History of changes

Date	Topic	Туре	Comments
2024- 03-21	Release March 2024	•	Computop Analytics password reset / forgot password process implemented: Password-Reset
2024- 03-11	Automatic SEPA Mandate Management	•	Documentation for SEPA Mandate Management: Automatic SEPA Mandate Management
2024- 02-29	customerInfo	0	Customerinfo Json Schema firstName and lastName changed from 30 to 50 characters: customerInfo
2024- 02-01	Release January 2024	•	SEPA Logo has been replaced by official SEPA Logo Introduction of Customer Data Storage Introduction of Customizable Confirmation Page
2024- 01-22	Error codes	0	new error codes 1550/1551 + new categories 325-337: A4 Error codes
2023- 11-30	Release November 2023	•	New paymethod Tink available in Hosted Payment Page Paymethod PayPal V2 available in Hosted Payment Page New paymethod PFconnect via BNP available
2023- 11-29	New mandatory fields for Visa Secure	1	Banner "Action required: New mandatory fields for Visa Secure from 02/12/2024" added to starting page
2023- 11-10	iDEAL PPRO	0	new issuers N26 bank and Nationale Nederlanden bank added: iDEAL
2023- 10-27	Computop Al protect	0	Added new Logo Added new pages to use Al protect panel
2023- 10-26	Release October 2023	•	 PayByLink: labels in Analytics and Templates have been unified (order, TransactionId,) both match now credit card, CB2A: Installment and Payment upon shipment tested in production and working Extending our CAT POS interface with new functionality and request/ response parameters, e.g.: Add a new Card Read function to the CAT interface. (A Card Read is a non financial transaction to read a card and to retrieve card data) Add request/response parameters such as: inputMode, RTF, ContractID Add response parameters such as: RefNr, receiptNr, schemeReferenceID, dccForeignAmount, dccCommission, dccForeignCurrencyCode, dccDisclaimer, dccMargin, dccRateValue, dccSource, dccTimestamp, ExpiryDate, PCNr, VerificationCode, PayID, aidParameters CustomerID parameter for Paytype IntercardEDD becomes conditional Adding GetNet a credit card Paytype to our TPNS Service
2023- 10-23	Zinia	•	Added new Parameter PayType
2023- 10-23	Computop AI protect (Nethone)	•	update then name from nethone Computop Al Protect
2023- 09-28	Release September 2023	•	new error code 0344 has been added: A4 Error codes
2023- 09-26	Debitorenmanage ment Riverty	0	Updated the json parameter for ArticleList: changed from grossPrice amount updated the eventtoken for credit: changed from OC CR
2023- 09-25	Amazon Pay V2	8	Information for German/EU-accounts (Developer Name / Developer account) added: MWS Authorization Token added request to update amount in review-process: UpdateAmount:
2023- 08-24	Release August 2023	•	 Analytics: Display diactrics (äöüÄÖÜßéíóú,) are shown correctly in Analytics Operation Table View Analytics: Enhancement for AMEX payments via CAPN with multiple partial credits, which now can also be done via or Analytics. Before this was only available via API (credit.aspx). Customerinfo Json Schema email to 256 chars: customerInfo

2023- 07-27	Release July 2023	•	 Analytics, language change (bugfix): currently language-change always requires 2x click; suppose to be 1x click Paynow, EMV 3DS, colorDepth=30/36: the official EMVCo list for colorDepth does not support colorDepth=30/36 which is in use by some browsers, this is now automatically converted: 30 -> 24, 36 -> 32. Pay By Link, email sender (display name): Email sender name can be setup by Computop Helpdesk to your company name
