



TIPS Message Specifications Gap Analysis

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1. Document scope

This document aim at describing the differences between TIPS messages implementation and EPC guidelines.

Reference documents are :

- EPC122-16 SCT Inst Interbank IG 2017 V1.2 and related XSD files
- TIPS UDFS 1.0

Where applicable, every difference is assigned a category to describe our understanding and suggest possible follow up methods for aligning the design of the Xml schema definitions.

The list of identified categories is as follows:

- Category 1 : Gap on SCT Inst schema
- Category 2 : Gap on TIPS schema
- Category 3 : EPC clarification needed

For items which do not fall on any of these categories, thus not requiring any action, "n/a" is put in the "Category" column.

2. Charset

EPC recommendations on charset (chapter 1.4), mandate banks to support Latin charset leaving the choice to adopt different charsets upon agreement within users' community.

Following the TIPS Contact group written procedure decision, TIPS supports the UTF-8 charset as far as messages described in the EPC Interbank document are concerned.

On top of this, EPC requires specific rules on field containing references, identifications and identifiers.

Actual text in chapter 1.4 says:

"References, identifications and identifiers must respect the following:

- o Content is restricted to the Latin character set as defined above*
- o Content must not start or end with a '/'*
- o Content must not contain '//s"*

Following these requirements, for such fields TIPS implementation has been performed by applying a specific regular expression pattern in the appropriate Xml Schema Definition data types.

The pattern is:

```
<xs:pattern value="[0-9a-zA-Z1-1?:\(\)\.,'+ ]/(?([0-9a-zA-Z1-1?:\(\)\.,'+ ]/?)*[0-9a-zA-Z1-1?:\(\)\.,'+ ]+)" />
```

Errors due to not compliance to the pattern are returned to the sender with an *admi.007* message out of ESMIG technical validation.

3. Message content

3.1. pacs.008

Field name	Xpath	TIPS	EPC	Comment	Category
InstructingAgent/BIC	FIToFICstmrCdtTrf/GrpHdr /InstgAgt/FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1
InstructedAgent/BIC	FIToFICstmrCdtTrf/GrpHdr /InstdAgt/FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1
DebtorAgent/BIC	FIToFICstmrCdtTrf/CdtTrf TxInf/DbtrAgt/FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1
CreditorAgent/BIC	FIToFICstmrCdtTrf/CdtTrf TxInf/CdtrAgt/FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1
Purpose/Proprietary	FIToFICstmrCdtTrf/CdtTrf TxInf/Purp/Prtry	Included in the schema	Not included in the schema	Field must be dropped from TIPS schema.	2

3.1. pacs.002

Field name	Xpath	TIPS	EPC	Comment	Category
InstructingAgent/BIC	FItoFIPmtStsRpt/GrpHdr/InstgAgt/FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1
InstructedAgent/BIC	FItoFIPmtStsRpt/GrpHdr/InstdAgt/FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1
DebtorAgent/BIC	FItoFIPmtStsRpt/TxInfAndSts/OrgnITxRef/DbtrAgt/FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1
Additional Information	FItoFIPmtStsRpt/TxInfAndSts/StsRsnInf/AddtlInf	Included in the schema.	Not included in the schema.	Element should be dropped from TIPS schema as not foreseen in the Implementation Guideline.	2
Interbank Settlement Amount	FItoFIPmtStsRpt/TxInfAndSts/OrgnITxRef/IntrBkSttlmAmt	Included in the schema.	Not included in the schema.	Element should be dropped from TIPS schema as not foreseen in the Implementation Guideline.	2
CreditorAgent	FItoFIPmtStsRpt/TxInfAndSts/OrgnITxRef/CdtrAgt	Included in the schema.	Not included in the schema.	Element should be dropped from TIPS schema as not foreseen in the Implementation Guideline.	2

3.1. pacs.028

Field name	Xpath	TIPS	EPC	Comment	Category
InstructingAgent/BICFI	FItoFIPmtStsReq/GrpHdr/InstgAgt/FinInstnId/BICFI	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1

InstructedAgent/BICFI	FIToFIPmtStsReq/GrpHdr/InstdAgt/FinInstnId/BICFI	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1
TransactionInformation/OriginalGroupInformation	FIToFIPmtStsReq/TxInf/OriginalGrpInf	Not included in the schema	Included in the schema.	This block and contained elements are marked in white in the Implementation Guideline. This means that must not be used (unless agreed) and then need to be dropped from EPC Xml Schema Definition.	1
PaymentTypeInformation/InstructionPriority	FIToFIPmtStsReq/TxInf/OriginalTxRef/PmtTpInf/InstructionPriority	Not included in the schema	Included in the schema.	The EPC definition for the containing block PaymentTypeInformation, includes attributes AT-40 and AT-45. This means that only ServiceLevel, LocalInstrumentType and CategoryPurpose shall be included. This field has been erroneously included in the EPC schema and must be dropped.	1
PaymentTypeInformation/ClearingChannel	FIToFIPmtStsReq/TxInf/OriginalTxRef/PmtTpInf/ClearingChannel	Not included in the schema	Included in the schema.	The EPC definition for the containing block PaymentTypeInformation, includes attributes AT-40 and AT-45. This means that only ServiceLevel, LocalInstrumentType and CategoryPurpose shall be included. This field has been erroneously included in the EPC schema and must be dropped.	1
PaymentTypeInformation/SequenceType	FIToFIPmtStsReq/TxInf/OriginalTxRef/PmtTpInf/SequenceType	Not included in the schema	Included in the schema.	The EPC definition for the containing block PaymentTypeInformation, includes attributes AT-40 and AT-45. This means that only ServiceLevel, LocalInstrumentType and CategoryPurpose shall be included. This field has been erroneously included in the EPC schema and must	1

