



## **EECS Rules Fact Sheet 18**

### **TRANSFER ERROR CODES**

This Fact Sheet sets out the error codes to be used when rejecting a transfer on import.

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Document Reference	AIB-EECS-FS018
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Reason for Issue	Updated references and descriptions, removal of obsolete code
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## EECS RULES FACT SHEET 18 TRANSFER ERROR CODES



Version	Date and Author	Description
V5	5 <sup>th</sup> December 2014 PH Moody	<ul style="list-style-type: none"><li>• Removal of a doubled code: 67 (covered by code 36) Removal of 16 (covered by 56 and 57)</li><li>• Removal of 55 (covered by 74 and 75)</li><li>• Clarify description: 56, 57, 90</li><li>• Clarify Check: 38, 39, 40, 41</li><li>• New error codes sent by the hub: 96, 97</li></ul>
V6	23 <sup>rd</sup> April 2015 Marika Timlin	<ul style="list-style-type: none"><li>• Add the version history table</li><li>• 96, 97: Adding notification about the current status of the HUB implementation of those Error codes</li><li>• Updating the NOTE in the end of the document for identifying the transfers where Hub sent NAK</li><li>• 79: removed text "(check should not be made during transition period)" as the transition period is over</li><li>• Error type change from Message to</li></ul>
V7	Marika Timlin Annie Desaulniers	<ul style="list-style-type: none"><li>• Move the error codes: 12, 19, 20, 21, 22, 23, 27, 28, 29, 30, 31, 37, 40, 46, 47, 48, 49, 50, 71, 80 to obsolete table</li><li>• Move the error codes: 52, 53, 94 to answer error code table</li><li>• Clarified description: 06, 07 (only for registry validation)</li><li>• Corrected spelling mistakes and other small polishing</li><li>• New codes: 13, 15, 51, 54</li><li>• Modified codes: 10 and 11</li><li>• Added validation order in HUB (valid after 2015-12-10)</li></ul>
V8	March 2018 Marika Timlin Annie Desaulniers	<ul style="list-style-type: none"><li>• The changes are now with track and change for WGS to discuss. Further the approved changes should be listed here</li><li>• Removal of obsolete codes</li><li>• Addition of references</li><li>• Clarification of text description</li><li>• Limitation to the check from error code 65 to two years by date of issue</li></ul>



## EECS RULES FACT SHEET 18 TRANSFER ERROR CODES



### Error code list

**Note:** The column **Sender** shows the party who takes responsibility of the check and error sending. Registries are allowed (but not obliged) to send error codes that are sent by the HUB. When the column is 'Registry' and coloured yellow, the registry is obliged to implement a check against the related error when applicable. In addition a check can be recommended but not mandatory for registries when it is written Registry (recommended) and the line is coloured green.

Error code	HUB Validation order	Description	Check	Reference to: SD03 HubCom, EECS Rules & Fact sheet (FS)	Sender: HUB/ Registry/ Registry (recommended)
01	1	Not correctly signed	Encryption/signature	SD03: C2	<b>HUB</b>
02	2	Not correctly encrypted	Encryption/signature	SD03: C2	<b>HUB</b>
03	3	File was not signed and encrypted	Encryption/signature	SD03: C2	<b>HUB</b>
04	4	File was not signed	Encryption/signature	SD03: C2	<b>HUB</b>
05	5	File was not encrypted	Encryption/signature	SD03: C2	<b>HUB</b>
06	10	Sending registry is unknown	Check of sending registry GS1 (FromRegistry).	SD03: B5.3.3	<b>HUB</b>
08	18	Sender in message is not the same as sender in XML	Web service: Sender identified by the client PKI certificate has to be the same as the attribute FromRegistry in the message. E-mail: Sender identified by the sender e-mail address in registry configurations in HUB database has to be same as the attribute FromRegistry in the message.	SD03: B5.3.3	<b>HUB</b>
09	8	XML does not validate against XSD	The message (XML) must be valid against given and supported schema (XSD).	SD03: B3.2	<b>HUB</b>
10	9	Message id already present	Checking the uniqueness of the given MessageID.	SD03: B5.3.2	<b>HUB/ Registry (recommended)</b>
13	8	Error in the schema transformation	If transformation between sending and receiving registry schemas is not possible	SD03: B5.2.2	<b>HUB</b>
11	8	Number of certificates bundles exceed the maximum limit	Number of certificate bundles is over the limit set by the AIB Hub Superuser.	SD03: 2.3.5.4	<b>HUB</b>



