



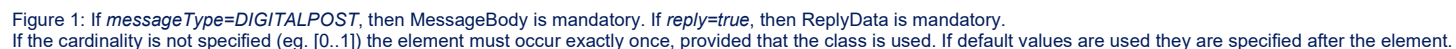
MeMo modelbeskrivelse v1.2

November 2024



Dette dokument indeholder den logiske model for MeMo Version 1.2 samt en uddybende beskrivelse af begreber, klasser og attributter.

I Appendix A findes en oversigt over de præfiks og navneområder, der er anvendt i modellen.



class AttentionData

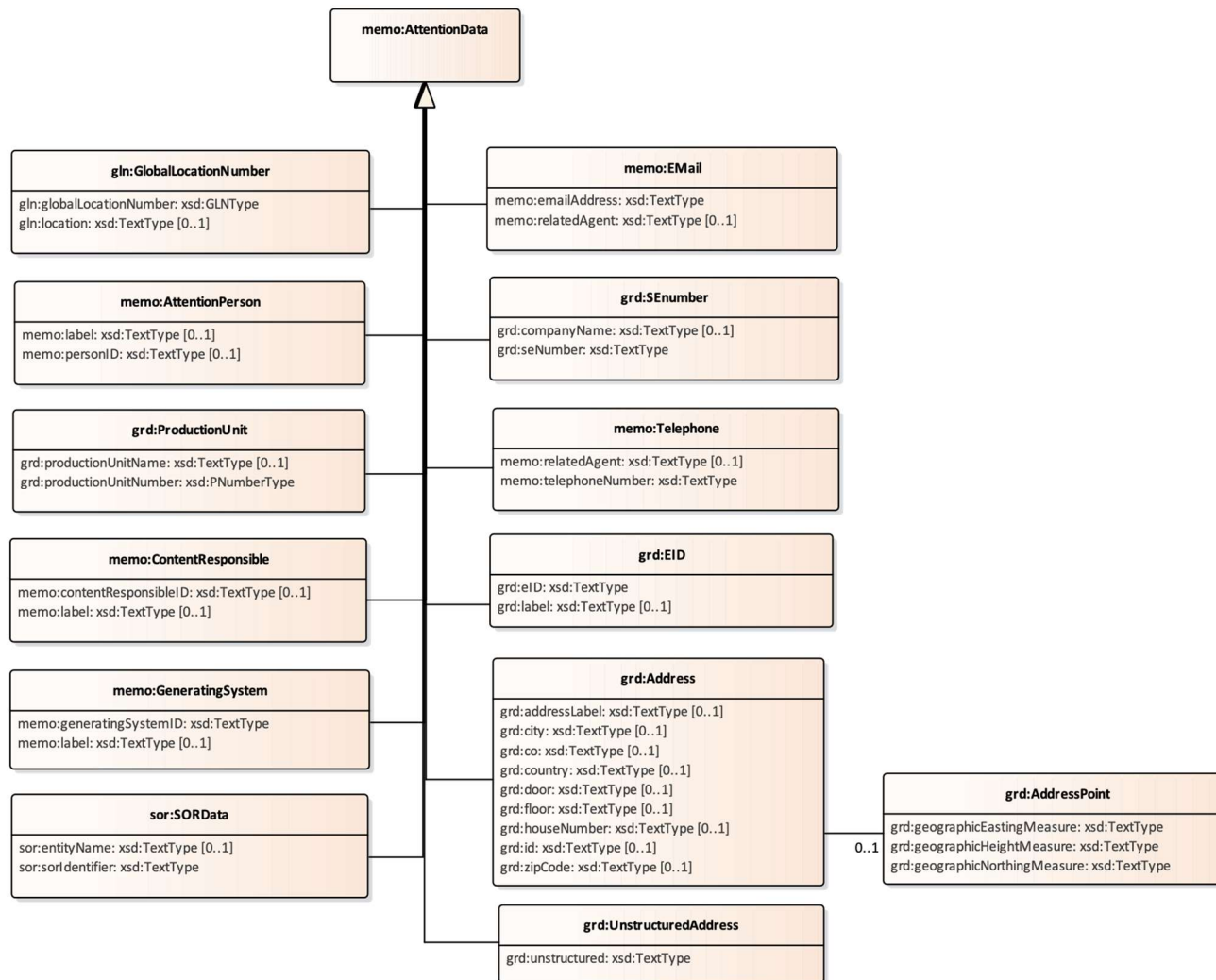


Figure 2: AttentionData; if the cardinality is not specified (eg. [0..1]) the element must occur exactly once, provided that the class is used.

