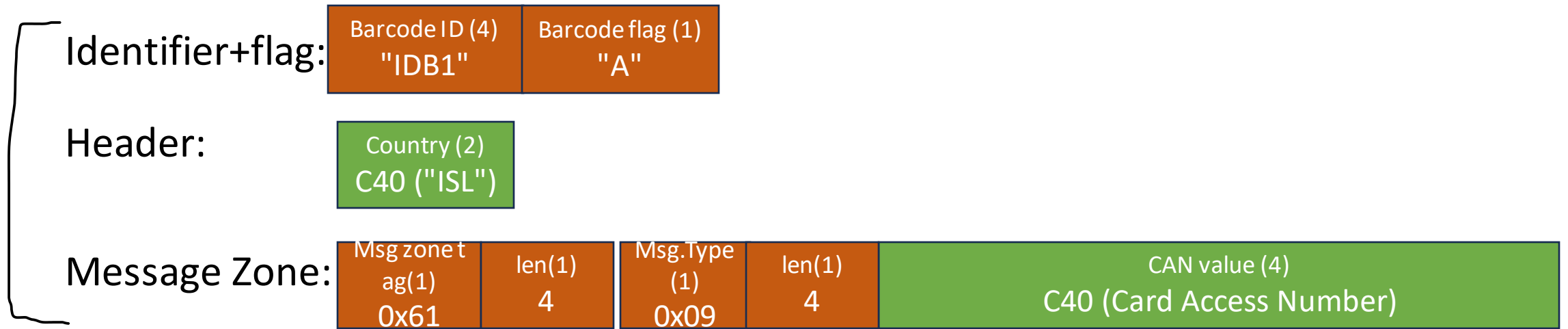# Icelandic ID-cards: ICAO Digital Barcodes (IDB)

18 January 2024
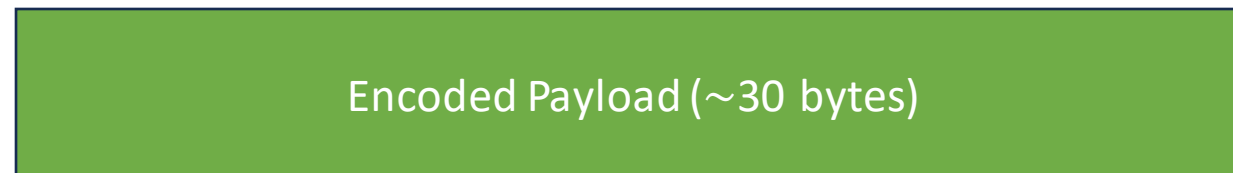
Icelandic ID-card: **small** CAN barcode on card **front**

Identifier+flag:

Barcode ID (4) "IDB1"	Barcode flag (1) "A"

Header:

Country (2) C40 ("ISL")

Message Zone:

Msg zone t ag(1) 0x61	len(1) 4	Msg.Type (1) 0x09	len(1) 4	CAN value (4) C40 (Card Access Number)

Payload structure to be encoded

Header (2) C40 ("ISL")	Msg zone tag(1) 0x61	len(1) 4	Msg.Type (1) 0x09	len(1) 4	MSG Zone (4) C40(CAN)

Zlib + Base32 + de-padding:

Encoded Payload (~30 bytes)

Barcode from Base32 (6x6mm 600dpi):

IDB1(4c, 8b)	Encoded Payload (~30 bytes)

Icelandic ID-card: Large barcode on card reverse

Front:

Barcode ID (4) "IDB1"	Barcode flag (1) "D"

Header:

Country (2) ("ISL")(c 40)	Signature alg(1) 0x01, 0x02 or 0x03	Certificate ref (5) (sha1 end)	Sign.date (4) Date (encoded)

MRZ message:

Msg zone tag(1) 0x61 ("T")	Msg len(3) DER-TLV	MRZ tag (1) 0x07	MRZ len(1) 0x3C (60) or 0x5A (90)	MRZ (60) C40 ("IDISLIS1234567X121212 1239 121212XF291011XISL 3 AEVARSDOTTIR THURIDUR OESP ")

Nat.MsgType (1) 0xAA	len(1) 44	Full name (44) "Þuríður Ösp Ævarsdóttir"

Nat.MsgType (1) 0xAB	len(3) DER-TLV	Tiny Facial (<1024) Jpeg2000 (B/W+shrink+compress)

Signature zone:

Signature Tag (1) 0x7F	len(1) <73	Signature (<73) (DER encoded – Signature on Header+All Messages)

Final encoding of large barcode

Encoded structure
for signing (<1129):

Signed structure
(<1204):

ZLIB compressed
level9 (~1196):

Base32 encoded (8/5)
+de-padding (<1866):

Barcode from Base32
(25x25mm 600dpi):

Header (16)	MRZ message (63)	FullName message (47)	TinyFacial message (<1005)	
Header (16)	MRZ message (63)	FullName message (47)	TinyFacial message (<1005)	Signature zone (<75)
Header	MRZ message	FullName message	TinyFacial message	Signature zone
Header (16)	MRZ message (69)	FullName message (53)	TinyFacial message (<1608)	Signature zone (<120)