2023- 06-29	Release June 2023	•	 New response code 139H for "payment has not been completed" (Instant Payment): A4 Error codes Added request parameter "ReturnRefundAccount" to Instanea Enablement of JCB 3DS 2.x solution: JSecure 2 Our POS solution will be extended to Canada region for VISA and Mastercard with the Next Family terminals and Acquirer Chase Paymentech. For Payment Method Bancontact via PPRO now is possible to forward a dynamic descriptor value defined by the merchant similar to what has been supported previously on Refund/Credit transactions. Computop Instant Payment (Token.io) is now available via Hosted Payment Page (HPP): Instant Payment Computop Analytics supports additional search criterias: standard: Account holder, E-Mail address, Card Holder, Customer Info, First name, Last name, Billing Email Address agreed with Computop Helpdesk: POSTerminalld, Terminalld, VuNr, SchemeReferenceID
2023- 05-30	Added various parameters to URLBack,	0	Added various response parameters missing in documentation by now to URLSuccess/URLFailure/URLNotify: Credit Card Form (paySSL)
2023- 05-16	3DS JSON threeD SData:request	0	Added missing attributes challengeRequestInd, challengeCancelInd, dsScore, transStatusReason to threeDSData:request
2023- 05-16	TermURL + URLNotify, M C	0	URLNotify and TermURL changed from "M" (Mandatory) to "C" (Conditional), i.e.: in case of recurring payments (Credential On File) initiated by the merchant (without consumer interaction) no 3DS is performed and therefore response values are returned as response of direct.aspx.
2023- 04-28	Parameter industry SpecificTxType	0	Parameter industrySpecificTxType has been changed from "M" (Mandatory) to "C" (Conditional) as it is only used to indicate specific use cases, but must not be used for normal authentications/authorizations.
2023- 04-26	Error codes	0	new error codes 1958-1961: A4 Error codes
2023- 04-18	Implementation Samples incl. AES	0	Pls. find some implementation samples supporting AES: Implementation Sources
2023- 04-17	Currency ISK has changed decimals	1	Currency ISK has changed decimals from 2 to 0: A1 Currency table
2023- 04-04	Links for PayPal V2 Signup	0	We provide PayPal-Links for easy signup to PayPal Sandbox and PayPal Production: PayPal V2 Signup
2023- 04-03	Currency ISK is changing decimals	1	Information for change on ISK currency from 2 decimals 0 decimals: Paygate ISK
2023- 03-23	Release March 2023	•	API to create Pay By Link Payments has been implemented: Pay By Link API
2023- 02-21	Certificate Renewal	0	Information to Certificate Renewal: Paygate Documentation
2023- 01-02	URLBack, Parameter	0	Notes added how to pass parameters: URLBack
2022- 12-22	Finland OBT	0	Email-address of consumer will become mandatory: Finland OBT
14 44	PayU CEE Single		Phone of consumer is not mandatory with Twisto any more: PayU CEE Single
2022- 12-01	Release December 2022	•	Computop Analytics now supports search for ApprovalCode (with credit card payments) ChasePNS supports 3-D Secure 2.x (MsgVer=2.0) RBI supports unreferenced Refunds Computop Paygate now also supports AES encryption: Create an API call and use encryption
2022- 11-03	CustomFields Netcetera SDK	0	notes for allowed character set in: CustomField[n] Link updated to Netcetera SDK: Server-2-Server Integration
2022- 10-14	HPP-parameter, ExpirationDate	•	we added parameter "ExpirationDate" to add an expiration date/time for HPP-/PaymentPage-calls: Hosted Payment Page