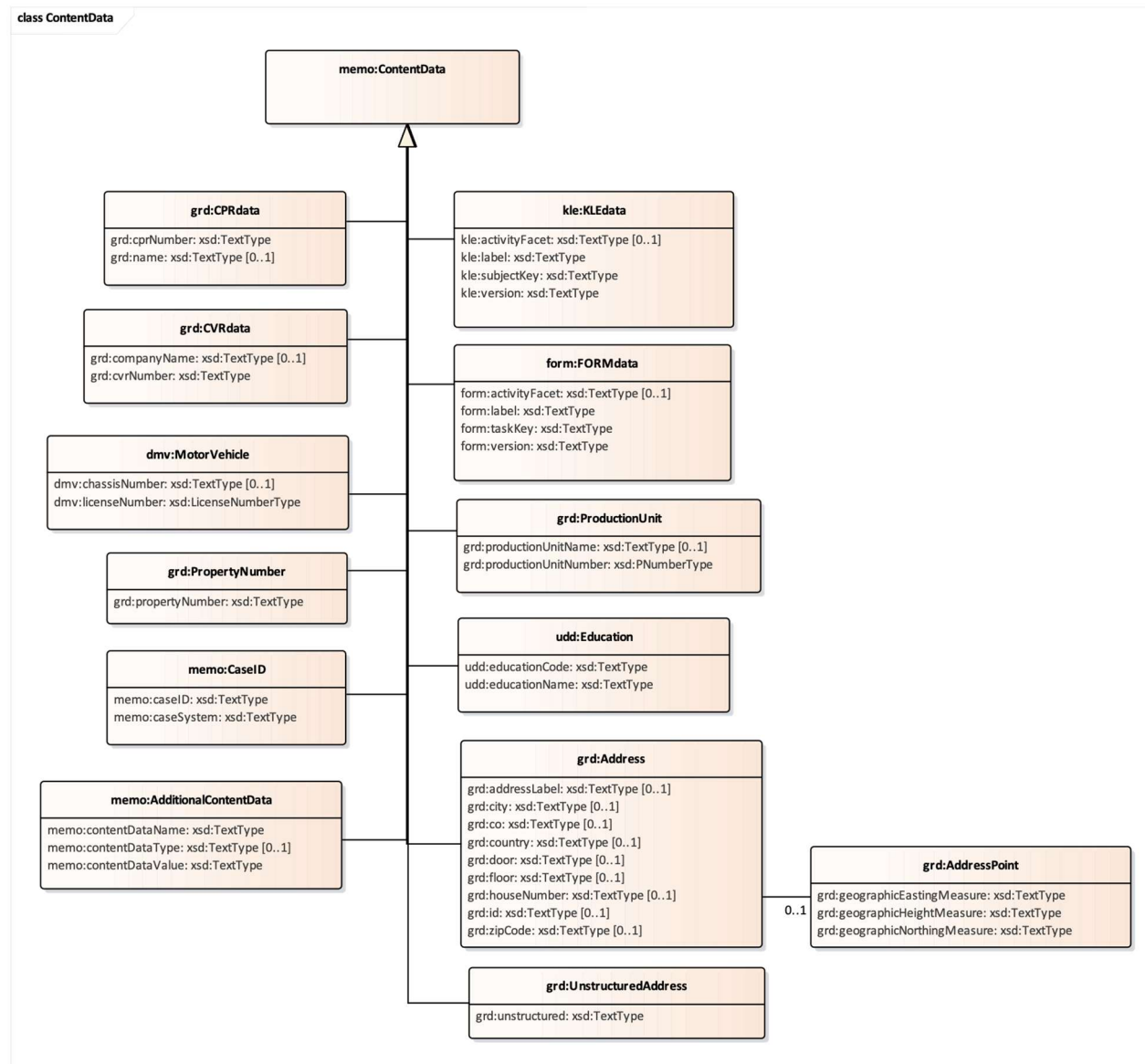


Figure 3: ContentData; if the cardinality is not specified (eg. [0..1]) the element must occur exactly once, provided that the class is used.

Data types

In the three figures above the data types are specified for each element. The following data types are used:

Data type	Description	Restrictions
<i>MessageType</i>	Specifies the MeMo message type	The only allowed values for the message type code list is “DIGITALPOST” and “NEMSMS”
<i>UriType</i>	<i>Specifies a URI</i>	Maximum field length is 256 characters
<i>UuidType</i>	<i>Specifies a UUID</i>	The unique ID must follow the pattern [a-fA-F0-9]{8}-[a-fA-F0-9]{4}-4[a-fA-F0-9]{3}-[aAbB89][a-fA-F0-9]{3}-[a-fA-F0-9]{12}
<i>CommentType</i>	<i>Specifies comment fields and can have a longer text</i>	Maximum field length is 512 characters
<i>TextType</i>	<i>Specifies general text fields</i>	Maximum field length is 256 characters
<i>LanguageType</i>	<i>Specifies language codes</i>	Maximum field length is 2 characters, and must be a valid language code
<i>NotificationType</i>	<i>Specifies a notification field used for eMails</i>	Maximum field length is 160 characters
<i>DateTimeType</i>	<i>Specifies the date and time format</i>	The DateTime field must follow the pattern YYYY-MM-DDTHH:MM:SSZ
<i>date</i>	<i>Specifies the date format</i>	The Date field must follow the pattern YYYY-MM-DD

<i>LicenseNumberType</i>	<i>Specifies an Auto License number</i>	Maximum field length is 7 characters
<i>GLNType</i>	<i>Specifies a Global Location Number</i>	Checks for a 13 characters long integer
<i>PNumberType</i>	<i>Specifies a P-number</i>	Checks for a 10 characters long integer
<i>base64Binary</i>	<i>Specifies the Base64 encodes content</i>	Checks for Base64 encoded content
<i>Boolean</i>	<i>Specifies the content as Boolean</i>	The Boolean values can be “true” or “false”

