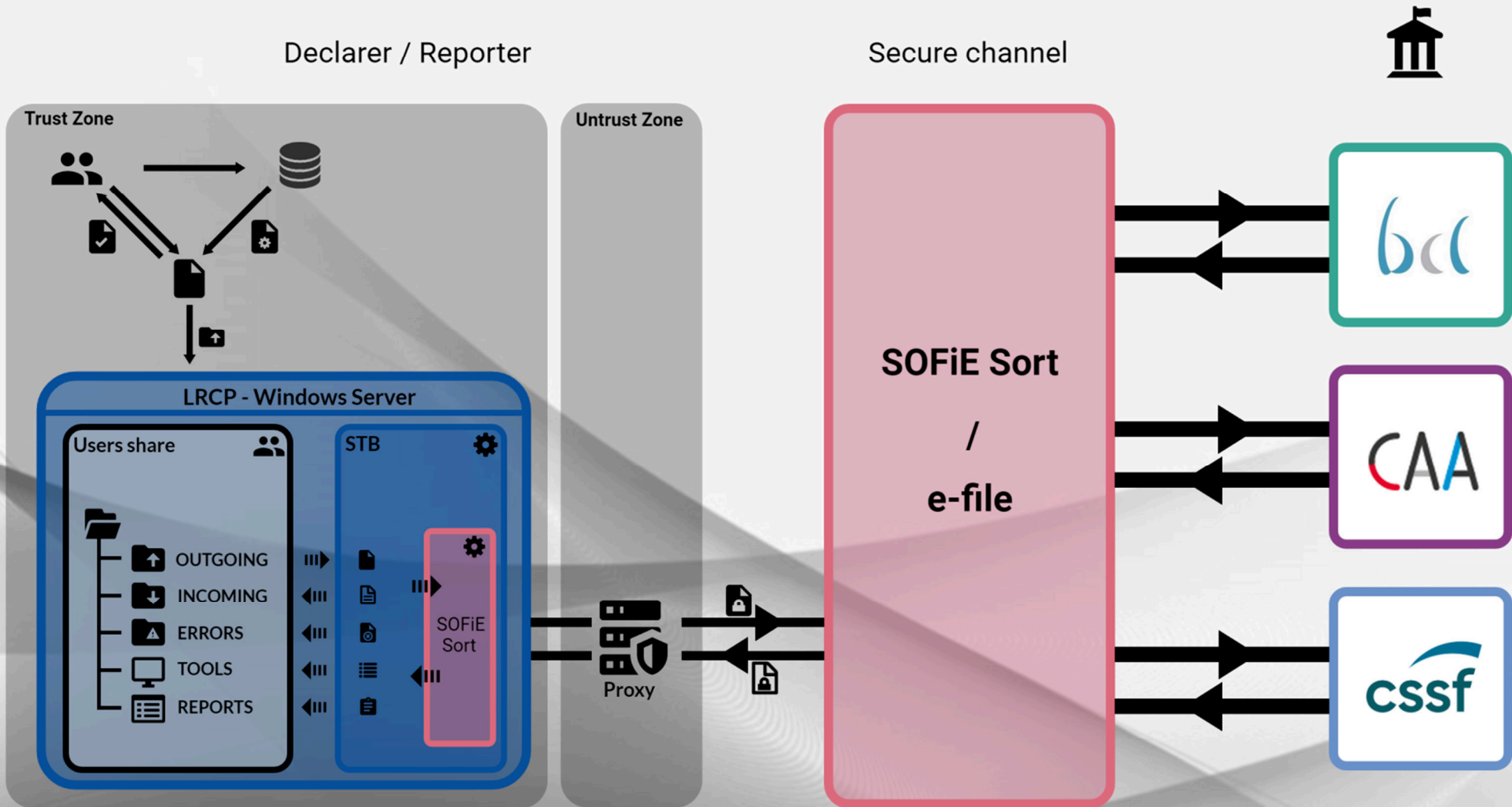


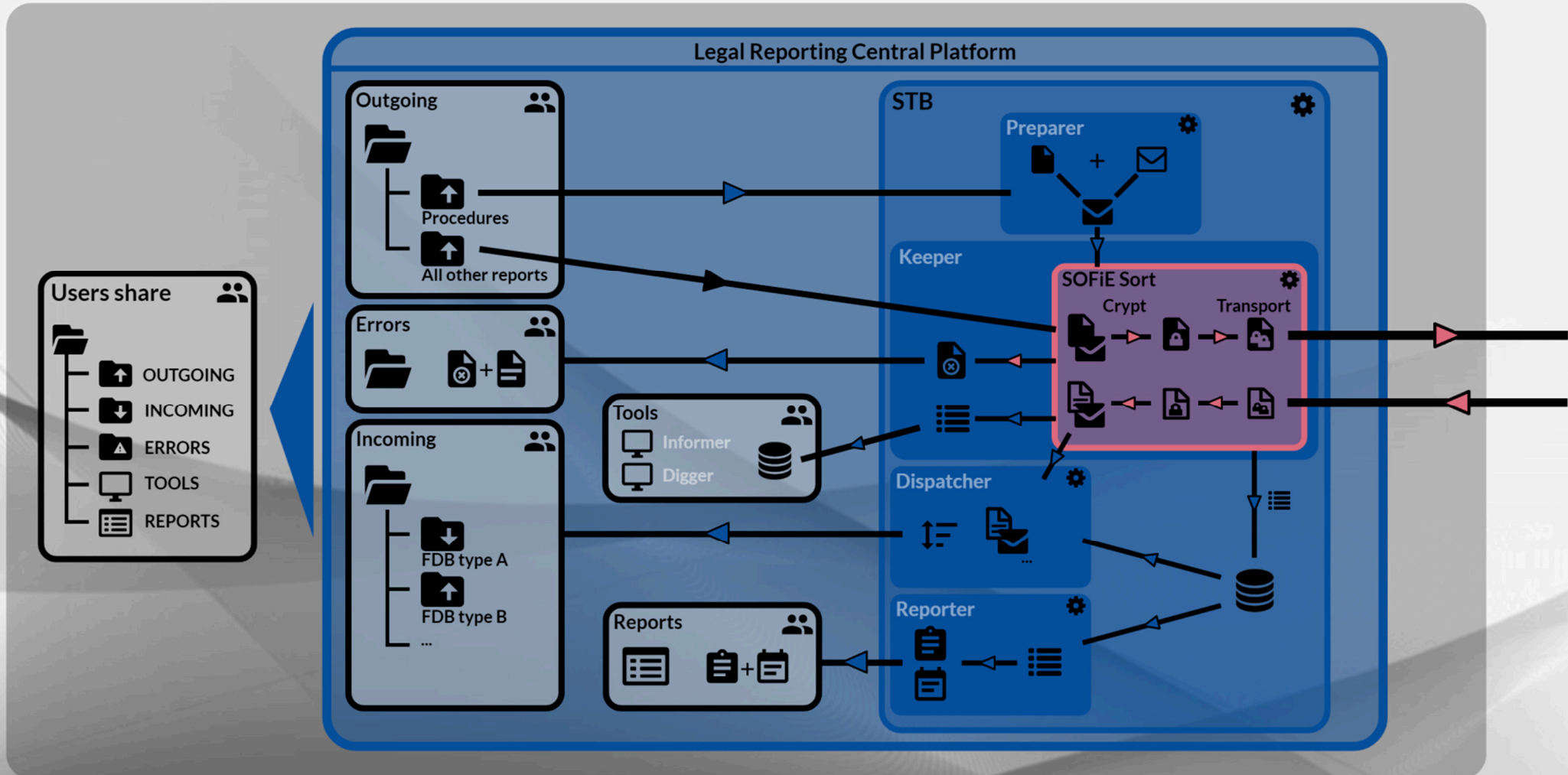
## LRCP - Main view



- |                 |                       |                  |                    |                        |
|-----------------|-----------------------|------------------|--------------------|------------------------|
| Report          | Auto generated report | Feedback         | Report in error    | Reconciliation reports |
| Verified report | Crypted report        | Crypted feedback | Activity meta-data | Automated processing   |

