



Converting SMS colours from one colourspace to another

Step-by-Step instructions

This presentation is intended for professional Designers that want to use the media neutral colours of the Spot Matching System without having to buy colours or other services from Spot-Nordic when the colours are required for other purposes than what their colourpalette is intended for (Web, TV, Textile, standard CMYK or other process Printing - analog or digital).

For correct evaluation of SMS colours, please view them on a monitor capable of displaying the sRGB colourspace at least.

Most decent monitors and even laptops and smartphones are capable of this but to be on the save side please check - and make sure that your customer also has a decent monitor to evaluate colours in sRGB format (the standard for the Internet).

If you haven't already, please invest in a monitor calibrator + software and adjust your monitor to display sRGB colours correctly and recommend the same for you customer. Such calibration packages are available from, for instance, Datacolor (Spyder) and Lumesca (Calibrite/Xrite) for 2-400 Euros.

This may seem expensive but this is a one time investment and it will also ensure that images and entire layouts your view on your monitor will be much closer to what to expect, when you softproof them.

Remember that all monitors „trend“ and in a digital world it is as essential to keep your display colour correct, as it was renewing your Pantone guides every 12-18 months.

Otherwise the colours are simply no longer correct and you don't know what to expect from your Printer nor what your design SHOULD look like online.



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You have a new customer and they have made it clear that they have been unhappy with how unstable their current logo / trademark colours have been in the different media and even within the same media.


So you decided to use the Spot Matching System colour palette to stay on the safe side to do at least what you can do to keep their colours consistent in all media.

After selecting the papertypes you want to use and communicating with your Printer, you have found out that for Print you need to deliver PDFs suited for printing according to Fogra 51 standards (using the icc profile PSO Coated v3) for brochures and leaflets and for office material you need to deliver PDF's prepared for printing according to Fogra 52 (PSO Uncoated v3).

What you do first is to select your SMS colourpalette.



Here is an overview of the available SMS colour palettes: Standard, ECO (e) and MAX (x).



The table below provides an overview of available SMS colour palettes. It includes the SPOT matching system logo and three color swatches: SMS G 20 (light red), SMS J 20 (dark red), and SMS K 20 (black).

	SMS P20e 869 Colours	SMS P20 869 Colours	SMS P20x 869 Colours
sRGB (Web/UI/AR/VR)	■	■	■
REC. 709 (Video)	■	■	■
REC. 2020 (Video)	■	■	■
Fogra 58 RGB (Digital Printing on Textile)	■	■	■
Fogra 39/ISO COATED V2 (Premium Coated paper)	■	■	■
Fogra 51/PSO COATED V3 (Premium Coated paper)	■	■	■
Fogra 47/ISO UNCOATED V2 (Premium Uncoated paper)	■	■	
Fogra 52/PSO UNCOATED V3 (Premium Uncoated Paper)	■	■	
CGATS21-2 CRPC6 (Premium Coated paper)	■	■	■
CGATS21-2 CRPC3 (Premium Uncoated paper)	■	■	
CGATS21-2 CRPC5 (Coated Publication Printing)	■		■
CGATS21-2 CRPC1 (Coldset Newspaper)	■		
WAN-IFRA (ISO 12647-3 - Newspaper)	■		
Munken Lynx (White Uncoated Paper)	■	■	
Munken Pure (Off-White Uncoated Paper)	■		

Price pr. P20 palette (sRGB): EUR 60
Contact: sms@spot-nordic.com



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Since you have established that you need to be able to print on both white, coated and uncoated Premium paper, you have the choice of using either the Standard or the ECO colour palette.

You decide to use the **Standard palette (P20) in sRGB format**. The P20 palettes are also available in REC 0709 or REC 2020 format (for video graphics).

As you can see (see previous page) the colours of the Standard palette are available for printing to Fogra 51 and Fogra 52 standards, so it is safe to use it for this customer.

So you contact sms@spot-nordic.com and order your P20 colour palette. The price is EUR 60.

