John Wells

From: John Wells [john.wells@scarlet.be]

Sent: 11 August 2005 12:57

To: CEN TC331 WG3 Secretariat; Domino, Philip Easton; Finland Post, Juha Nurmi (Finland Post, Juha Nurmi); Finland Post, Reijo Mononen (Finland Post, Reijo Mononen); Giovanni Brardinoni (Ente Poste Italiane, Giovanni Brardinoni); Intermec, Sprague Ackley (Intermec, Sprague Ackley); IPC, John Wells; John Park (John Park); Jose Coutinho (Correios de Portugal, Jose Coutinho); Joseph Ulvr (Canada Post, Joseph Ulvr); La Poste SRTP, Roland Leray (La Poste SRTP, Roland Leray); La Poste, Jérôme Moreau (La Poste, Jérôme Moreau); La Poste, Maud Lebourgeois (La Poste, Maud Lebourgeois); Lubenow & Associates, Joe Lubenow (Lubenow & Associates, Joe Lubenow); Marcelo Macedo de Castro (marcelomc@correios.com.br); Michele Vicenzi (Elsag, Michele Vicenzi); Ned Hayden (An Post, Ned Hayden); Norway Post, Rune Larsen (Norway Post, Rune Larsen); Peter Scheller (Deutsche Post, Peter Scheller); Pitney Bowes, Leon Pintsov (Pitney Bowes, Leon Pintsov); Pitney Bowes, Richard Collins (Pitney Bowes, Richard Collins); Post Danmark, Jeanne M Delaurent (Post Danmark, Jeanne M Delaurent); Royal Mail, Dave Evans (Royal Mail, Dave Evans); Siemens Dematic, Juergen Schad (Siemens Dematic, Juergen Schad); Smart Vision Systems, Joan Martinez (Smart Vision Systems, Joan Martinez); Solystic, Christophe Caillon (Solystic, Christophe Caillon); Solystic, Emmanuel Miette (Solystic, Emmanuel Miette); Solystic, Francois Gillet (Solystic, Francois Gillet); Stefano Solari (Elsag, Stefano Solari); Sweden Post, Hans Blomqvist (Sweden Post, Hans Blomqvist); TPG Post Willem Klein (TPG Post, Willem Klein); TPG Post, Michael A Corsten (TPG Post, Michael A Corsten); UPU, Christine Betremieux; UPU, Jelto Stant (UPU, Jelto Stant); USPS, Brent Raney (USPS, Brent Raney); USPS, George Coupar (USPS, George Coupar); USPS, Himesh Patel; USPS, Jeffrey L Freeman (USPS, Jeffrey L Freeman); USPS, John W Brown (USPS, John W Brown); USPS, Kuldip Goyal (USPS, Kuldip Goyal); Yukee Yeung (Canada Post, Yukee Yeung); Yves Remy (Belgian Post, Yves Remy)

Subject: upu cbc wg: arrangements, agenda and supporting documents for teleconference on 23 august at 13:00 CET (= 11:00 GMT).

Importance: High

Attachments: cbc.zip

As previously announced, there will be a Customer Bar Coding standards working group teleconference at 13:00 CET (11:00 GMT) on Tuesday 23 August.

On: Tuesday 23 August 2005.
Start: 13:00 CET (= 11:00 GMT / UTC)
End: 15:00 CET?

If you are not sure of the relationship between your own time and GMT / UTC, look on
tycho.usno.navy.mil/cgi-bin/timer.pl

Teleconference access

To join the teleconference, call +32.2.600.2292
No password is required, but you will be put on hold if you call in before I do. In that case, just wait.
In case of problems, call me on +32.486.510404

Proposed Agenda - please email any suggestions for amendment to me by 19 August
---

1 Introductions and agreement of the agenda

2 Minutes of previous meetings
2.1 Meeting of 1 June 2005 (see ipc-jw15923)

3 Review of action status (see annex to ipc-jw15923)
The following actions are complete, or of no further relevance:
14309.5
15301.8
15839.4
15839.7
15923.1
15923.2
15923.3
15923.4
15923.5
15923.6

Unless there are objections, I propose that the following actions should be deleted / superseded by actions agreed during the teleconference:
15611.2 => see agenda 6
15839.5 => see agenda 4.1
15839.6 => see agenda 6
15839.13 => see agenda item 4.2
15839.14 => see agenda item 6