## EECS RULES FACT SHEET 18 TRANSFER ERROR CODES



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14	6	Incomplete message (raised when the file is empty)	XML file	SD03: B3	<b>HUB</b>
15	28	Purpose is not valid	Validate that the Purpose given is found from AIB Hub master data and that it is valid at the moment of the transfer (checked against MessageTransmissionTime).	SD03: B5.5.2	<b>HUB</b>
17	19	Message transmission time is incorrect	Validate the format of the transmission time	SD03: B5.3.1	<b>HUB</b>
18	20	Message ID is not correct (15 digits)	Validate that the given MessageID is in correct format.	SD03: B5.3.2	<b>HUB</b>
25	22	SendingAccountID is not a valid code	Validate that the SendingAccountID has valid type.	SD03: B5.4.1	<b>HUB</b>
26	23	ReceivingAccountID is not a valid code	Validate that the SendingAccountID has valid type.	SD03: B5.4.2	<b>HUB</b>
32	24	StartCertificateNumber is greater than EndCertificateNumber	StartCertificateNumber <= EndCertificateNumber	SD03: B5.5.5, B5.5.6	<b>HUB</b>
34	25	IB: Issuing Body ID, is not valid	Validate that the IssuingBody is given in correct format	SD03: B5.5.7	<b>HUB</b>
35	26	Issuing body ID is unknown	Validate that the given IssuingBody is found from AIB Hub master data and that it is valid at the moment of the transfer (Fact Sheet 4)	FS-04 SD03: B5.5.7	<b>HUB</b>
36	27	Production Device ID is not a valid GS1 code	Validate that the given GSRN is correct format.	SD03: B5.5.11	<b>HUB</b>
38	28	Type of installation is not valid	Validate that the given TypeOfInstallation is found from Technology codes Master data of AIB Hub (Fact Sheet 05).	FS-05 SD03: B5.5.19	<b>HUB</b>
39	15	Energy source is not valid	Validate that the given EnergySource is found from Energy source codes Master data of AIB Hub (Fact Sheet 05).	SD03: B5.5.20	<b>HUB</b>
41	29	Code in "EarmarkFlag" is unknown	Validate that the given EarmarkFlag is found from the Earmark master data of AIB Hub (Fact Sheet 03)	FS-03 SD03: B5.5.16	<b>HUB</b>



## EECS RULES FACT SHEET 18 TRANSFER ERROR CODES



Error code	HUB Validation order	Description	Check	Reference to: SD03 HubCom, EECS Rules & Fact sheet (FS)	Sender: HUB/ Registry/ Registry (recommended)
42	30	Production Device Capacity in kWh is not valid	Validate that the value of elements ElectricalCapacity, MechanicalCapacity or ThermalCapacity will be a digit with maximum of 3 numbers behind decimal point and with "." as decimal point and maximum of 11 characters length decimal point included.	SD03: B5.5.13	<b>HUB</b>
43	31	Production period is not valid	Validate that the period is given in correct format and that the associated Issuing body is allowed to issue for the given production period (check against AIB Hub master data and Fact Sheet 4).	FS-04 SD03: B5.5.15	<b>HUB</b>
44	32	Production period start date is after end date	Validate that the ProductionPeriod enddate >= startdate	SD03: B5.5.15	<b>HUB</b>
45	33	UseOfHeat is unknown	Validate that the given code is found from the master data of AIB Hub (Fact Sheet 11).	FS-11 SD03: B5.5.22	<b>HUB</b>
56	-	SendingAccountID is unknown in receiving registry	Receiving registry should validate that the given sending account holder (SendingAccountID) is a valid account holder.	SD03: B5.4.1	Registry (recommended)
57	-	ReceivingAccountID is unknown in receiving registry	Receiving registry validates that the given receiving account holder (ReceivingAccountID) is valid in their registry.	SD03: B5.4.2	<b>Registry</b>
64	34	Number of Certificates is invalid	Validate that the given number of the certificates (NumberOfCertificates) corresponds to the Sum of ((EndCertificateNumber - StartCertificateNumber) + 1) for all the bundles.	B5.4.3, B5.5.5, B5.5.6	<b>HUB</b>