## LRCP - User's view

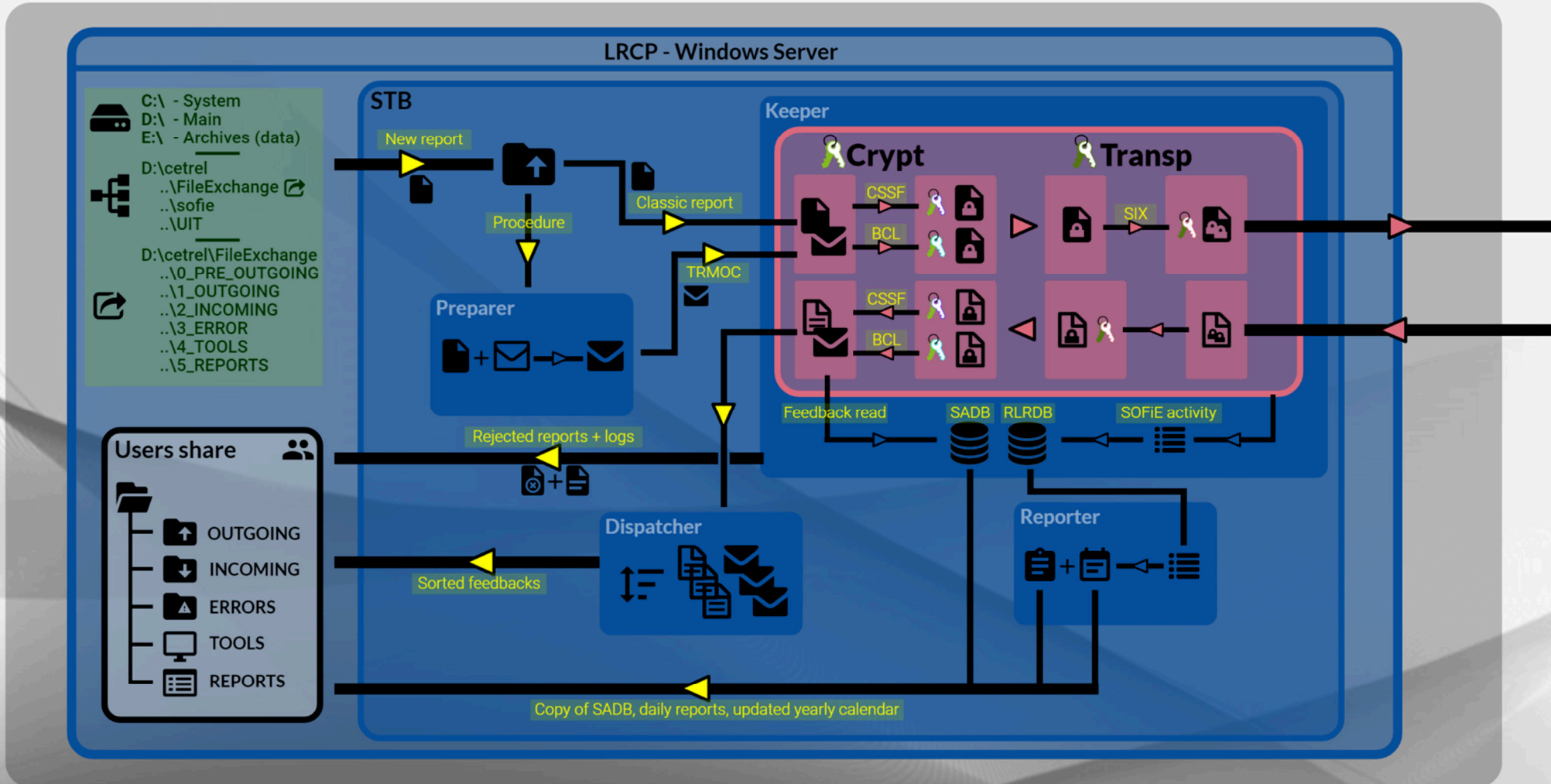
Declarer / Reporter



- |                    |                    |                 |               |                  |                      |
|--------------------|--------------------|-----------------|---------------|------------------|----------------------|
| Report             | Feedback           | Report in error | Reco reports  | STB processing   | User interaction     |
| Procedure (in/out) | Activity meta-data | SOFiE error log | Reco calendar | SOFiE processing | Automated processing |