Classes and attributes

Message

Element	Application Note	Comments / Constraints	Element type
<i>Message</i>	<i>The information sent in one transaction through Digital Post. Equivalent to an e-mail in a traditional internet messaging setup, or to a letter received through physical mail.</i>	A Message must always have a Message header as a container for all information related to distributing the message. Classes and Attributes are presented in their sequential order in the spreadsheet ‘MeMo Classes and Attributes v1.2.xlsx’. This sequence should always be used when populating a Digital Post message.	Class: memo:Message

MessageHeader

Element	Application Note	Comments / Constraints	Element type
<i>MessageHeader</i>	<i>The MessageHeader contains the information necessary to route the message in Digital Post and help the receiver to handle the message in their own systems.</i> <i>This includes data about both sender and recipient, which can be described using a list of parameters e.g. a content responsible, production unit, attention person etc.</i> <i>Data describing and categorizing the content like KLE and FORM should make it easier for the recipient, to automatically sort and distribute the post internally, independent of the sender</i> <i>Also the sender can add data which must be returned in an eventual reply, so an answer can easier be linked to a prior message.</i>	The header can have one of two message types, either “normal” Digital Post or nemSMS. Digital Post Messages must have a Message body as a container for the message content. nemSMS Messages only have a Message header.	Class: memo:MessageHeader

messageType	<i>A message type is specified, so the message can be handled correctly in the Digital Post solution as either a "normal" message or a "NemSMS".</i>	messageType is mandatory and can have one of two values: "DIGITALPOST" - used to indicate a "Normal message" or "NEMSMS" - used to indicate an SMS message. TextType	Attribute: memo:messageType
messageUUID	<i>Unique identification of the message</i>	UUID is mandatory and must follow the specification for UUID version 4. It is the responsibility of the sender system to ensure that UUID is correctly generated. Example: 8C2ea15d-61fb-4ba9-9366-42f8b194c114 UuidType	Attribute: memo:messageUUID
messageID	<i>The sender's identification of the message</i>	The sender can as a supplement to the UUID specify his own identification of the message	Attribute: memo:messageID
messageCode	<i>A code describing the message</i>	A code describing the message category specified by the sender, e.g. "Payslip". The code can be used to sort and handle the messages in the receiving systems. If not specified, the messageCode defaults to "MeMo".	Attribute: memo:messageCode

label	<i>A title for the message</i>	Can be used as headline in the user client. The title used should be consistent, so that the Sender always uses the same title for the same type of message eg.Speeding ticket. In this way they can be grouped accordingly by the user client or sorted by a receiving system.	Attribute: memo:label
notification	<i>Part of the Message header that allows for the sender to make a user-oriented notification text, used to inform the recipient via SMS or e-mail that he has received Digital Post. The text is also used to create the SMS tekst when the MessageType is NEMSMS.</i>	A short text to notify the recipient that a message has arrived. Suitable for SMS or, e-mail. Should not contain sensitive information. If not specified a default text will be added by Digital Post. Note that maximum 160 characters are allowed If the sender wishes separate SMS and e-mail texts, the e-mail text can be specified in additionalNotification (see below).	Attribute: memo:notification
additionalNotification	<i>Additional text that allows for the sender to make a user-oriented notification text, only intended for e-mail</i>	If only notification is specified it will be used for both SMS and e-mail notification. If both notification and additionalNotification are specified, the notification is used for SMS and additionalNotification as e-mail text. If not specified a default notification text will be added by the Digital Post System.	Attribute: memo:AdditionalNotification
reply	<i>Setting which states whether a reply to the document is possible (true) or not (false)</i>	If not specified, the value defaults to "false" and reply is not possible	Attribute: memo:reply
replyByDateTime	<i>The deadline for the recipient to reply to a received document.</i>	Note that all Times must be in UTC The format is "2020-03-30T12:00:00Z"	Attribute: memo:replyByDateTime

<i>doNotDeliverUntilDate</i>	<i>Date when the sender wants messages delivered by in the future</i>	Instruction by the sender to the Digital Post System not to make the message available to the receiver before a given date	Attribute: memo:do-NotDeliverUntilDate
<i>mandatory</i>	<i>Specifies a mandatory message</i>	This boolean element is used to indicate a “mandatory” message that can be sent even when the receiver is exempted from Digital Post. The value defaults to “false” and must be set to “true” for mandatory messages.	Attribute: memo:mandatory
<i>legalNotification</i>	<i>Specifies a message with legal notification</i>	This boolean element is used to indicate legal notifications (forkyndelser) sent from a court instance e.g. informing the receiver that he must appear in court. The Digital Post solution registers if the receiver opens, deletes, moves or in any other way handles the legal notification, so the sender knows whether the receiver has been served. The value defaults to “false” and must be set to “true” for legal notifications.	Attribute: memo:legal-Notification
<i>postType</i>	<i>Specifies if the message is sent to a public authority in its role as public authority or a company</i>	The postType can have one of two values "VIRKSOMHEDSPOST" or "MYNDIGHEDSPOST" or left unused. Denoting whether recipient is treated as a public authority or company.	Attribute: memo:postType

Sender

Element	Application Note	Comments / Constraints	Element type
<i>Sender</i>	The sender of the message. The public Sender must have a connection agreement with Digital Post.	If the sender wishes to supply the receiver with further information about the sender it is possible to add further data in the AttentionData class	Class: memo:Sender
<i>senderID</i>	The identification of the sender e.g. by "CVR-number" or "CPR-number"	The sender of the message must unambiguously be identified by the sender ID, normally that would be CVR-number for companies/authorities and CPR-number for citizens.	Attribute: memo:senderID
<i>idType</i>	Specifies the type of ID - "CPR" or "CVR"	Only the defined idTypes, i.e. "CPR" or "CVR", are valid values.	Attribute: memo:id-Type
<i>label</i>	Name of the Sender		Attribute: memo:label