## EECS RULES FACT SHEET 18 TRANSFER ERROR CODES



Error code	HUB Validation order	Description	Check	Reference to: SD03 HubCom, EECS Rules & Fact sheet (FS)	Sender: HUB/ Registry/ Registry (recommended)
65	-	Certificate number already exists in receiving registry	Registry must validate that there are no duplicates within each incoming transfer. Registry must validate that the incoming certificates numbers are not found in their registry with a date of issue younger than two years and are Active, Expired, Cancelled or Waiting for AK. Furthermore, not only the first and last certificate number should be checked, but also the numbers in between. AIB Hub validates whether there are any duplicates within each incoming transfer.	SD03: B5.5.5, B5.5.6	<b>HUB/ Registry</b>
68	35	Certificate issue date is not in the past	Certificate issue date (IssuedDate) has to be less than the date from the MessageTransmissionTime.	SD03: B5.5.10	<b>HUB</b>
74	36	Product status is not valid	Validate that the ProductStatus is valid and found from the Master data of the AIB Hub. Validity is checked against a date from the MessageTransmissionTime. Multiple nodes are allowed. In addition it is validated that each of the certificate bundles have to have at least one standalone product status (GO or "ICS:EECSDISCLOSURE") (Fact Sheet 17)	FS-17 SD03: B5.5.3	<b>HUB</b>
75	16	Product type is not valid	Validate that the given ProductType is found from the master data of the AIB Hub and that it is valid at the time of the transfer. Multiple nodes are allowed.	SD03: B5.5.4	<b>HUB</b>
76	37	Country of issue is not valid	Validate that the given CountryOfIssue is found from the master data of the AIB.	SD03: B5.5.9	<b>HUB</b>



## EECS RULES FACT SHEET 18 TRANSFER ERROR CODES



Error code	HUB Validation order	Description	Check	Reference to: SD03 HubCom, EECS Rules & Fact sheet (FS)	Sender: HUB/ Registry/ Registry (recommended)
77	14	Production Device Capacity is missing	Validate that at least one of three elements (ElectricalCapacity, MechanicalCapacity, ThermalCapacity) is filled. NOTE: The mandatory of ElectricalCapacity is checked with the validation 85 in AIB Hub.	SD03: B5.5.13	<b>HUB</b>
78	38	Date operational is not valid	Validate that given DateOperational has correct format and that it is less than date from the MessageTransmissionTime.	SD03: B5.5.14	<b>HUB</b>
79	39	Location of the production device and/or address is required	Validate that at least one of ProductionDeviceCoordinates and ProductionDeviceAddress is given and that all the attributes are given and not empty. If the ProductionDeviceCoordinates is filled, the attribute CoordinateCode has to match a valid item in the AIB Hub master data. Validity is checked against a date from the MessageTransmissionTime. (Fact Sheet 16).	FS-16 SD03: B5.5.21	<b>HUB</b>
81	21	Competent Authority is unknown	Validate that the given CompetentAuthority match a valid item in the AIB Hub master data. Validity is checked against a date from the MessageTransmissionTime. (Fact Sheet 4)	FS-04 SD03: B5.5.8	<b>HUB</b>
82	40	Production period dates is not in the past	Validate that the ProductionPeriod.startdate and ProductionPeriod.enddate are less than transfer date (MessageTransmissionTime).	SD03: B5.5.15	<b>HUB</b>