				be dropped.	
DebtorAgent	FIToFIPmtStsReq/TxInf/Or gnlTxRef/DbtrAgt	Includes only FinancialInstitution Identification	Includes both FinancialInstitutionIDe ntification and BranchIdentification	EPC describes this field with "AT-06 The BIC code of the Originator Bank". In the pacs.008 distributed by EPC, the field has been designed as it is in TIPS, therefore allowing only FinancialInstitutionIDentification. The BranchIdentification must be dropped from this message to align.	1

3.1. camt.056

Field name	Xpath	TIPS	EPC	Comment	Category
Assigner	FIToFIPmtCxlReq/Assgnmt /Assgnr	Limited to Agent/BIC	Includes several options	TIPS is compliant to specs as only deals with Banks and EPC specifies that the field must be "Limited to BIC to identify a bank or CSM". Since messages are used in bank-to- bank mode also, no change is required in TIPS and EPC implementations.	n/a
Assignee	FIToFIPmtCxlReq/Assgnmt /Assgne	Limited to Agent/BIC	Includes several options	TIPS is compliant to specs as only deals with Banks and EPC specifies that the field must be "Limited to BIC to identify a bank or CSM". Since messages are used in bank-to- bank mode also, no change is required in TIPS and EPC implementations.	n/a
Underlying	FIToFIPmtCxlReq/Undrlyg	Cardinality 1..1	Cardinality 1..n	TIPS allows only one transaction to be cancelled for message. No change is required.	n/a
TransactionInformation	FIToFIPmtCxlReq/Undrlyg/ TxInf	Cardinality 1..1	Cardinality 1..n	TIPS allows only one transaction to be cancelled for message. No change is required.	n/a
Originator/PrivateIdentif	FIToFIPmtCxlReq/Undrlyg/ TxInf/CxlRsnInf/Orgtr/Id/P	Included in the	Not included in the	According to EPC Interbank guideline, the Originator can be identified with	1

ication	rvtId	schema.	schema	the PrivateIdentification when it is a non financial institution. EPC should update the schema.	
SettlementInformation	FIToFIPmtCxlReq/Undrlyg/ TxInf/OrgnlTxRef/SttlmInf	Includes Reimbursement information.	Does not include Reimbursement information.	EPC Interbank document does not specify that Reimbursement information must be dropped, namely: - InstgRmbrsmntAgt - InstgRmbrsmntAgtAcct - InstdRmbrsmntAgt - InstdRmbrsmntAgtAcct - ThrdRmbrsmntAgt - ThrdRmbrsmntAgtAcct This shall be checked by EPC to clarify.	3
PaymentTypeINformation	FIToFIPmtCxlReq/Undrlyg/ TxInf/OrgnlTxRef/PmtTpInf	All the elemens are included in the schema	Only ServiceLevel, LocalInstrument and CategoryPupose	The EPC definition for the containing block PaymentTypeInformation, includes attributes AT-40 and AT-45. This means that only ServiceLevel, LocalInstrumentType and CategoryPurpose shall be included. This field has been erroneously included in the TIPS schema and must be dropped.	2
RemittanceInformation	FIToFIPmtCxlReq/Undrlyg/ TxInf/OrgnlTxRef/RmtInf	Different implementation.	Different implementation.	There is no indication on how the elements nested in this component must be considered. Reference to AT-05 only says that either Structured or Unstructured can be used. To be on the safe side, TIPS does not apply any restriction.	3
UltimateDebtor/PostalAddress	FIToFIPmtCxlReq/Undrlyg/ TxInf/OrgnlTxRef/UltmtDbtr/PstlAdr	Included in the schema.	Not included in the schema.	Element should be dropped from TIPS schema.	2
DebtorAgent/BIC	FIToFIPmtCxlReq/Undrlyg/ TxInf/OrgnlTxRef/DbtrAgt/ FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block.	1

				A block cannot be empty.	
CreditorAgent/BIC	FIToFIPmtCxlReq/Undrlyg/ TxInf/OrgnlTxRef/CdtrAgt/ FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1