Representative

Element	Application Note	Comments / Constraints	Element type
Representative	A representative who sends the message on behalf of the sender. Read more about this here: https://digitaliser.dk/digital-post/ny-hedsarkiv/2024/nov/i-dag-lanceres-laese-og-skriveadgang-til-digital-post	If an organization or person has been chosen to send messages on behalf of the sender, i.e. because they have been granted access to write messages from the senders mailbox, the representative class can be used to include information about the representative, to make it clear to the recipient, that the message has been sent on behalf of the sender by another party.	Class: memo:Representative
representativeID	The identification of the representative i.e. by "CVR-number" or "CPR-number"	The representative must unambiguously be identified by the representative ID, normally that would be CVR-number for companies/authorities and CPR-number for citizens.	Attribute: memo:representativeID
idType	Specifies the type of ID - "CPR" or "CVR"	Only the defined idTypes, i.e. "CPR" or "CVR", are valid values.	Attribute: memo:idType
label	Name of the Representative		Attribute: memo:label

Recipient

Element	Application Note	Comments / Constraints	Element type
<i>Recipient</i>	<i>The Receiver of the message.</i> <i>The public Recipient must have a connection agreement with Digital Post.</i>	If the recipient must be described in more detail it is possible to add further data in the attention data class	Class: memo:Recipient
<i>recipientID</i>	<i>Recipient identified by "CPR-number" or "CVR-number"</i>	The recipient of the message must unambiguously be identified by the recipient ID, normally done by using CVR-number for companies/authorities or CPR-number for citizens.	Attribute: memo:recipientID
<i>idType</i>	<i>Specifies the type of ID - "CPR" or "CVR"</i>	Only the defined idTypes, i.e. "CPR" or "CVR", are valid values.	Attribute: memo:id-Type
<i>label</i>	<i>Recipient identified by name</i>		Attribute: memo:label

AttentionData

AttentionData is supplementary data describing the sender or the recipient. Each type of data is described as a separate class.

Element	Application Note	Comments / Constraints	Element type
AttentionPerson	Specification of attention person by ID (e.g. employee ID) and/or name.		Class: memo:AttentionPerson
personID	Identifier for the person e.g. employee number		Attribute: memo:personID
label	Text or label for the ID e.g. person name		Attribute: memo:Label
Email	Sender or receiver eMail and possible name		Class: memo:Email
emailAddress	Email address		Attribute: memo:emailAddress
relatedAgent	The owner/agent related to the email address		Attribute: memo:relatedAgent
Telephone	Sender or receivers phone number		Class: memo:Telephone

telephoneNumber	<i>Phone number</i>		Attribute: memo:telephoneNumber
relatedAgent	<i>The owner/agent related to the phone number</i>		Attribute: memo:relatedAgent
GlobalLocation-Number	<i>Sender or receiver's "Global Location Number" and if possible the name for this</i>		Class: gln:GlobalLocationNumber
globalLocationNumber	<i>The Global Location Number of the respective organization, person, or place.</i>	The GLN is a 13-digit number used to identify physical locations.	Attribute: gln:globalLocationNumber
location	<i>Text or label for the GLN-number</i>		Attribute: gln:location
ContentResponsible	<i>The organization, department, office etc. responsible for the content of the message</i>	The "sender" of a message is the part who has an agreement with and is registered as sender of Digital Post, but in some cases the "sender" is not the part actually responsible for the content of the message. For example the sender can be "Domstolsstyrelsen", but the responsible part is "Retten i Glostrup". In this case "Retten i Glostrup" can be specified as "content responsible" to indicate who is the actual sender and responsible for the message. In some cases information about the "content responsible" is actually of more relevance to the receiver than the information about the "sender". If specified, the name of the content responsible will be shown in the viewing clients.	Class: memo:ContentResponsible

		Attention data on ContentResponsible is only relevant in relation to the Sender.	
contentResponsibleID	<i>The identifier for the content responsible</i>		Attribute: memo:contentResponsibleID
label	<i>Text for label for the content responsible</i>		Attribute: memo:label
ProductionUnit	<i>Sender or recipient's production unit number (p-nummer). Number and a possible name can be specified.</i>		Class: grd:ProductionUnit
productionUnitNumber	<i>Production unit code (p-nummer)</i>		Attribute: grd:productionUnitNumber
productionUnitName	<i>Text or label for the production unit</i>		Attribute: grd:productionUnitName
SEnumber	<i>Sender or receivers VAT-number (SE-nummer) and corresponding company name</i>		Class: grd:SEnumber
seNumber	<i>VAT-number, i.e. a SE-nummer</i>		Attribute: grd:seNumber

