



## EECS RULES FACT SHEET 18 TRANSFER ERROR CODES



## 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 and which AIB Hub is using when validating a transfer.

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Reason for Issue	New error code
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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)</li><li>• 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>• Removal of obsolete codes</li><li>• Addition of references</li><li>• Clarification of text description</li></ul>
V9	June 2019	<ul style="list-style-type: none"><li>• Add error code 33 for Combinations of Technology Code and Fuel Source of Fact sheet 5.</li></ul>
V10	June 2020 Marika Timlin- de Vicente Annie Desaulniers	<ul style="list-style-type: none"><li>• Add error code 83 for Certificate block</li><li>• Review of the descriptions and references</li><li>• Removed A52 being related only the Email transfers</li></ul>
V11	January 2021 Marika Timlin- de Vicente Annie Desaulniers	<ul style="list-style-type: none"><li>• Add error code 94 for Account holder rejecting a transfer</li><li>• Update the description of error code 65 to add AIB Hub checking the ownership of certificate on incoming transfer.</li><li>• Update descriptions for 65 and 10 by adding Technical support user</li><li>• Clarifying the Error codes for Answer messages</li></ul>



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### 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 the check against the related error when applicable. A check is 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/Description	Ref to: SD03 HubCom, EECS Rules or Fact Sheet (FS)	Sender: HUB/Registry/Registry(recommended)
01	1	Not correctly signed	Encryption/signature	SD03: C2	HUB
02	2	Not correctly encrypted	Encryption/signature	SD03: C2	HUB
03	3	File was not signed and encrypted	Encryption/signature	SD03: C2	HUB
04	4	File was not signed	Encryption/signature	SD03: C2	HUB
05	5	File was not encrypted	Encryption/signature	SD03: C2	HUB
06	10	Sending registry is unknown	Check of sending registry GS1 (FromRegistry).	SD03: B5.3.3	HUB
07	11	Receiving registry is unknown	Check of receiving registry GS1 (ToRegistry).	SD03: B5.3.4	HUB
08	18	Sender in message is not the same as sender in XML	Sender identified by the Client PKI Certificate has to be the same as the FromRegistry in the message.	SD03: B5.3.3	HUB
09	8	XML does not validate against XSD	The message (XML) has to be valid against given and supported schema (XSD).	SD03: B3.2	HUB



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Error code	HUB Validation order	Description	Check/Description	Ref to: SD03 HubCom, EECS Rules or Fact Sheet (FS)	Sender: HUB/Registry/Registry(recommended)
10	9	Message id already present	<p>Checking the uniqueness of the given MessageID.</p> <p><b>NOTE: If AIB Hub receives an incoming transfer with non-unique messageID, the second attempt will be kept open in the AIB Hub and only PENDING is being send to the Sending Registry. In the AIB Hub user interface the NAK 10 is visible.</b></p> <p><b>Similarly, if a Registry is sending a NAK 10, AIB Hub is not forwarding that to counter party, but is keeping the transfer in open status.</b></p> <p><b>In both cases AIB Hub Technical Support User or Superuser help is needed to close the transfer.</b></p>	SD03: B5.3.2	HUB/ Registry (recommended)
13	8	Error in the schema transformation	The transformation between sending and receiving registry schema is not possible	SD03: B5.2	HUB
11	8	Number of certificates bundles exceed the maximum limit	Number of certificate bundles is over the limit configured in the AIB Hub.	SD03: 2.3.5.4, B5.4.4	HUB
14	6	Incomplete message (raised when the file is empty)	The XML message (result of decryption subprocess) cannot be empty.	SD03: B3	HUB
15	28	Purpose is not valid	Validate that the Purpose given is found from AIB Hub master data and that it is valid (checked against MessageTransmissionTime).	SD03: B5.5.2	HUB
17	19	Message transmission time is incorrect	Validate the format of the transmission time	SD03: B5.3.1	HUB
18	20	Message ID is not correct (15 digits)	Validate that the given MessageID is in correct format.	SD03: B5.3.2	HUB



