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A Scheme for PIV Visual Card Topography

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1. Introduction

1.1 Authority

This document has been developed by the National Institute of Standards and Technology (NIST) in furtherance of its statutory responsibilities under the Federal Information Security Management Act (FISMA) of 2002, Public Law 107-347.

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1.2 Purpose and Scope

The purpose of this document is to provide additional recommendations on the Personal Identity Verification (PIV) Card color-coding for designating employee affiliation. Compliance with this document is voluntary, however, a department or agency shall not claim compliance unless it adheres to all requirements of this document. This document is not intended to contradict requirements specifically identified in Federal Information Processing Standard 201 (FIPS 201) or its associated documents, nor to limit options permitted by FIPS 201 except as explicitly stated herein. This document is intended to refine FIPS 201 to enable reliable visual verification of the PIV Card.

2. Color-coding for Employee Affiliation

2.1 Zones 15 and 12

This section provides a color-coding scheme for Zones 15 and 12 to describe employee affiliation using FIPS 201 color designations. Figure 1 illustrates use of Zones 15 and 12 to color-code employee affiliation.

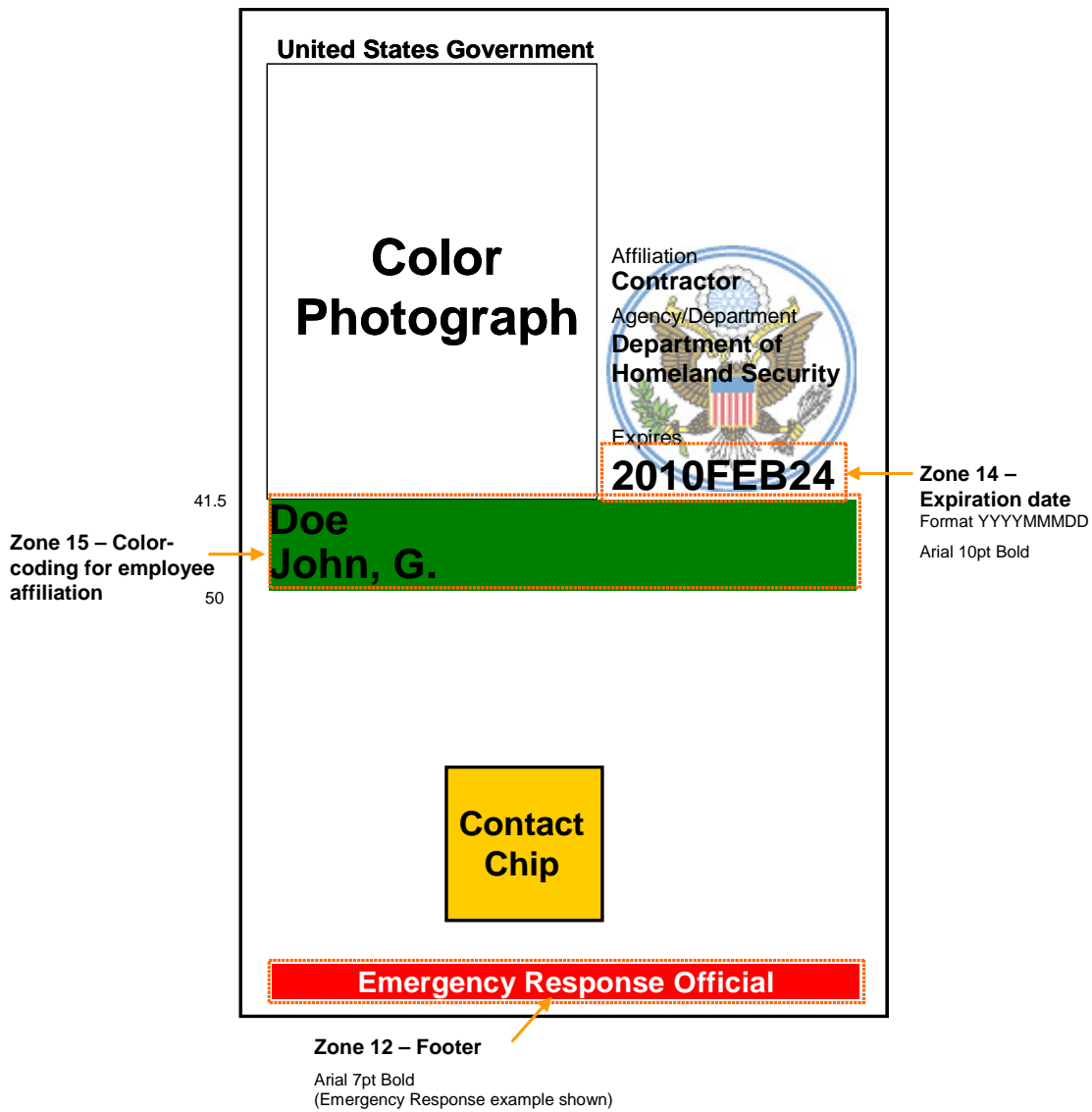


Figure 1. Employee Affiliation Color-coding

Zone 15 shall be color-coded using one of the following colors:

- + Blue—Foreign National
- + White—Government employees
- + Green—Contractors

Note that the foreign national, when used, has precedence over the government employee or contractor.

If an agency needs to highlight emergency response officials, Zone 12 shall be used to identify these affiliations. The department or agency must print “Emergency Response Official” with white lettering within a text box with red background.