companyName	<i>Text or label for the owner of the VAT-number</i>		Attribute: grd:companyName
GeneratingSystem	<i>The system from where the message is generated</i>	Attention data on the Generating system is only relevant in relation to the Sender.	Class: memo:GeneratingSystem
generatingSystemID	<i>Identifier for the generating system</i>		Attribute: memo:generatingSystemD
label	<i>Text or label for the generating system</i>		Attribute: memo:label
EID	<i>Sender or recipient's eID (certificate) data</i>	The eID was earlier referred to as RID-number	Class: grd:EID
eID	<i>eID identifier</i>		Attribute: grd:eID
label	<i>The name of the owner of the eID/certificate</i>		Attribute:grd:label
SORdata	<i>Sender or recipients SOR data</i>	SOR is a register of the health care systems organizational units	Class: sor:SORdata
sorIdentifier	<i>SOR identification</i>	The SOR-code that relates to the health care unit. Generated automatically. A SOR-code is composed by four components: Sequence number - Namespace (7 digits: "1000016") - Partition id (2 digits) - Checksum-digit (1 digit). The first possible SOR-code is thus '11000016002'	Attribute: sor:sorIdentifier

entityName	<i>Name related to SOR identifier</i>	Name of the health care unit. If not specified the name can be collected from SOR and displayed in the UI	Attribute: sor:entity-Name
Address	<i>Address information</i>	If structured address information cannot be provided, an unstructured address can be specified in the separate UnstructuredAddress class. The Address and the UnstructuredAddress are mutually exclusive.	Class: grd:Address
id	<i>Unik identifier for the address</i>		Attribute: grd:id
addressLabel	<i>Street name</i>		Attribute: grd:addressLabel
houseNumber	<i>House number</i>		Attribute: grd:house-Number
door	<i>Identifier for the door</i>		Attribute: grd:door
co	<i>Care of/attention</i>		Attribute: grd:co
floor	<i>Floor</i>		Attribute: grd:floor
zipCode	<i>Zip code</i>		Attribute: grd:zipCode

city	City name		Attribute: grd:city
country	Country code		Attribute: grd:country
AddressPoint	Address point information		Class: grd:AddressPoint Subclass of Address
geographicEasting-Measure	Degree of latitude		Attribute: grd:geographicEastingMeasure
geographicNorthing-Measure	Degree of longitude		Attribute: grd:geographicNorthingMeasure
geographicHeight-Measure	Altitude		Attribute: grd:geographicHeightMeasure
UnstructuredAddress	Address	Alternative address specification	Class: grd:Address
unstructured	Unstructured address specification	As an alternative to the structured address described above, the address can be specified as text in one field. It is allowed to use CData tag to preserve new lines.	Attribute: grd:unstructured

ContactPoint

A ContactPoint can be used to identify different areas within a public authority that it makes sense for eg. a citizen to send Digital Post to. Each ContactPoint has an identified receiving system setup in the Digital Post solution. When writing to a public authority their ContactPoint must always be specified.

When a public authority act as a sender, they can specify the ContactPoint they want replies sent to.

Element	Application Note	Comments / Constraints	Element type
<i>ContactPoint</i>	<i>When contacting a public authority, a contact point must be specified.</i>	When a citizen or a company writes to an authority the correct contact point can be looked up in central register for authorities	Class: memo: ContactPoint
<i>contactGroup</i>	<i>A Contact group defined by the authority</i>		Attribute: memo:contactGroup
<i>contactPointID</i>	<i>the authority's contact point Id</i>		Attribute: memo:contactPointID
<i>label</i>	<i>Text or label describing the contact point</i>		Attribute: memo:label
<i>ContactInfo</i>	<i>Supplementary contact information requested by the authority</i>	When specifying the contact point, the authority can add up to two additional fields, which must be filled out before a message is sent to that particular contact point.	Class: memo:ContactInfo SubClass of ContactPoint

label	<i>Name for the contact info field</i>	The authority must name the fields for the additional information.	Attribute: memo:label
value	<i>Value for the contact info field</i>	The value is added to the field by the sender of the message when selecting that particular contact point.	Attribute: memo:value

ContentData

Content data are specified as classes, with the relevant properties. The purpose is to help the recipient sort and distribute received messages internally.

ContentData is a flexible class that allows the sender to specify additional data describing the content of the message. General use is defined by Digital Post to assure consistency (so e.g. KLE, FORM, CPR-number etc. are always specified the same way). Other content data, only relevant for particular messages or in bilateral agreements, can be specified by the sender using up to ten additional ContentData classes using name/value pairs to describe an attribute and its value.

Element	Application Note	Comments / Constraints	Element type
CPRdata	<i>CPR-number and possible name of the person a message concern</i>		Class: grd:CPRdata
cprNumber	<i>Personal registration number</i>		Attribute: grd:cprNumber

name	<i>The person name</i>		Attribute: grd:name
CVRdata	<i>CVR-number and possible name of the company a message concern</i>		Class: grd:CVRdata
cvrNumber	<i>Company identification, i.e. CVR-number</i>		Attribute: grd:cvrNum- ber
companyName	<i>The company name</i>		Attribute: grd:com- panyName
ProductionUnit	<i>Production unit (p-nummer) and possible name for the organizational unit the message con- cern.</i>		Class: grd:Produc- tionUnit
productionUnitNum- ber	<i>Production unit code (p-nummer)</i>		Attribute: grd:produc- tionUnitNumber
productionUnitName	<i>Text or label for the production unit</i>		Attribute: grd:produc- tinUnitName
MotorVehicle	<i>Information about motor vehicles</i>		Class: dmV:Mo- torVehicle