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Error code	HUB Valid ation order	Description	Check/Description	Ref to: SD03 HubCom, EECS Rules or Fact Sheet (FS)	Sender: HUB/Registry/ Registry(recom mended)
25	22	SendingAccountID is not a valid code	Validate that the SendingAccountID has valid type (cS attribute).	SD03: B5.4.1	HUB
26	23	ReceivingAccountID is not a valid code	Validate that the ReceivingAccountID has valid type (cS attribute).	SD03: B5.4.2	HUB
32	24	StartCertificateNumber is greater than EndCertificateNumber	StartCertificateNumber <= EndCertificateNumber	SD03: B5.5.5, B5.5.6	HUB
33	41	Invalid combination of Technology Code and Fuel Source Code	The combination is not permitted in Fact Sheet 5.	FS05 SD03: 5.5.19, B5.5.20	HUB
34	25	IB: Issuing Body ID, is not valid	Validate that the IssuingBody is given in correct format	SD03: B5.5.7	HUB
35	26	Issuing body ID is unknown	Validate that the given IssuingBody is found in AIB Hub master data and that it is valid at the moment of the transfer.	FS04 SD03: B5.5.7	HUB
36	27	Production Device ID is not a valid GS1 code	Validate that the given ProductionDeviceID is correct format.	SD03: A2.4, B5.5.11	HUB
38	28	Type of installation is not valid	Validate that the given TypeOfInstallation is found in AIB Hub master data and that it is valid at the moment of the transfer.	FS05 SD03: B5.5.19	HUB
39	15	Energy source is not valid	Validate that the given EnergySource is found in AIB Hub master data and that it is valid at the moment of the transfer.	FS05 SD03: B5.5.20	HUB
41	29	Code in "EarmarkFlag" is unknown	Validate that the given EarmarkFlag is found in AIB Hub master data and that it is valid at the moment of the transfer.	FS03 SD03: B5.5.16	HUB



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Error code	HUB Validation order	Description	Check/Description	Ref to: SD03 HubCom, EECS Rules or 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 is 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	HUB
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 certificates for the given Production Period.	FS04 SD03: B5.5.15	HUB
44	32	Production period start date is after end date	Validate that the ProductionPeriod enddate >= startdate	SD03: B5.5.15	HUB
45	33	UseOfHeat is unknown	Validate that the given code is found in AIB Hub master data and that it is valid at the moment of the transfer.	FS11 SD03: B5.5.22	HUB
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, B6	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, B6	Registry
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	HUB

65	-	Double counting risk identified.	<p><b>Registry has to validate</b> that there are no duplicates within each incoming transfer and that any of the incoming certificates are not found in their registry with status Active, Expired, Cancelled, Pending or Exported.</p> <p>Furthermore, not only the first and last certificate number should be checked, but also the numbers in between.</p> <p>NOTE: where possible use the Additional info field for telling reason of NAK 65 to help further investigations.</p> <p><b>AIB Hub validates whether:</b></p> <ol style="list-style-type: none"> <li>1. There are any duplicates within each incoming transfer.</li> <li>2. The transfer is coming from the expected Registry. AIB Hub is maintaining the ownership of each certificate which has passed previously through AIB Hub. On incoming transfer, the From Registry is compared to the ownership information in the AIB Hub.</li> </ol> <p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>• <b>If AIB Hub founds duplicated certificates within a transfer, or AIB Hub sees that the sending registry is not expected, the transfer will be kept open in the AIB Hub and only PENDING is being send to the Sending Registry. In the AIB Hub user interface the NAK 65 is visible and Additional information tells the reason for NAK 65.</b></li> <li>• <b>If a Registry is sending a NAK 65, AIB Hub is not forwarding that to counter</b></li> </ul>	SD03: B5.5.5, B5.5.6	HUB/Registry
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Error code	HUB Validation order	Description	Check/Description	Ref to: SD03 HubCom, EECS Rules or Fact Sheet (FS)	Sender: HUB/Registry/ Registry(recommended)
			<p style="text-align: center;"><b>party, but is keeping the transfer in open status.</b></p> <p style="text-align: center;"><b>In both above cases AIB Hub Technical Support User or Superuser help is needed to close the transfer in Hub.</b></p>		
<b>68</b>	35	Certificate issue date is not in the past	Certificate issue date (IssuedDate) has to be before the date from the MessageTransmissionTime.	SD03: B5.5.10	HUB
<b>74</b>	36	Product status is not valid	<p>Validate that the ProductStatus is found in AIB Hub master data and that it is valid at the moment of the transfer.</p> <p>Multiple nodes are allowed.</p> <p>In addition it is validated that each of the certificate bundles have to have at least one standalone product status (GO or "ICS:EECSDISCLOSURE")</p>	FS17 SD03: B5.5.3	HUB
<b>75</b>	16	Product type is not valid	<p>Validate that the given ProductType is found in AIB Hub master data and that it is valid at the moment of the transfer.</p> <p>Multiple nodes are allowed.</p>	SD03: B5.5.4	HUB
<b>76</b>	37	Country of issue is not valid	Validate that the given CountryOfIssue is found in the master data of the AIB.	SD03: B5.5.9	HUB
<b>77</b>	14	Production Device Capacity is missing	<p>Validate that at least one of three elements (ElectricalCapacity, MechanicalCapacity, ThermalCapacity) is filled.</p> <p>NOTE: The mandatory of ElectricalCapacity is checked with the validation 85 in AIB Hub.</p>	SD03: B5.5.13	HUB





