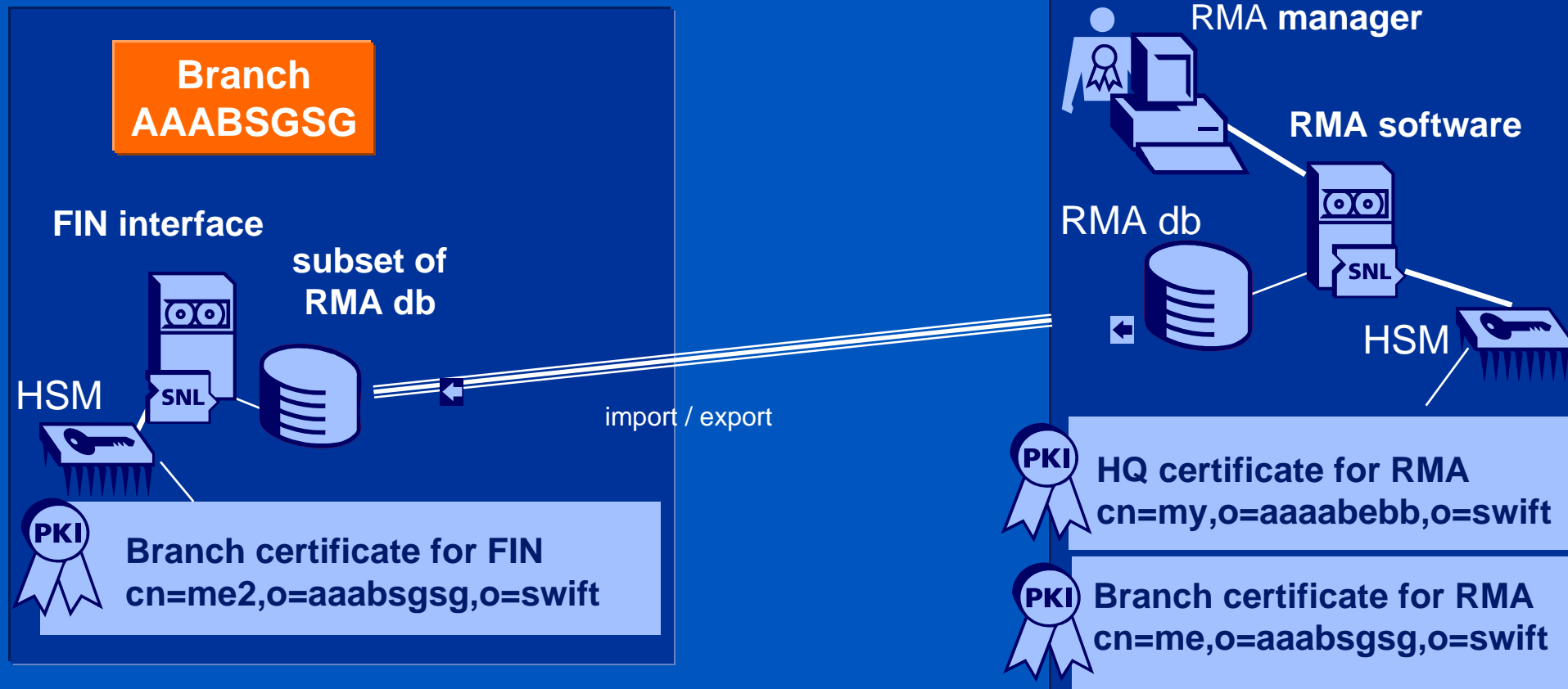**Bank A in NL**

Bank B in BR

As with BKE, you can exchange RMA authorisations for multiple BICs from one single system or location

RMA management
Centralized RMA – How does it work

Headquarters AAAABEBB

RMA **manager**

RMA **software**

RMA db

SNL

HSM

Branch AAABSGSG

FIN interface

subset of RMA db

HSM

SNL

import / export

PKI **HQ certificate for RMA cn=my,o=aaaabebb,o=swift**

PKI **Branch certificate for RMA cn=me,o=aaabsgsg,o=swift**

PKI **Branch certificate for FIN cn=me2,o=aaabsgsg,o=swift**

Branch certificate-for-FIN needs
- RBAC role for `swift.fin`
   (and/or `swift.fin!p` for T&T)

Branch certificate-for-RMA needs
- RBAC role for `swift.rma`
   (and/or `swift.rma!p` for T&T)
- RBAC role for S&F queue `aaabsgsg_rma`
   (and/or `aaabsgsg_rma!p` for T&T)