3.1. camt.029

Field name	Xpath	TIPS	EPC	Comment	Category
Assigner	RsltnOfInvstgtn/Assgnmt/ Assgnr	Limited to Agent/BIC	Includes several options	TIPS is compliant to specs as only deals with Banks and EPC specifies that the field must be "Limited to BIC to identify a bank or CSM". Since messages are used in bank-to-bank mode also, no change is required in TIPS and EPC implementations.	n/a
Assignee	RsltnOfInvstgtn/Assgnmt/ Assgne	Limited to Agent/BIC	Includes several options	TIPS is compliant to specs as only deals with Banks and EPC specifies that the field must be "Limited to BIC to identify a bank or CSM". Since messages are used in bank-to-bank mode also, no change is required in TIPS and EPC implementations.	n/a
SettlementInformation	RsltnOfInvstgtn/CxlDtls/Tx InfAndSts/OrgnlTxRef/Stl mInf	Includes Reimbursement information.	Does not include Reimbursement information.	EPC Interbank document does not specify that Reimbursement information must be dropped, namely: - InstgRmbrsmntAgt - InstgRmbrsmntAgtAcct - InstdRmbrsmntAgt - InstdRmbrsmntAgtAcct	3

				<ul style="list-style-type: none"> - ThrdRmbrsmntAgt - ThrdRmbrsmntAgtAcct <p>This shall be checked by EPC to clarify.</p>	
PaymentTypeInformation	RsltnOfInvstgtn/CxIDtls/Tx InfAndSts/OrgnITxRef/Pmt TpInf	All the elemens are included in the schema	Only ServiceLevel, LocalInstrument and CategoryPupose	The EPC definition for the containing block PaymentTypeInformation, includes attributes AT-40 and AT-45. This means that only ServiceLevel, LocalInstrumentType and CategoryPurpose shall be included. This field has been erroneously included in the TIPS schema and must be dropped.	2
RemittanceInformation	RsltnOfInvstgtn/CxIDtls/Tx InfAndSts/OrgnITxRef/Rmt Inf	Different implementation.	Different implementation.	There is no indication on how the elements nested in this component must be considered. Reference to AT-05 only says that either Structured or Unstructured can be used. To be on the safe side, TIPS does not apply any restriction.	3
UltimateDebtor/PostalAddress	RsltnOfInvstgtn/CxIDtls/Tx InfAndSts/OrgnITxRef/Ult mtDbtr/PstlAdr	Included in the schema.	Not included in the schema.	Element should be dropped from TIPS schema.	2
DebtorAgent/BIC	RsltnOfInvstgtn/CxIDtls/Tx InfAndSts/OrgnITxRef/Dbt rAgt/FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1
CreditorAgent/BIC	RsltnOfInvstgtn/CxIDtls/Tx InfAndSts/OrgnITxRef/Cdtr Agt/FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1

3.1. pacs.004

Field name	Xpath	TIPS	EPC	Comment	Category
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InstructingAgent/BIC	PmtRtr/GrpHdr/InstgAgt/FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1
InstructedAgent/BIC	PmtRtr/GrpHdr/InstdAgt/FinInstnId/BIC	Set as mandatory	Set as optional	EPC implementation is not correct as the field is the only element of the FinancialInstitutionIdentification block. A block cannot be empty.	1
Originator/PostalAddress	PmtRtr/TxInf/RtrRsnInf/Orgtr/PstlAdr	Included in the schema	Not included in the schema.	Element should not be part of the schema and dropped from TIPS implementation.	2
PaymentTypeInformation	PmtRtr/TxInf/OrgnITxRef/PmtTpInf	All the elements are included in the schema	Only ServiceLevel, LocalInstrument and CategoryPurpose	The EPC definition for the containing block PaymentTypeInformation, includes attributes AT-40 and AT-45. This means that only ServiceLevel, LocalInstrumentType and CategoryPurpose shall be included. This field has been erroneously included in the TIPS schema and must be dropped.	2
RemittanceInformation	PmtRtr/TxInf/OrgnITxRef/RmtInf	Different implementation.	Different implementation.	There is no indication on how the elements nested in this component must be considered. Reference to AT-05 only says that either Structured or Unstructured can be used. To be on the safe side, TIPS does not apply any restriction.	3

4. Categories and way forward

For every identified category assigned to each deviation, the following way forward could be put in place.

- **Category 1** : Gap on SCT Inst schema
Remarks should be sent to EPC/SWIFT for analysis.
EPC/SWIFT are in charge to provide with corrected XSD.

Corrections may not be deemed necessary as XSD are provided with a disclaimer stating that they are published for information purpose only and shall not be used in production environments.

- **Category 2** : Gap on TIPS schema

If deemed necessary by the TIPS Contact Group, a Change Request should be raised to close all the gaps.

Impact in TIPS seems low because affected fields are not part of the core information needed for settlement.

- **Category 3** : EPC clarification needed

Remarks should be sent in terms of question for EPC/SWIFT to clarify.

After the clarification is provided, those items will fall either in category A or B and follow that specific way forwards.