## LRCP - Workflow

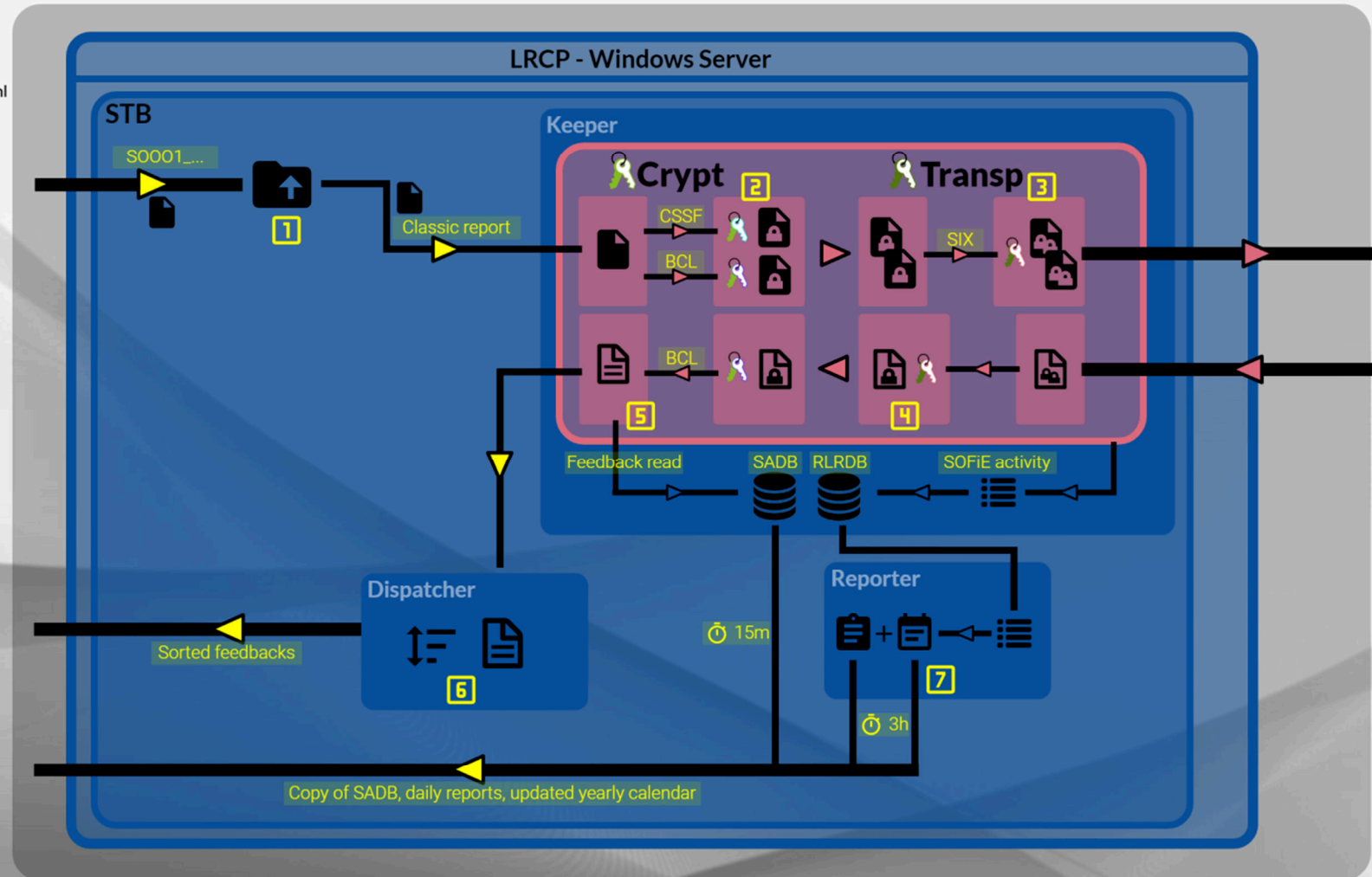
Declarer / Reporter



- |                    |                   |                 |               |                  |              |
|--------------------|-------------------|-----------------|---------------|------------------|--------------|
| Report             | Feedback          | Report in error | Reco reports  | STB processing   | 1x encrypted |
| Procedure (in/out) | STB file handling | SOFiE error log | Reco calendar | SOFiE processing | 2x encrypted |

## LRCP - Example 1

Declarer / Reporter



### Example scope & settings

S0001 type report - Main receiver : BCL - Copy to CSSF  
 Ex. : S0001\_L1\_20210215\_B000000999\_B000000999\_20210516\_001.xml  
 Crypt & Transp execute each 30m.  
 Crypt : 9:00 / 9:30 / 10:00 / ... - Transp : 9:15 / 9:45 / 10:15 / ...  
 Keeper executes after Crypt & Transp, Dispatcher only after Crypt