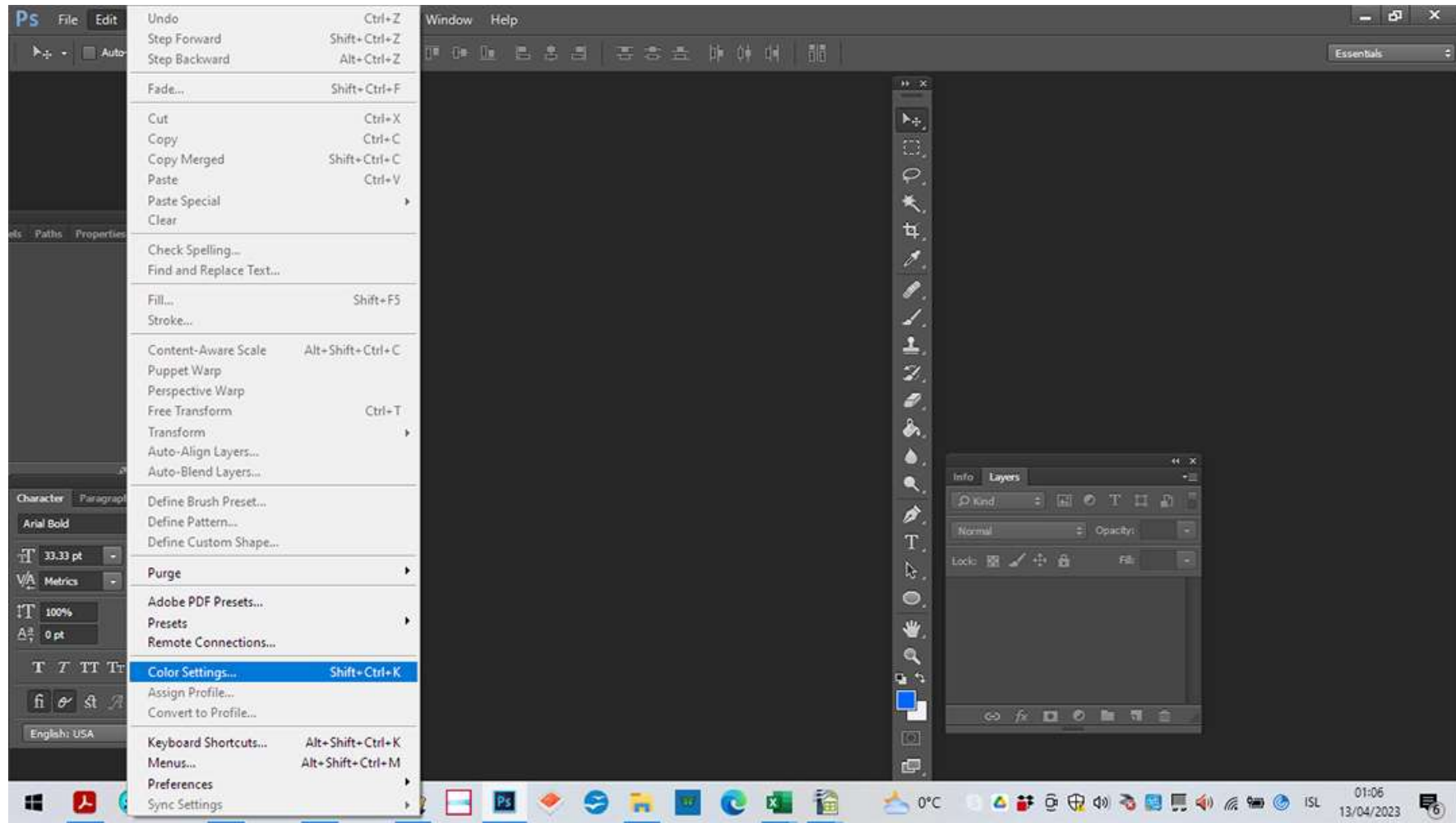
Optionally you can buy it online in our Spot-Nordic webstore - [here](#)

The palette is then delivered to you by email in PDF format. SMS colour palettes can also be delivered in other formats, such as jpg, png or tif on request.