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Error code	HUB Validation order	Description	Check/Description	Ref to: SD03 HubCom, EECS Rules or Fact Sheet (FS)	Sender: HUB/Registry/Registry(recommended)
78	38	Date operational is not valid	Validate that given DateOperational has correct format and that it is before the date from the MessageTransmissionTime.	SD03: B5.5.14	HUB
79	39	Location of the production device and/or address is required	Validate that at least one of ProductionDeviceCoordinates or 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.	FS16 SD03: B5.5.21	HUB
81	21	Competent Authority is unknown	Validate that the given CompetentAuthority match a valid item in the AIB Hub master data.	FS04 SD03: B5.5.8	HUB
82	40	Production period is not in the past	Validate that the ProductionPeriod.startdate and ProductionPeriod.enddate are before transfer date (MessageTransmissionTime).	SD03: B5.5.15	HUB
83	42	The transfer is not allowed because of certification issue	Check against AIB Hub configuration for certificates to be blocked based on one or more of below: <ul style="list-style-type: none"> <li>• Production device ID (GSRN)</li> <li>• Technology code</li> <li>• Fuel code</li> <li>• Production Period</li> <li>• Incoming and/or outgoing registry</li> </ul>	SD03: 2.3.1.10 and 2.3.5.3 HPA: Art.15.2 and 15.3	HUB
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	HUB
89	-	NAK is sent manually by HUB superuser	Error code to indicate that the NAK was sent by Superuser from AIB Hub User Interface to close the transfer (e.g. timeout, NAK65, NAK10).	-	HUB



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Error code	HUB Validation order	Description	Check/Description	Ref to: SD03 HubCom, EECS Rules or Fact Sheet (FS)	Sender: HUB/Registry/ Registry(recommended)
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 imported, 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 SD03 B5.5.10, B5.5.15	Registry
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 with this error code.	SD03 2.3.2	Registry
92	12	Sending registry is not allowed to export certificates	Validate that the sending registry is allowed to export certificates. The validation is done against AIB Hub master data.	-	HUB
93	13	Receiving registry is not allowed to import certificates	Validate that the Receiving registry is allowed to import certificates. The validation is done against AIB Hub master data.	-	HUB
94	-	Account Holder rejected transfer	Receiving Account Holder might have possibility to reject a transfer depending on the rules of each domain. If the Receiving Account Holder is rejecting a transfer, this error code should be used.	-	Registry
95	7	XSD version (@1) is not a valid version	Validate that the given schemaLocation is one of the supported schemas.	SD03 B3.2.3	HUB
96	-	SendingAccountID is not assigned to the sending Registry in the Central Account Holders Database	Validate that the SendingAccountID is a valid account in Account Holders Database	SD03 B6	HUB



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Error code	HUB Validation order	Description	Check/Description	Ref to: SD03 HubCom, EECS Rules or 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 a valid account in Account Holders Database	SD03 B6	HUB
99	-	Unspecified	Other error. It is recommended to give more details in the AdditionalInfo field.	SD03 C4.2.3	HUB/Registry

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

**NOTE: The following error codes are not sent to Registry but are only shown in the HUB user interface to explain the problem!**

Error code	Description	Check	Reference to SD03	Error type	Sender: HUB/Registry
A51	Message ID must be given in SendFeedback and SetCertificateResponse, Given MessageID must be found from AIB Hub.	MessageId should be filled and found in the Hub	C4.2.3	Shown only in Hub user interface	HUB
A53	ErrorCode or ErrorMessage have unexpected value compared to the ReturnCode.	ReturnCode is ("AK" or "PENDING") and ErrorCode has a value 0 and ErrorMessage is empty.  ReturnCode is "NAK" and ErrorCode contains value other than 0.	C4.2.4	Shown only in Hub user interface	HUB
A54	There must be only one AK/NAK delivered per Transfer Message ID	Another acknowledgement answer was already processed. It is not allowed to send several answers to a transfer.	C4.2.4	Shown only in Hub user interface	HUB



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Error code	Description	Check	Reference to SD03	Error type	Sender: HUB/Registry
A55	Error Code is not valid	Error Code included in NAK has to match to a valid item in the code table	C4.2.3	Shown only in Hub user interface	HUB
A94	Unexpected ReturnCode on SetCertificatesResponse or on SetFeedback (e.g. timeout or Soap error).	The return code has to contain only following values: "AK", "NAK", "PENDING". This could happen e.g. if there is timeout or other connection issue.	C4.2.4	Shown only in Hub user interface	HUB

## 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, a warning message is sent to SuperUser.	-	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, a warning message is sent to SuperUser.	-	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, a warning message is sent to SuperUser.	-	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, a warning message is sent to SuperUser.	-	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 will not forward the NAK to the sender. The Superuser will investigate and close the transfer. See A55 above.