2022- 10-06	Release October 2022	•	With 3-D Secure 1.0 sunset Computop Paygate indicates missing EMV 3DS data via Server-2-Server-API: if MsgVer=2.0 and "browserInfo" is missing -> response code 3002 is returned if MsgVer=2.0 and "javaScriptEnabled=false" -> response code 0093 is returned

2022- 08-25			
00 23	Release August 2022		Hosted Payment Page Paytype Klarna PM has been added Paytype Bluecode has been added Analytics Multi-Merchant (several MIDs linked to the same MID-account) has been added to UserManagement Server-zu-Server Blacklist Editing Support for PCNr and PBAN has been added
2022- 07-28	Release July 2022	•	cavvAlgorithm is accepted and returned with threeDSData to support Cartes Bancaires with external MPI Subscriber (part of phone number) has been extended from AN12 to AN15 https://developer.computop.com/display/EN/brone https://developer.computop.com/display/EN/brone email-properties have been extended from a50 -> a254 https://developer.computop.com/display/EN/customerInfo https://developer.computop.com/display/EN/customerInfo https://developer.computop.com/display/EN/merchantRiskIndicator in simulation mode (OrderDesc=Test:0000) now Approvalcode is only returned for CC paymethods (e.g. not for Paydirekt any more) Approvalcode is only returned if activated in merchant configuration
2022- 07-15	AuthenticationMeth ods	0	Additionally to AuthenticationTypes now also AuthenticationMethods with EmvCo 3DS are explained
2022- 06-20	Release June 2022	•	in simulation mode (OrderDesc=Test:0000) now without MsgVer=2.0: TransactionId and Approvalcode are returned with random values for RTF=E I with MsgVer=2.0: schemeReferenceID and Approvalcode are returned with random values for credentialsOnFile= {, initial=true} 3DS JSON customerInfo + phone Typo in JSON schemes "maxLenght" has been corrected to "maxLength" https://developer.computop.com/display/EN/customerInfo https://developer.computop.com/display/EN/phone
2022- 06-20	3DS2 Response Codes	1	Response codes for 3DS2 were duplicate and not unique, e.g. Code 0305. This has now been unified. Pls. find details here: A4 Error codes
2022- 05-16	Amazon Payments	0	The old Amazon pages have been hidden (Amazon Pay + Amazon Pay Recurring). Pls. refer to Amazon Pay Checkout v2
	TransStatusReason	0	Specific codes 83 + 84 for MasterCard have been added to transStatusReason Codes
2022- 05-10	Credit card, integration methods	•	New paramater PayTypes added: Credit Card Form (paySSL)
2022- 03-21	Credit card, externalPaymentD ata	•	If request parameter msgver has been used a new data element externalPaymentData is returned - depending on acquirer and 3rd party.
2022- 03-14	Klarna, B2B support	0	Added some additional information on parameters for B2B support (bdCompany, sdCompany, LegalForm, CompanyID + VatID): Klarna Payments
	CTSF /	•	Paysafecard has been added to CTSF: Computop Settlement File
	Paysafecard PayU CEE Single		BLIK OneClick added, new parameters TokenAxt, AppKey, Alternatives: PayU CEE Single
2022- 03-03	Release February 2022	•	 Added attribute useCase in credentialOnFile-JSON to fulfill special use cases in authentication/authorization Added useCase to 3DS 2.0 Merchant Use-Cases & Testing of 3D-Secure 2.0 recurring: useCase: fixed/flexibleAmount unscheduled: useCase: cot/ucof
2022- 02-25	authenticationResp onse, transStatusR eason	0	Added additional values (80-88, scheme specific) to attribute transStatusReason in authenticationResponse-JSON.