If a department or an agency does not need to highlight emergency response officials and would like to denote country of citizenship, Zone 12 may be used to denote citizenship. If so used, a department or an agency shall print the country name or the three letter country abbreviation (alpha-3 format) in accordance with ISO 3166-1, Country Codes. [ISO 3166] If so used and an applicant is a US citizen with multiple citizenships, US citizenship shall be depicted in Zone 12. Figure 2 illustrates an example of foreign national color-coding using country abbreviations.

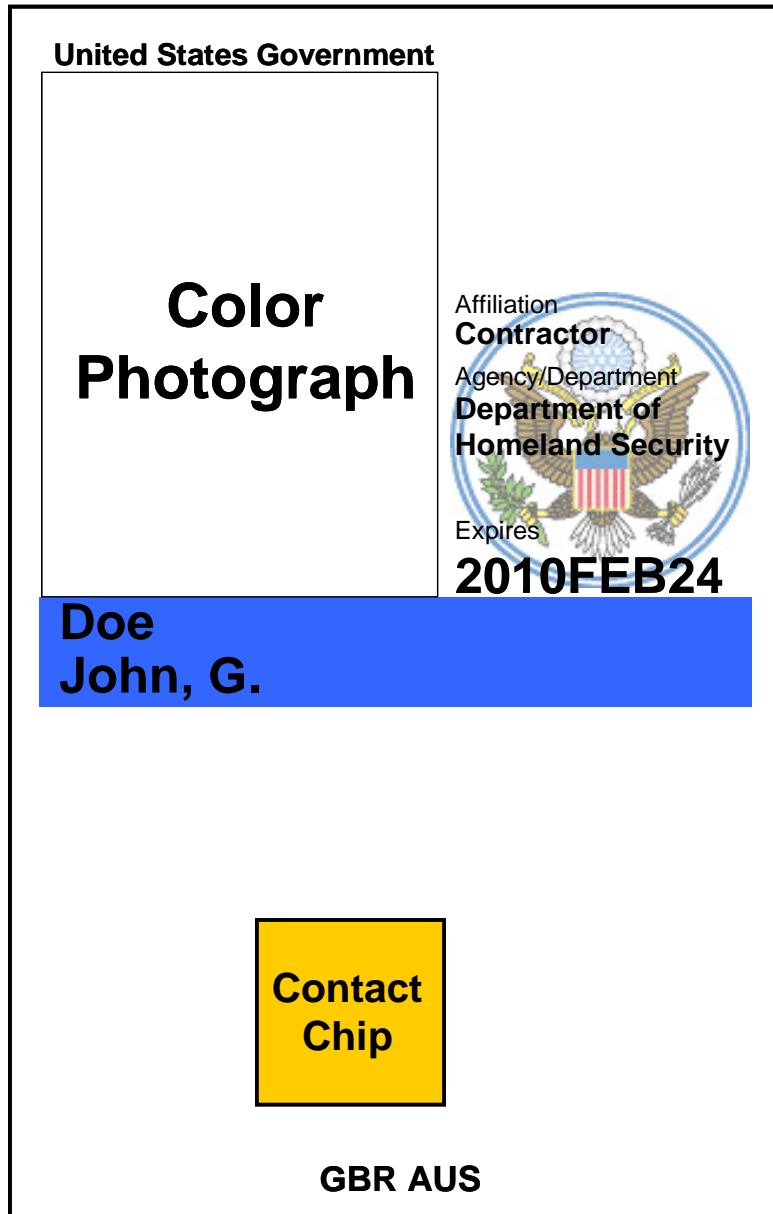


Figure 2. Foreign National Color-coding

When both emergency response official and country name need to be depicted in Zone 12, the emergency response official affiliation takes precedence.

2.2 Zones 13 and 14

Zone 13, issue date, shall be absent or contain the card issuance date data label printed in Arial 5pt and the issue date printed in Arial 6pt Bold.

Zone 14, expiration date, shall contain the card expiration date data label printed in Arial 5pt and the expiration date printed in Arial 10pt Bold.

2.3 Color Representation

Table 1 provides quantitative specifications for colors in four color systems. The colors are specified in the Pantone¹, RGB (Red Green Blue), sRGB (IEC 61966-2-1, Color management – default RGB color space), and CMYK (Cyan, Magenta, Yellow and Key or ‘blacK’) systems. [IEC 61966] Since the card body is white, the white color-coding is achieved by the absence of printing. Note that [FIPS 201] requires the presence of one or more security features that may overlap colored or printed regions, thus modifying the perceived color. In the case of colored regions, the effect of overlap shall not prevent the recognition of the principal color by a person with normal vision (corrected or uncorrected) at a working distance of 50 cm to 200 cm.

Table 1. Color Representation

Color	Zone	Pantone Color Cue™	RGB Value {R,G,B}	sRGB Value (IEC 61966-2-1)	CMYK Value {C,M,Y,K}
White	15		{255, 255, 255}	{255, 255, 255}	{0, 0, 0, 0}
Green	15	354C	{51,162,61}	{124, 209, 134}	{80, 0, 90, 0}
Blue	12	299C	{42,142,191}	{113, 197, 224}	{85, 19, 0, 0}
Red	12	032C	{253, 27, 20}	{254, 92, 79}	{0, 90, 86, 0}

¹ Pantone is a registered name protected by copyright laws.

3. References

- [FIPS 201] Federal Information Processing Standard 201-1, Change Notice 1, Personal Identity Verification (PIV) of Federal Employees and Contractors, March 2006. (See <http://csrc.nist.gov>)
- [IEC 61966] IEC 61966-2-1:1999. Multimedia systems and equipment - Colour measurement and management - Part 2-1: Colour management - Default RGB colour space - sRGB
- [ISO 3166] ISO 3166-1:2006. Codes for the representation of names of countries and their subdivisions -- Part 1: Country codes.