## EECS RULES FACT SHEET 18 TRANSFER ERROR CODES



Error code	HUB Validation order	Description	Check	Reference to: SD03 HubCom, EECS Rules & Fact sheet (FS)	Sender: HUB/ Registry/ Registry (recommended)
85	17	Missing required field (@1)	Validate that all the certificate mandatory fields are given and not empty. The error description will tell the elements missing.	SD03: B5.2.	<b>HUB</b>
89	-	NAK is sent manually by HUB superuser	Error code to indicate that the NAK was sent by Hub Superuser from AIB Hub userinterface manually to solve a problem (e.g. timeout).	-	<b>HUB</b>
90	-	Rejected due to expired certificates	Registry should validate that the incoming certificates are still valid according to their expiry rules set in the domain protocol. If expired certificates are accepted, the system is still in compliance with the EECS-rules as long as the expired certificates are not re-transferred. However, it is advisable to block expired certificates.	EECS Rules: C5.2.3, C6.1.1	<b>Registry</b>
91	-	Rejected due to provisions of national legislation or regulations	Registry should validate that they import only the certificates they are allowed according to National legislation. E.g. if Fossils are not allowed then those should be blocked on import.	2.3.2	<b>Registry</b>
92	12	Sending registry is not allowed to export certificates	Validate that the sending registry is allowed to export certificates. Validation done against AIB Hub master data.	-	<b>HUB</b>
93	13	Receiving is not allowed to import certificates	Validate that the Receiving registry is allowed to import certificates. Validation done against AIB Hub master data.	-	<b>HUB</b>
95	7	XSD version (@1) is not a valid version	Validate that the given schemaLocation contains one of the supported schemas (B3.2.3).	SD03: B3.2	<b>HUB</b>
96	-	SendingAccountID is not assigned to the sending Registry in the Central Account Holders Database	Validate that the SendingAccountID is valid account in Account Holders Database	New. Not described yet.	<b>HUB</b> (implemented with AHDB)





## EECS RULES FACT SHEET 18 TRANSFER ERROR CODES



Error code	HUB Validation order	Description	Check	Reference to: SD03 HubCom, EECS Rules & Fact sheet (FS)	Sender: HUB/ Registry/ Registry (recommended)
97	-	ReceivingAccountID is not assigned to the receiving Registry in the Central Account Holders Database	Validate that the ReceivingAccountID is valid account in Account Holders Database	New. Not described yet.	<b>HUB</b> (implemented with AHDB)
99	-	Unspecified	Other error. If webservice, it is recommended to give more details in the AdditionalInfo field.	-	<b>HUB/ Registry</b>

### Error codes for Answer messages (only in UI)

**NOTE: The below error codes are not to be send within answer message – but are only shown in the HUB user interface!**

Error code	Description	Check	Reference to SD03	Error type	Sender: HUB/Registry
A51	Transfer Message ID referred in answer must be in the HUB database	Unknown message ID	New. Not described yet	Shown only in Hub user interface	HUB
A52	r:message, Message Validation Flag, is not correct	Check the Message Tag from the answer	B5.5.4	Shown only in Hub user interface	HUB
A53	Validation flag is not correct in the tag "Content"	The value in the tag "content" in the "answerv70_xsd" can only be "true" or "false"	B5.5.4	Shown only in Hub user interface	HUB
A54	There must be only one AK/NAK delivered per Transfer Message ID	An acknowledgement answer was already processed	New. Not described yet	Shown only in Hub user interface	HUB
A94	AK and NAK are the only accepted return codes	Another code than "AK" is used as return code	C2.1.8	Shown only in Hub user interface	HUB



## EECS RULES FACT SHEET 18 TRANSFER ERROR CODES



### Validation codes for Fraud detection

**NOTE: The below codes are only indication for possible Fraud, and are not blocking any transfer.**

Error code	Description	Check	Reference	Error type	Sender
FR01	Volume of certificates in the message exceeds an average (daily) load for an account holder.	Validate the incoming transfer against the average load of the account holder and if the incoming transfer volume exceeds more than set in the configuration, the warning message will be given.	-	Warning - Shown only in Hub user interface	HUB
FR02	Volume of certificates in the message exceeds an average (daily) load for a combination of account holders	Validate the incoming transfer against the average load of the set of account holders and if the incoming transfer volume exceeds more than set in the configuration, the warning message will be given.	-	Warning - Shown only in Hub user interface	HUB
FR03	Volume of certificates in the message exceeds an average (daily) load for a registry	Validate the incoming transfer against the average load of the registry and if the incoming transfer volume exceeds more than set in the configuration, the warning message will be given.	-	Warning - Shown only in Hub user interface	HUB
FR04	Volume of certificates in the message exceeds an average (daily) load for a combination of registries	Validate the incoming transfer against the average load of the set of registries and if the incoming transfer volume exceeds more than set in the configuration, the warning message will be given.	-	Warning - Shown only in Hub user interface	HUB

### Obsolete or unknown Error codes

If the Hub receives an unknown or obsolete code, it will keep the transfer pending and won't forward the NAK to the sender. The Superuser will investigate and close the transfer.