RMA management
RMA distribution versus BKE distribution

- Standard file format in XML
- At least once per day
  - Import/export can be automated over SWIFTNet FileAct
- Complete file: all authorisations for a set of selected BIC8s
- Partial file: decided at export, not at import
  - all authorisations issued and received since a date
  - all authorisations received for a service for a BIC-8
- Security
  - Each record contains signature (except bootstrapped records)
  - File is signed with LAU key (shared, 128 bits)
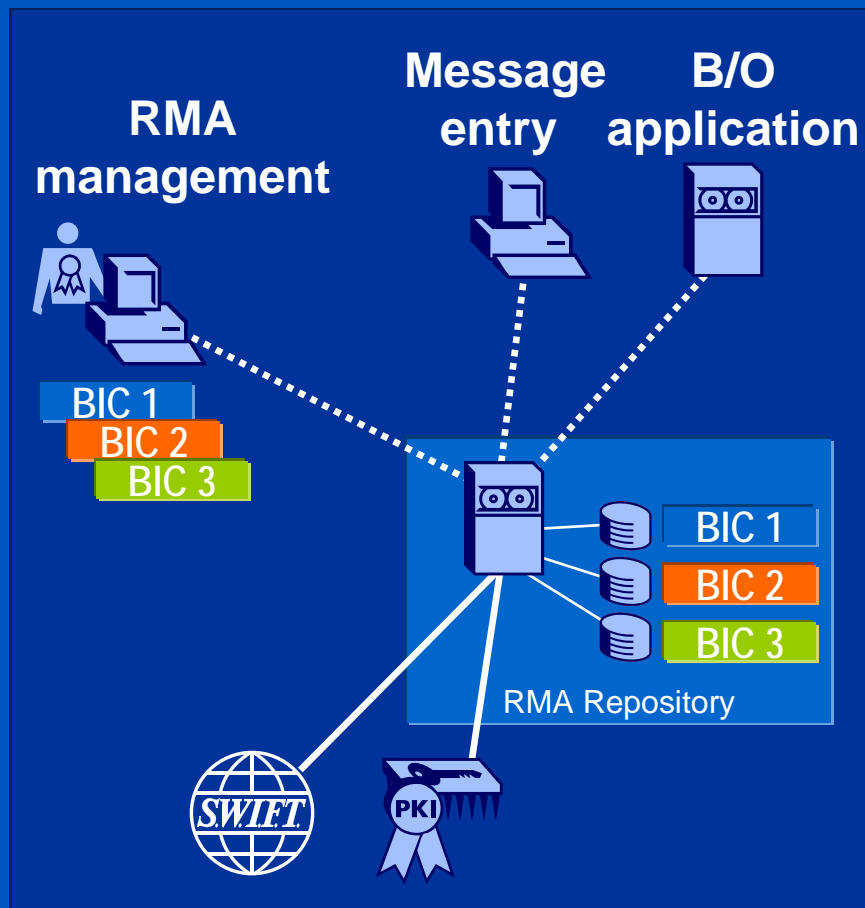 - At import, signature must match, else no import

1) FIN user with a single BIC (one or more Services)

RMA management & message entry

B/O application

RMA Repository
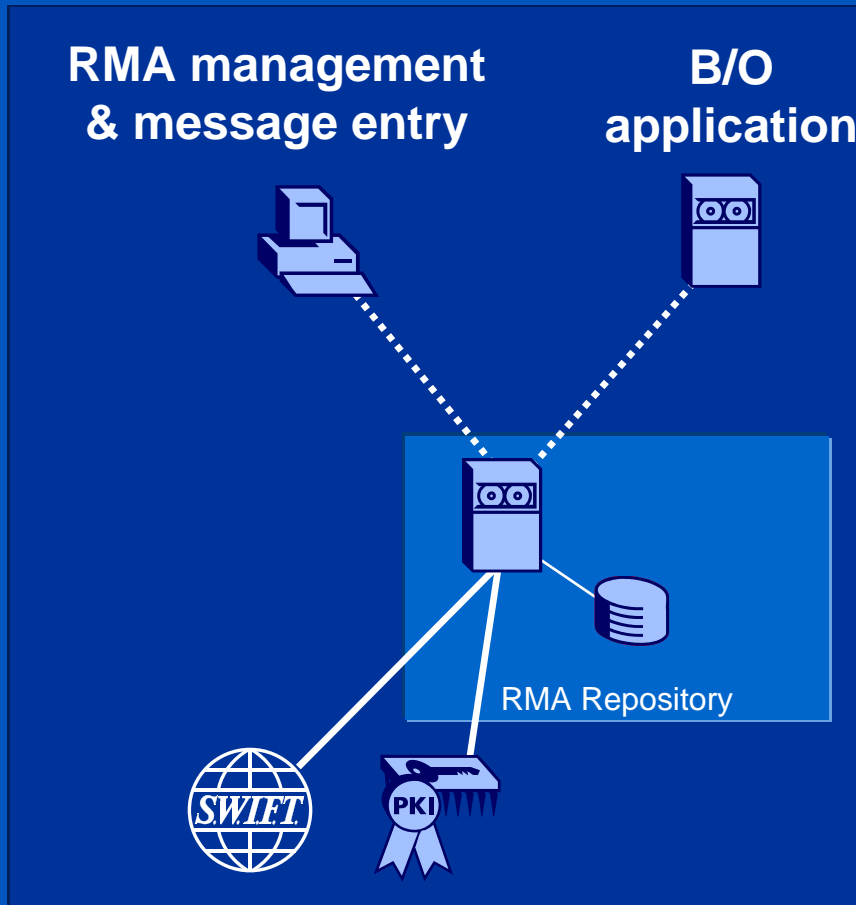
- RMA and message entry interface(s) on same hardware platform
- Single RMA manager

2) FIN user operating multiple destinations

- One RMA manager controls multiple destinations
- Queries/reporting per destination