2022- 02-23	HMAC calculation and handling	•	added some notes to HMAC calculation pointed out that MerchantID / MID are case-sensitive pointed out that for request: MerchantID in plain request and in HMAC-calculation must the identical pointed out that for notify: MID from plain request must be used in HMAC-calculation

2022-01-17	Release January 2022	•	 our new templates cards_v1, paymentpagelogos_v1, paymentpagedropdown_v1 now support GooglePay with 3-D Secure flow URLSuccess/URLFailure with optional URLEncode, i.e. spaces are encoded as "+", "/" is encoded as "%2f" can be optionally configured by Computop Helpdesk new user permission in Computop Analytics to enable/disable "Pay By Link" improved 3DS2-challenge-form for mobile devices by scaling challenge-form to device screen width CB2A: automatic brand correction (i.e. change to Mastercard/VISA if PAN is not CB-cobranded) not only for PAN, but also for PCNr CB2A: several improvements for recurring, credentialOnFile, GooglePay URLSuccess/URLFailure: if MsgVer=2.0 is used data are sent via POST - even in case of 3DS1 fallback (previously: GET for 3DS1 fallback; POST for 3DS2) TPNS now sends notifications for TestCard with capture=Auto Banksys: Fixing of wrong parameter mapping towards Banksys which is causing declines in 3DS 2.x transactions
2022-	BillPay	0	BillPay will be discontinued at end of March 2022: BillPay
01-17		_	
	Computop Scheme Token Service	•	New documentation for Computop Scheme Token Service
2021-	Credit card	0	The credit card documentation has been migrated to EMV 3DS:
12-30	documentation		Form: Card processing - common form S2S: Card processing - common Server-to-Server
			The legacy-implementation is still available here:
			 Form: Card processing - common form - legacy S2S: Card processing - common Server-to-Server - legacy
2021-	Node.JS sample	0	we now also provide a Node.JS implementation: Implementation Sources
12-15	Chinapay	•	OrderDesc changed to ans128: ChinaPay
2021- 12-14	Hmac calculation	0	better explained HMAC-calculation based on SHA256: Programming basics
2021-	Error codes		now error codes: 110, 122, 202: shanged: 1950: A4 Error codes
12-03		0	new error codes: 119, 123, 393; changed: 1859: A4 Error codes
2021- 11-27	3DS 2.0, resultsRespon se	•	resultsResponse has been extended with dsScore, challengeRequestInd, cardholderInfo: resultsResponse
2021-	Hosted Payment	•	Payment type Google Pay added
11-03	Page	•	Parameter OrderDesc moved to special parameters and modified for B4payments: Direct debit
	Direct debit	Ø	Parameter Account removed from credit.aspx and added for creditex.aspx: PayPal
	PayPal	-	Description of acsChallengeMandated extended: Server-2-Server Integration
	3DS 2.0	•	Sees pilot of accordance gotta trade of other 2 cortor magnation
2021-	Programming	0	Pls. find additional samples here:
10-26	samples		Create an API call and use encryption HMAC Authentication (Request) HMAC Authentication (Notify)
2021- 10-14	Update IP- changes, 2021-11- 15	1	New schedule: Important technical information, 2021-11-15
2021-	3DS 2.0	•	3DS 2.0 Merchant Use-Cases & Testing of 3D-Secure 2.0 EN: schemereferenceID added in Scenario 05
10-06	Klarna Payments	0	Description of parameter Code "0" extended in Klarna Payments
2021- 09-21	PagBrasil, CC: IPAddr + DeviceId added	•	IPAddr + DeviceId added due to fraud prevention: PagBrasil
2021- 09-20	Update IP- changes, 2021-10- 18	1	Important technical information, 2021-10-18
2021- 09-09	Currency table	•	IDR changed back from 0 to 2 decimals: A1 Currency table EN
2021- 09-07	Trustly, test data added	0	Test data for Trustly have been added: Test Trustly
2021-	Klarna, RTF	•	KlarnaPM now supports parameter RTF (recurring payments): Klarna Payments
09-03	/recurring		

2021- 08-31	Analytics, show operation details	0	Analytics: Meaning of "Action" and "Status" have been explained when displaying operation details: Details on Action and Status
2021-	POS Notify	0	Added IBANEMVfield to POS Notify Service into notification request and status response: POS Notify Service
08-13	PayPal, PayerId	0	Added PayerId to response: PayPal
2021- 07-16	Pages renamed	0	Pages have been renamed
07-16			 Payment methods in Computop Paygate Payment methods Services in Computop Paygate Services
			Section of EMV 3-D Secure 2.x moved from Services to Payment methods - Credit Cards
2021- 07-15	Release July 2021	0	Release July 2021
07 10	Analytics, CSV- export	•	Microsoft Excel has a problem with importing numbers/amounts having " " (Space) as a thounds separator. Therefore the space is now removed for CSV export
	Analytics, CSV- export	0	Empty cells have been exported in CSV as "-", now they are exported as empty cells.