USPS is asked to complete / report on the following actions:
15301.7
15839.1

Belgian Post is asked to complete/report on:
15535.7

The following IPC actions remain incomplete:
14716.5
15611.1
15611.3
15839.12
15839.15

4 Progress on drafting
4.1 Reference model

4.2 Main CBC specification (P17b) - see below

4.3 Modifications to S25 - see below

5 Any other business

6 Planning of further work and meetings
do we want to present anything to the next PEG and SB meetings?
what other work is needed before the next working group teleconference and/or meeting
when should this / these take place?
do we want to invite the DOTE inventor (action 15611.2)
do we still need more on choice of symbology (action 15839.6)
does I pintsov still intent to submit proposals for an xml-based service specification (action 15839.14)

Re 4.1 and 4.2: Attached are two draft documents that I should like to discuss.

The first of these is a revised draft of the main CBC standard, currently carrying reference P17b; the second covers related extensions to S25.

I believe that P17b addresses the comments made on previous drafts and, apart from some missing references and some details, examples and code for the the 4-state bar code, is now reasonably complete.

Given that we agreed to drop Planet, I eliminated the clause on 'postal industry symbologies' and put the draft 4-state definition into the clause on applications specific encoding.

During the teleconference, I'd especially like feedback on the 4-state draft and on the questions raised in it.
As previously discussed, I based this draft on the idea of accommodating a compound construct containing identifier, service code and routing code - similar in concept to the one planned by USPS, but extended to cope with international needs.
I ended up with 114 data bits, compared with the 103 used by the USPS specification.

Of these, 64 are used for identification. I propose this explicitly for reasons of compatibility with the binary definition of ID-tags...
The proposal uses 4 bits for format code and uses one of the 12 spare values in the ID-tag binary value definition, leaving 11 open for future extension.
The full range of S31 issuer codes is supported (uses 16 bits), leaving 44 bits (13 digits) for the local identifier value.
How these are used is left to the discretion of the issuer, though the draft gives some suggestions for how the 13 might be split between customer number and item number if that approach is desired.
We could eventually allow big posts to use multiple issuer codes - e.g. one for big customers, another for medium sized ones and a third for small ones...

10 bits are reserved for a 3 digit service code, allowing 1000 values. I have proposed that 200 of these be reserved for UPU allocation (globally agreed values), with 800 being allowed for private allocation.
Again, different issuer codes could potentially be used to extend the range, e.g. one set for parcels, a different set for letters...

This leaves 40 bits for the routing code. Reserving one for a domestic/international flag allows encoding of:
- 11 digits or 7 alphanumerics in the domestic case
- 8 digits or 5 alphanumerics in the international case, in which 10 bits are used to specify destination country.

I've tried to make the data construct definition, behind the proposal, fully compliant with the other data definitions.
This has the advantage that:
- the construct can also be encoded (though as a character string with a yet to be defined data identifier) in a code 128 bar code and/or in a 2d symbol
- its also possible for the code 128 / 2d symbol encoding to support other forms of licence plate and an extended range of service data values.

I have proposed borrowing from S18d for the definition of bars, etc.
The main questions that I have relate to the error checking mechanisms and the use, or otherwise, of the sync codewords in S18d.
assuming that the bar code is printed by mailers as the top line of the address, and will be reasonably 'clean', we should be able to expect a read performance similar to that of the s18d tag applied on a label.
Based on S18d performance, 6 RS codewords would seem to be more than adequate.
But would it be better to have 6, with no sync codewords; 5 with one sync value or 4 with 2 sync values, like in S18d.
The way I see it, the more like S18d we make it, the easier it will be to share decoder developments - and the more we will encourage use of the 4-state ID-tag itself.

And would it be better to use exactly the same algorithm as is used in S18d's label version, which generates 12 ECC codewords, but only prints 6 of them?
Or to use a different RS algorithm?
Or even, like USPS, not to use RS at all? [I'd be interested in a full justification of this USPS decision].

John L Wells

Project Manager, Process Integration
International Post Corporation
av de Bourget 44
BE 1130 Brussels
BELGIUM
Tel: +32.2.724.7273
Fax: +32.2.706.5029 or +32.2.726.0425
Email: john.wells@ipc.be or process-integration@ipc.be