<i>licenseNumber</i>	<i>The vehicles license number</i>		Attribute: dmvl:licenseNumber
<i>chassisNumber</i>	<i>The vehicles chassis number</i>		Attribute: dmvl:chassisNumber
<i>PropertyNumber</i>	<i>Information about property</i>		Class: grd:PropertyNumber
<i>propertyNumber</i>	<i>Property number</i>		Attribute: grd:propertyNumber
<i>Education</i>	<i>Information about educations</i>		Class: udd:Education
<i>educationCode</i>	<i>The code for that specific education</i>		Attribute: udd:educationCode
<i>educationName</i>	<i>Text or label describing the education</i>		Attribute: udd:educationName
<i>CaseID</i>	<i>Case identification</i>		Class: memo:CaseID
<i>caseID</i>	<i>Case number</i>		Attribute: memo:caseID

caseSystem	<i>The system where the case number is identified</i>		Attribute: memo:case-System
KLEdata	<i>KLE code describing the authoritative tasks a message concern</i>		Class: kle:KLEdata
subjectKey	<i>Identification of the KLE subject key</i>		Attribute: kle:Subject-Key
version	<i>The KLE version</i>		Attribute: kle:version
activityFacet	<i>Identification of the KLE activity facet</i>		Attribute: kle:activity-Facet
label	<i>Text or label for the KLE code</i>		Attribute: kle:kabel
FORMdata	<i>FORM code for the authoritative tasks a message concern</i>		Class: form:FORMdata
taskKey	<i>Identification of the FORM subject key</i>		Attribute: form:task-Key
version	<i>The FORM version</i>		Attribute: form:version

activityFacet	<i>Identification of the FORM activity facet</i>		Attribute: form:activityFacet
label	<i>Text or label for the FORM code</i>		Attribute: form:label
Address	<i>Address information</i>	If structured address information can not be provided, an unstructured address can be specified in separate UnstructuredAddress class. The Address and the UnstructuredAddress are mutually exclusive.	Class: grd:Address
id	<i>Unik identifier for the address</i>		Attribute: grd:id
addressLabel	<i>Street name</i>		Attribute: grd:addressLabel
houseNumber	<i>House number</i>		Attribute: grd:houseNumber
door	<i>Identifier for the door</i>		Attribute: grd:door
co	<i>Care of/attention</i>		Attribute: grd:co
floor	<i>Floor</i>		Attribute: grd:floor

zipCode	Zip code		Attribute: grd:zipCode
city	City name		Attribute: grd:city
country	Country code		Attribute: grd:country
AddressPoint	Address point information		Class: grd:AddressPoint Subclass of Address
geographicEasting-Measure	Degree of latitude		Attribute: grd:geographicEastingMeasure
geographicNorthing-Measure	Degree of longitude		Attribute: grd:geographicNorthingMeasure
geographicHeight-Measure	Altitude		Attribute: grd:geographicHeightMeasure
UnstructuredAddress	Address	Alternative address specification	Class: grd:Address

<i>unstructured</i>	<i>Unstructured address specification</i>	As an alternative to the structured address described above, the address can be specified as text in one field. CData tags are allowed to preserve new lines.	Attribute: grd:unstructured
AdditionalContentData	<i>Additional content data specified by the sender</i>	Up to ten supplementary classes can be added describing the content of the document.	Class: memo:AdditionalContentData
contentDataType	<i>The type of additional content data</i>	A common type categorizing further content data. If more AdditionalContentData classes are added the contentDataType can be used to group related content by giving them the same type.	Attribute: memo:contentDataType
contentDataName	<i>The name of the additional content data element</i>		Attribute: memo:contentDataName
contentDataValue	<i>The value for the additional content data element</i>		Attribute: memo:contentDataValue

ForwardData

Element	Application Note	Comments / Constraints	Element type
ForwardData	<i>Information relevant when a received message is forwarded</i>	In the Digital Post solution a Recipient can identify a number of trusted persons to whom they can choose to forward a message received in Digital Post in a secure way.	Class: memo:ForwardData
messageUUID	<i>MessageUUID identifying the forwarded message</i>	UUID's must follow the specification for UUID version 4. Example: "8C2ea15d-61fb-4ba9-9366-42f8b194c114"	Attribute: memo:messageUUID
originalMessageDateTime	<i>The date and time for the original message.</i>		Attribute: memo:originalMessageDateTime
originalSender	<i>Identification of the original sender of the forwarded message</i>	Sender label from the original message being forwarded. E.g. the name of the public authority who originally send the message.	Attribute: memo:originalSender
originalRepresentative	<i>Identification of the original representative of the forwarded message</i>	Representative label from the original message being forwarded.	Attribute: memo:originalRepresentative
originalContentResponsible	<i>Identification of the original content responsible of the forwarded message</i>	ContentResponsible label from the original message being forwarded.	Attribute: memo:originalContentResponsible

contactPointID	Identification of the original contact point id of the forwarded message		Attribute: memo:contactPointID
comment	Any comment from the original recipient of the message to the new receiver of the forwarded message	For example, a comment on the reason for forwarding the message to the trusted person.	Attribute: memo:comment

ReplyData

When replying to a message the sender can specify his own Reply data in an additional Reply data class, and thereby linking messages in a conversation by always pointing backwards to the previous message. New messages marked with reply=true **must** initiate this chain, by having ReplyData.messageUUID present with the message's UUID.