- 1 9:50 - Report is deposited in the OUTGOING directory
  - From 1 to X directories can be configured, in this example user's outgoing directory = SOFIE input
- 2 10:00 - SOFIE Crypt validates the report (filename, right XML structure) then duplicates the report and encrypts both copies using declarer's private key and regulator's public key. Keeper updates SADB + its copy for users.
- 3 10:15 - SOFIE Transp encrypts a second time both reports using its second private key and Six's common public key then sends both reports to SOFIE server. It also verifies if any feedback is present (not in this case). Keeper updates SADB + its copy for users. It also updates RLADB.
- 4 10:45 - SOFIE Transp downloads one file (SOFI.xxx) from the server then proceed with a first decryption using the Transport's private key and Six's common public key. Keeper updates SADB + its copy for users.
- 5 11:00 - SOFIE Crypt decrypts the feedback received (which is an FDBTECH from BCL) using declarer's private key and BCL's public key. Keeper updates SADB + its copy for users.
- 6 11:00+ - Dispatcher reads then sorts (moves) the feedback in a sub-folder of the INCOMING directory.
  - Dispatcher can optionally perform a backup copy of all the feedbacks received (configurable)
- 7 12:00 - Reporter generates a first reconciled report of the current day + updates the yearly calendar.
  - Reporter is by default scheduled to execute a few times per day and not as many time than other STB tools.

	Public key		Crypt Keypair		BCL Keypair		Six Keypair	Encryption or decryption using Crypt or Transport private key with destinationary public key			
	Private key		Transp Keypair		CSSF Keypair				For CSSF (crypt)	For BCL (crypt)	For Six (transp)