	Analytics, 3DS Dashboard	0	Computop Analytics Dashboard now shows a dedicated tab to show KPIs and reporting for 3-D Secure payments: Showing 3-D Secure Analysis
	Bluecode, cancellation		Cancellations via Bluecode.aspx have not been cancelled by Computop Paygate when user clicked on Cancel-button. This bug has been fixed.
2021-	New error code	⊘	Added error codes 3004 / 4305 to: A4 Error codes
06-22	Format of error	0	Format and character set explained: A4 Error codes
	codes	•	Parameter industrySpecificTxType added: Server-2-Server Integration
	Server-2-Server Integration		
2021- 06-10	Server-to-Server blacklist	•	Notice for return of BlockilD added: Server-to-Server Blacklist Editing
	industrySpecificTx Type for MIT	•	New parameter "industrySpecificTxType" according to the card brands MIT (Merchant Initiated Transactions) Framework: Serve r-2-Server+Integration
2021- 05-xx	Debtor Management Real	Ø	Parameters for "Installment" (installment payment) have been added: Debtor Management Real
OO XX	Klarna	•	Format for "AccessToken" changed to ans2048: Klarna Payments
	Card processing	•	Response parameter PAR added for Paytype CAPN: Card processing - interface via form#CAPN:AmericanExpress / Card processing - interface Server-to-Server#CAPN:AmericanExpress
2021- 04-12	Analytics	•	Language selection added for Pay by link: Creating an operation with "Pay by link"
04-12	PaqU CEE GECAD	•	Parameter PayType is mandatory: PayU CEE GECAD
	EMV 3DS	Ø	Notice added for schemeReferenceID: Server-2-Server Integration
	EMV 3DS	•	URLSuccess / URLFailure are currently called with 3DS2 via POST, but with a fallback from 3DS2 to 3DS1 via GET! Card processing / Credit card via Credit Card Form (PaySSL)
2021-	Paygate Notify	•	The "Referer" field in the HTTP header of the Paygate Notify is expected to be removed on 2021-04-29: Paygate EN
03-17	PayPal	•	Parameters TransactionID, TID, payerStatus added: PayPal
	schemeReferenceID	•	Note to regulatory changes added: schemeReferenceID
	EMV 3DS	0	Information for EMV 3DS, Scenario 09 added: 3DS 2.0 Merchant Use-Cases & Testing of 3D-Secure 2.0
	EMV 3DS	0	Details for direct3d.aspx Authorisation added: 3DS 1.0 Fallback
2021- 02-25	Release February 2021	0	Release February 2021
	Param "URLBack"	•	Parameter "URLBack" is in use with payment pages (paymentPage.aspx, payssl.aspx, paysdd.aspx, billpay.aspx). The parameter "URLBack" can now be part of encrypted parameter "Data" (recommended variant) to prevent manipulation. For complatibility "URLBack" can still be sent plain.
	Credit card, CB2A	0	Additional response parameters available on request: CodeExt, Approvalcode, TerminalID, VUNr Card processing, CB2A
	Analytics Operation details	•	3-D Secure 2.x details are now displayed for all paymethods - if available and collected while processing.
2021- 02-22	EMV 3-D Secure / JSON	•	Notice that javaScriptEnabled=true must be for 3DS 2.0: browserInfo
	1		1

2021- 02-10	Direct debit	•	OrderDesc will not be forwarded with connection via PPRO.
	EMV 3-D Secure / JSON	•	"R" removed from intermediateStatus: threeDSData:request
	paydirekt	•	URLConfirm added for oneKlick registration: paydirekt
	EMV 3-D Secure	•	Process flow for automated soft decline handling added: EMV 3-D Secure
	EMV 3-D Secure	•	Notice added about browser cookies and session handling in Credit Card Form (paySSL) and Silent Order Post (PayNow)
2021-	Release January	0	Release January 2021
01-28	2021	•	Amount has to be input as X,XX or X.XX for currencies with 2 decimals; watermark is giving you a pattern.