Element	Application Note	Comments / Constraints	Element type
ReplyData	The Reply data class allows the sender to specify data which must be returned in an answer.	If reply=true, then ReplyData is mandatory. Reply data must be returned to the sender unchanged. The data can help the sender link a returned message to the initial message. When replying to a message the sender must specify his own Reply data in an additional Reply data class, thereby linking messages in a conversation by always pointing backwards to the previous message. See separate guide for more information on reply data.	Class: memo:ReplyData

messageID	<i>MessageID that must be returned in a reply, if specified by the sender</i>		Attribute: memo:mes- sageID
messageUUID	<i>MessageUUID that must be returned in a reply, if specified by the sender</i>	The UUID of the message creating the entry in the ReplyData class. If it's the initiating message, and reply=true, this must be present in ReplyData. UUID's must follow the specification for UUID version 4. Example: "8C2ea15d-61fb-4ba9-9366-42f8b194c114"	Attribute: memo:mes- sageUUID
replyUUID	<i>ReplyUUID that must be returned in a reply, if specified by the sender</i>	The replyUUID must always point to the identifier (MessageUUID) of the message that is being replied to. UUID's must follow the specification for UUID version 4. Example: "8C2ea15d-61fb-4ba9-9366-42f8b194c114" For the initial message the replyID will always be empty, since there is no prior message to point to.	Attribute: memo:reply- UUID
senderID	<i>SenderID that must be returned in a reply, if specified by the sender</i>		Attribute: memo:sen- derID
recipientID	<i>RecipientID that must be returned in a reply, if specified by the sender</i>		Attribute: memo:reci- pientID

caseID	<i>CaseID that must be returned in a reply, if specified by the sender</i>		Attribute: memo:caseID
contactPointID	<i>ContactPointID that must be returned in a reply, if specified by the sender</i>		Attribute: memo:contactPointID
generatingSystem	<i>GeneratingSystem that must be returned in a reply if specified by the sender</i>		Attribute: memo:generatingSystem
comment	<i>Comment that must be returned in a reply, if specified by the sender</i>		Attribute: memo:comment
AdditionalReplyData	<i>Up to four subclasses of additional information that must be returned in a reply if specified by the sender, can be added to the ReplyData class</i>		Class: memo:AdditionalReplyData
label	<i>Label for additional information that must be returned in a reply if specified by the sender</i>	It is up to the sender to decide which information to add to each of the additional replyData elements. The label specifies the type of additional information.	Attribute: memo:label
value	<i>Value for the additional information that must be returned in a reply if specified by the sender</i>	It is up to the sender to decide which information to add to each of the additional replyData elements. The value for the specified label is added in the value field.	Attribute: memo:value

MessageBody

Element	Application Note	Comments / Constraints	Element type
MessageBody	<i>Message Body contains the actual message consisting of documents and files and eventual actions.</i> <i>The Message Body itself does not contain text</i>	If messageType=DIGITALPOST, then MessageBody is mandatory.	Class: memo:MessageBody
createdDateTime	<i>Date and time at which the creator of the message indicated that the message was complete and ready to enter the mail delivery system – equivalent to “brevdato”</i>	Note that all Times must be in UTC The format is “2020-03-30T12:00:00Z” Other dates and times can be relevant in relation to processing the message, e.g. at what time a message was made available to the receiver. This information is however not relevant to the MeMo document itself - they can instead be found in the Digital Post log (“hændelseslog”) or in the senders or receivers log data or receipts.	Attribute: memo:createdDateTime

Documents

Three types of documents can be added to a DIGITALPOST type Message. Messages of the type NEMSMS, has no body and therefore no added documents.

Exactly one main document must be added, and any number of additional documents can be added (in the Digital Post solution the limit is 10 additional documents). The Main document will be displayed first and any additional documents are displayed in the same sequence as they are added in the Message.

It is also possible to add “technical” documents. Technical documents can contain any type of additional information about the message – normally according to a bilateral agreement between the sender and the receiver. “Technical” documents will not be handled or displayed by the viewing clients. A receiving system can choose to interpret and use the content in the technical documents, if it is of value to them.

In the transition period until MeMo is fully implemented in sender systems, a transformation between the former format (DP1/DP2) and MeMo will be necessary. The Digital Post Solution will add a technical document containing the original DP1/DP2 message to ensure that a copy of the original message is available to the receiver.

Element	Application Note	Comments / Constraints	Element type
<i>MainDocument</i>	<i>There must be exactly one main document in a message.</i>	A document is a logical collection of files.	Class: memo:Main-Document
<i>mainDocumentID</i>	<i>The ID of the main document</i>		Attribute: memo:mainDocumentID
<i>label</i>	<i>The name of the added document</i>		Attribute: memo:label

<i>AdditionalDocument</i>	<i>A number of additional documents relevant for the message can be added</i>	If more than one additional document is added to the message, they are displayed in the same order as they are represented in the MeMo message.	Class: memo:AdditionalDocument
<i>additionalDocumentID</i>	<i>The ID of the additional documents</i>		Attribute: memo:additionalDocumentID
<i>label</i>	<i>The name of the added document</i>		Attribute: memo:label
<i>TechnicalDocument</i>	<i>A number of technical documents relevant for the message can be added</i>	Technical documents can be used by the receiving system. Information from the technical documents will not be shown in the Viewing clients. Note that it is not possible to relate an Action to a Technical Document.	Class: memo:TechnicalDocument
<i>technicalDocumentID</i>	<i>The ID of the technical documents</i>		Attribute: memo:technicalDocumentID
<i>label</i>	<i>The name of the added document</i>	The label could be used as a document header and is typically easier readable than the file name (described below).	Attribute: memo:label