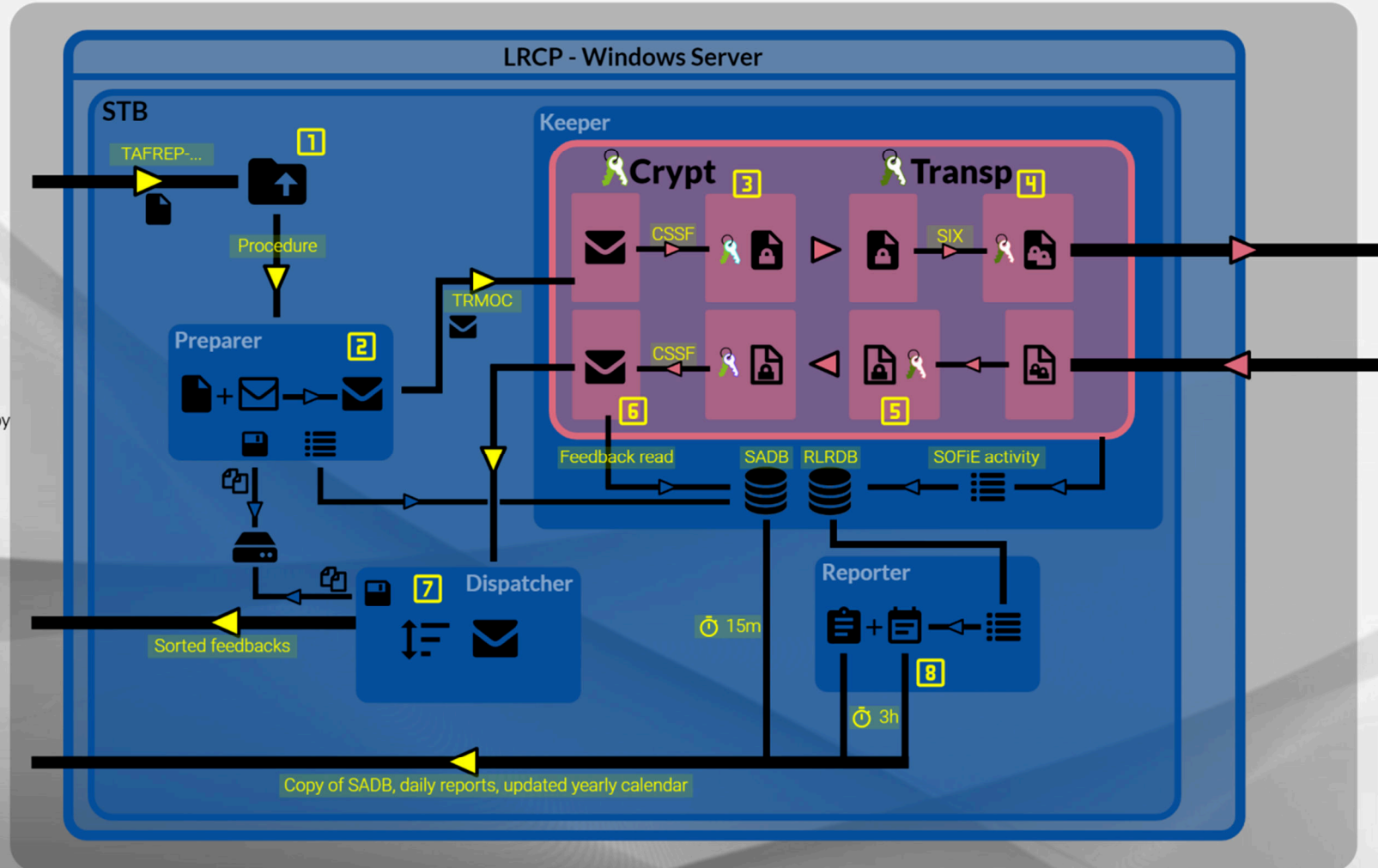
## LRCP - Example 2

Declarer / Reporter

### Example scope & settings

TAFREP - MIFIR type report - Receiver : CSSF (ESMA)  
 Ex. : TAFREP-B00000999-2021-06-01-012345.xml  
 Crypt & Transp execute each 30m. Preparer executes before Crypt  
 Preparer & Crypt : 9:00 / 9:30 / 10:00 / ... - Transp : 9:15 / 9:45 / 10:15 / ...  
 Keeper executes after Crypt & Transp, Dispatcher only after Crypt

- 1 9:50 - Report is deposited in a specific and dedicated OUTGOING directory which will be scanned by Preparer.
- 2 10:00 - Preparer validates the filename of the report then creates a procedure based on the source directory and the profile configured to it. It copies the file to SOFiE Crypt, logs meta-data and performs a backup of the procedure.  
 1 Preparer also verifies TAF counter & duplicates reports.
- 3 10:00+ - SOFiE Crypt validates the procedure (filename & right) then encrypts it (TRMOC => TRMIC) using CSSF public key. Keeper updates SADB + its copy for users.
- 4 10:15 - SOFiE Transp encrypts a second time the procedure then send it to SOFiE server. Keeper updates SADB + its copy for users. It also updates LRDB based on Preparer data.
- 5 10:45 - SOFiE Transp downloads one or several files from the server then decrypts them (SOFI => TRMID). Keeper updates SADB + its copy for users.
- 6 11:00 - SOFiE Crypt decrypts the TRMID to TRMOD using CSSF's private key. Keeper reads the TRMOD and updates SADB & LRDB. It also update the SADB for users.
- 7 11:00+ - Dispatcher reads then sorts (moves) the feedback in a sub-folder of the INCOMING directory. It performs a backup copy of the feedback procedure.
- 8 12:00 - Reporter generates a first reconciled report of the current day + updates the yearly calendar.  
 1 A minimum of 3 TRMOD will be returned for one TAFREP, final reconciliation can take up to 7 days.



	Public key		Crypt Keypair		BCL Keypair	Encryption or decryption using Crypt or Transport private key with destinationary public key			
	Private key		Transp Keypair		CSSF Keypair		Six Keypair		
					For CSSF (crypt)		For BCL (crypt)		For Six (transp)

## LRCP - Error handling

Declarer / Reporter

- 1 Preparer will send an email if a problem occurs. A separated email adresse can be configured for Picker sub-module
- 2 Crypt: report's validation or 1st encryption error.  
 ❶ This type of error represents the most common SOFiE error : bad filename or bad file structure.
- 3 Transp : 2nd encryption error (rare)
- 4 Transp : error during upload or download of crypted report (rare : line cut or SOFiE server problem)
- 5 Transp : 1st decryption error (rare)
- 6 Transp : 2nd decryption error (rare)
- 7 Crypt : 2nd decryption error (rare)
- 8 Keeper : In case of a SOFiE error Keeper moves the report in error + its dedicated log to user's share and sends a mail to a list of email addresses.  
 In case of a Keeper error, it writes a specific ERROR line in its log.