	Analytics Pay-By- Link	•	Language of Hosted Payment Page (HPP) can be selected; the last selected language is stored in a Cookie for next usage
	Analytics Pay-By-	•	Validity of "7 days" has been added
	Link Analytics Pay-By-Link	0	Approval Code / Authorization Code is displayed in Analytics (for transactions newly created from now on)
	Credit card, CB2A		
2021-	EMV 3DS -	0	Sample and description of "language" improved: browserInfo
01-18	browserinfo Currency table	•	IDR changed from 2 to 0 decimals: A1 Currency table EN
	All PPRO payment methods	•	Response parameter "TransactionID" removed from Credit notes
2021-	Maybank2u	0	Credit has to be processed manually: Maybank2u#Creditwithreference
01-11	PayU CEE GECAD	0	If PayType is used, then parameter bdCountryCode becomes mandatory: PayU CEE GECAD
2021-	PayU	0	Bugfix in documentation regarding "ArticleList(n)" and clearification on "Amount": PayU CEE GECAD
01-06	Base64-encoding and JSON	0	Some common notes on handling JSON and Base64-encoding: Basics of Base64-encoding
2020- 12-29	EMV 3-D Secure / JSON	0	Added documentation to make handling of Base64-encoded parameters more transparent: Basics of Base64-encoding
12 20	EMV 3-D Secure /	•	Added section "Soft Decline" to make soft decline more clear: EMV 3-D Secure
	Soft Decline	•	Added key "challengePreference" to threeDSPolicy
	EMV 3-D Secure / Soft Decline	•	Added new response code "0366" for Soft decline: Error codes
	EMV 3-D Secure /	0	Description for key "UserData" corrected (no Base64-encoding required): Hosted Payment Page
	Soft Decline	0	Added hint to URLs (https required, no userdata allowed): Credit Card Form (paySSL)
	Hosted Payment Page	•	Added key "Cryptocurrency" to credit card handling: Card processing
	Hosted Payment	•	Added JSON-object for Payment Facilitator processing: subMerchantPF
	Page	0	Description of bd*-keys corrected for creating a Klarna Session: Klarna Payments#CreateKlarnasessionfortheHPP
	Credit card, Common	8	Added key "MandateURL" and values "OOFF, FRST" to "MdtSeqType": Direct debit, Server-2-Server, PPRO
	Credit Card,	0	Added day most tipe to pay feature "Delete passes related date" in Computer Applities EN
	Payment Facilitator	0	Added documentation to new feature "Delete person-related data" in: Computop Analytics EN
	Klarna, Klarna Session	0	Added note that only TLS 1.2 is allowed: Programming basics#PrinciplesofPaygateprogramming Note that exponent for Currency XOF has changed from "2" to "0": A1 Currency table EN
	Direct Debit via	0	Added new payment methods (upchequedejeuner, apetiz, passrestaurant, sofinco2xcb, sofinco2xcbsansfrais, sofinco3xcb,
	PPRO Cofidis, special	0	sofinco3xcbsansfrais, sofinco4xcb, sofinco4xcbsansfrais) to Thunes (Limonetik)
	characters		
	Analytics, GDPR- Delete		
	Paygate, TLS 1.2		
	Currency XOF		
	Limonetik		

2020- 12-10	Credit card, Common	•	On request we can return both (masked PAN (6x4) plus PcNr) in card:response EN
12 10	Credit card,CB2A	•	Credit cards with CB2A need to be still valid for capture / refund. So expired cards are now declined.
	PayU, Gecad	•	PayU Gecad (PayU CEE GECAD) now supports EMV 3DS, details see EMV 3-D Secure
	Analytics, Pay-By-		Analytics -> Create Process -> Pay By Link "valid for 1 hour" didn't work as expected.