File

Element	Application Note	Comments / Constraints	Element type
<i>File</i>	A document can contain one or more files. Files can exist in variants, where the same file can be attached in more file formats e.g. text, HTML, PDF etc. Also the same file can be in different languages. The receiving system e.g. a user client can choose to support displaying the selected language.	See separate guidelines with use cases for document and file variants. All attached files are considered Base64 encoded.	Class: memo:File
<i>encodingFormat</i>	The mime type of the file	E.g. "text/html" or "application/pdf" See the list of allowed MimeCodes	Attribute: memo:encodingFormat
<i>filename</i>	An identifying name given to a file	Note that filename must include the filetype extension eg. ".pdf" and should follow best practice for file naming conventions where they are kept short and must not contain special characters.	Attribute: memo:filename
<i>language</i>	Language code for the content of the file	language code e.g. "da", "en" etc. Must follow ISO 639-1.	Attribute: memo:language

content	<i>Contains the embedded content of the file</i>	The content must always be Base64 encoded	Attribute: memo:content
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Action

Element	Application Note	Comments / Constraints	Element type
Action	<i>The sender can supply information, which makes it possible for the recipient to act directly on the message. It could be creating a calendar appointment, pay an invoice in the sender's payment solution, signing a document or other interactions with external systems based on an external link.</i>	A sender can add information to the message, which can be made actionable for the recipient. Since the possible actions will depend on the receiving system e.g. a user client, the Actions should only be considered a supplement to information already available elsewhere in the attached documents (main and/or additional documents). For more information on Actions see separate guideline	Class: memo:Action
label	<i>The label for the interaction</i>	Can be used as a supplement to the action code to further specify the headline for a link or a button in the user client.	Attribute: memo:label
actionCode	<i>Indicating the type of action</i>	For Similar actions a common code, e.g. "Payment", "Calendar Invite or "Digital Signing" could be used to help the Viewing clients identify which kind of action it is.	Attribute: memo:actionCode

startDateTime	<i>The start date and time from when an action can be carried out.</i>	Note that all Times must be in UTC The format is "2020-03-30T12:00:00Z"	Attribute: memo:start-DateTime
endDateTime	<i>The deadline to carry out the specified action if relevant.</i>	Note that all Times must be in UTC The format is "2020-03-30T12:00:00Z"	Attribute: memo:end-DateTime

EntryPoint

Element	Application Note	Comments / Constraints	Element type
EntryPoint	<i>Interactions with external systems that can be reached with an external link</i>	Note that either an Entry point or a Reservation (described below) is allowed for an Action class	Class: memo:Entry-Point
url	<i>URI to the service/action made available by the sender of the message e.g. a payment solution or a self-service solution.</i>	Hyperlinks must be "HTTPS://"	Attribute: memo:url

Reservation

Element	Application Note	Comments / Constraints	Element type
<i>Reservation</i>	<i>Allows for integration to calendar appointments. Can be mapped to different calendar formats dependent on the receiving system.</i>	Note that either an Entry point (described above) or a Reservation is allowed for an Action class	Class: memo:Reservation
<i>description</i>	<i>Further description of the appointment</i>	Description may include but is not limited to: an abstract, a table of contents, a graphical representation, or a free-text account of the resource.	Attribute: memo:description
<i>reservationUUID</i>	<i>This property defines the persistent, unique identifier for the calendar component.</i>		Attribute: memo:reservationUUID
<i>abstract</i>	<i>Short text/headline for the calendar appointment</i>		Attribute: memo:abstract
<i>location</i>	<i>Location</i>		Attribute: memo:location
<i>startDateTime</i>	<i>Calendar start time</i>	Note that all Times must be in UTC The format is "2020-03-30T12:00:00Z"	Attribute: memo:startDateTime

endTime	<i>Calendar end time</i>	Note that all Times must be in UTC The format is "2020-03-30T12:00:00Z"	Attribute: memo:end-DateTime
organizerMail	<i>The calendar organizers email</i>		Attribute: memo:organizerMail
organizerName	<i>The calendar organizers name</i>		Attribute: memo:organizerName

Appendix A

Præfix og navneområder anvendt i modellen.

Præfiks	Navneområde	Kilde
memo	https://DigitalPost.dk/MeMo-1	I attributten memoVersion angives den anvendte version
gln	https://www.gs1.dk/gs1-standarder/identifikation/gln-global-location-number/	

udd	https://www.dst.dk/da/TilSalg/Forskningservice/Dokumentation/hoekvalitetsvariable/elevregister-2/udd#	
dmv	https://motorregister.skat.dk/	
form	http://www.form-online.dk/	
kle	http://kle-online.dk/	
grd	http://kle-online.dk/	
sor	https://services.nsi.dk/en/Services/SOR	
xsi	http://www.w3.org/2001/XMLSchema-instance	
xsd	http://www.w3.org/2001/XMLSchema#	Navneområde og præfiks til XSD-datatype. Se eventuelt mere på: https://www.w3.org/TR/swbp-xsch-datatypes/
dt	https://data.gov.dk/model/dataTypes/	