	Link	0	Analytics User Log Search for "gdpr-delete" now supported.
	Analytics, User log	•	Payssl now checks for ASCII characters for field "cardholdername" to ensure that only EMV 3DS characters can be used.
	Payssl, cardholdername		
2020-	EMV 3-D Secure	0	Updated communication diagram (with english text) for credit card transaction with 3-D Secure via form interface.
11-19	Credit card, Cofidis	•	New payment type Cofidis available: Cofidis
	Klarna Payments	0	Notes on the token validity: Klarna Payments
	Klarna Payments	•	Supported countries (BE, ES, IT, PL) and languages (CA, ES, PL) added: Klarna Payments
	MyClear FPX	•	Parameter "RefNr" and "MobileNo" became mandatory: MyClear FPX
	Bluecode	0	New payment method "Bluecode" documentation added: Bluecode
	Smart Data	0	Corrected documentation: "Acquirer" to "Acquirer Name": Smart Data Reference Guide
2020-	EMV 3-D Secure	0	Added note that "currency" has to be ISO 4217 numeric (e.g. "978" for EUR): merchantRiskIndicator
10-30	Klarna Payments	0	Added URLConfirm for Klarna Payments with HPP: Klarna Payments#CreateKlarnasessionfortheHPP
	Direct Debit (direct	0	Added missing parameter RefNr: Direct debit#Directconnection.1
	connection)	0	Added information to Be2Bill and Fraud Prevention: Be2bill, keyword "IPAddr" + Fraud Prevention
	Be2Bill, Fraud Prevention		
2020- 10-23	EMV 3-D Secure	0	Added note to MIT transactions ("request elements"): Server-2-Server Integration
	EMV 3-D Secure	0	Added note to confirm challenge with mouseclick to One-time passwords (OTP): Test Cards
	EMV 3-D Secure	0	Changed "browserInfo" from mandatory to conditional: Server-2-Server Integration
	Common, Third- Party-Cookies	0	Notes / work arounds to new browser handling of 3rd-party-cookies: Third-party-cookies - Browser cookies and session handling
	Credit card,	0	Added note to refer to EMV 3-D Secure: Card processing#Processof3DSecurepayments
	common	0	Format RefNr corrected: Card processing EN#GICC
	Credit card, GICC	•	RefNr needs to be fixed length: Card processing EN#CB2A
	Credit card, CB2A	0	Detailed "OrderDesc" for Chinapay: ChinaPay
	ChinaPay	0	Chapter added to add PayPal API permission for PayPal Sandbox: PayPal EN - Sandbox
	PayPal API permissions	0	Corrected "ShippingInfo" -> "ShippingData": Klarna Payments#Capture
	Sandbox	0	Added response parameter: PayU India
	Klarna Payments	0	Parameter AmountClass mandatory: Debtor Management Ideal
	PayU India	0	New error codes 0148 and 1774 added: A4 Error codes
	Debtor, ideal		Filename for BatchManager unified for Analytics & sFTP: Batch manager
	Error codes	0	Added "Reference number" plus "Card holder information 1+2" to: Smart Data Reference Guide
	Batch-Manager Smart Data	•	
2020-	Analytics, Tx	•	Analytics, Operation detailed view: Added 3DS details like 3-D Version and ECI value
10-15	details	0	Analytics, Operation detailed view: Added feature "GDPR delete" as possible action. Special user permission required.
	Analytics, GDPR delete		New payment method "Bluecode" implemented: Bluecode
	Bluecode		
		-	Parameter availabilities and his Price and h
2020- 09-09	AfterPay	•	Parameter grossUnitPrice, netUnitPrice, vatPercent, vatAmount now mandatory: Riverty (AfterPay)

2020- 07-10	EMV 3-D Secure	0	Notes for color depths 30 and 36 bits which are not officially supported by EMVCo: browserInfo

Legend:

Туре	Description
	Bugfix
•	Change, improvement
0	Info, documentation only