Once you have your P20 colour palette, the first thing to do is to set up your workspace in Adobe Photoshop.

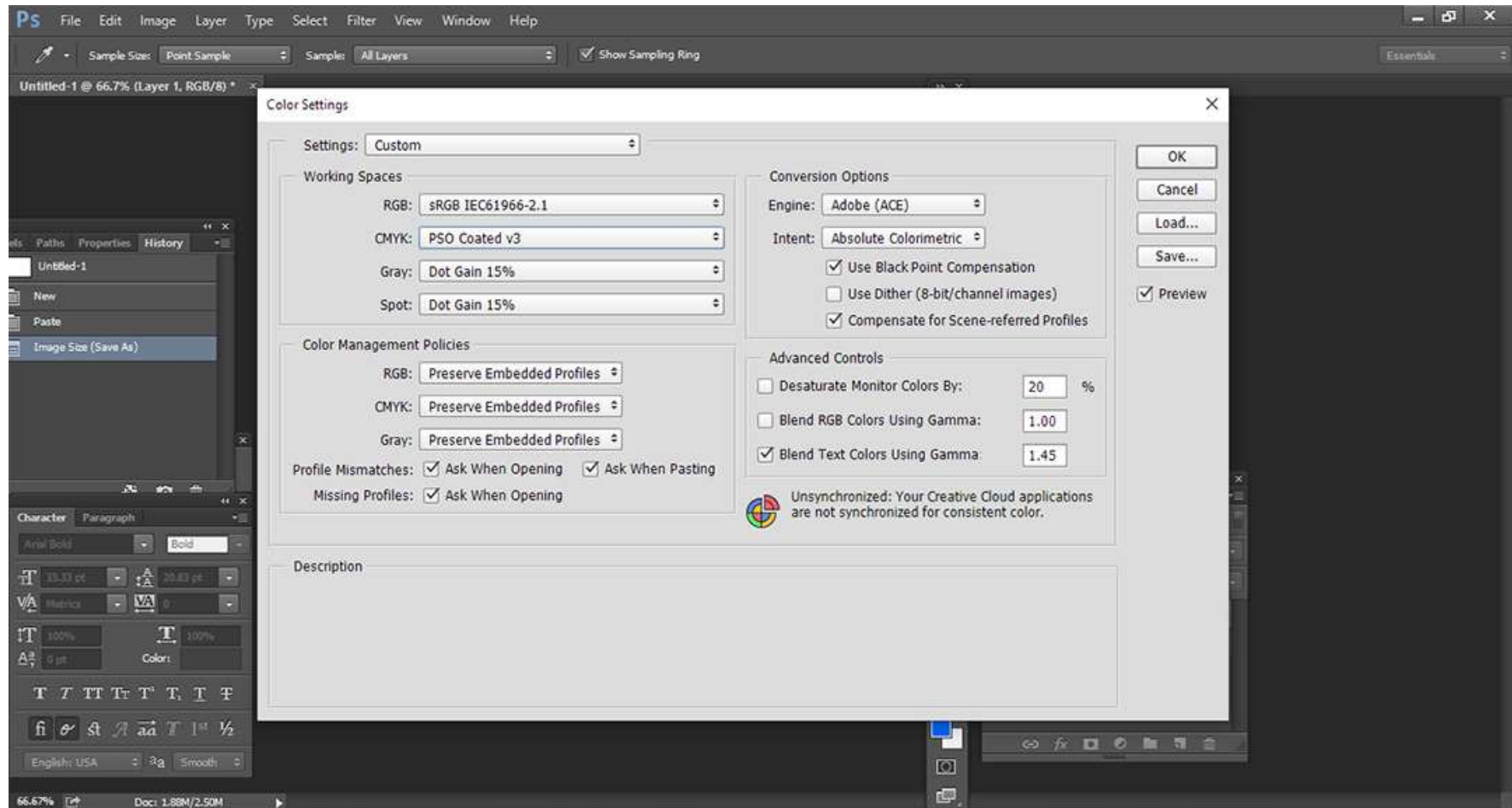


Open Photoshop Go to Color Settings



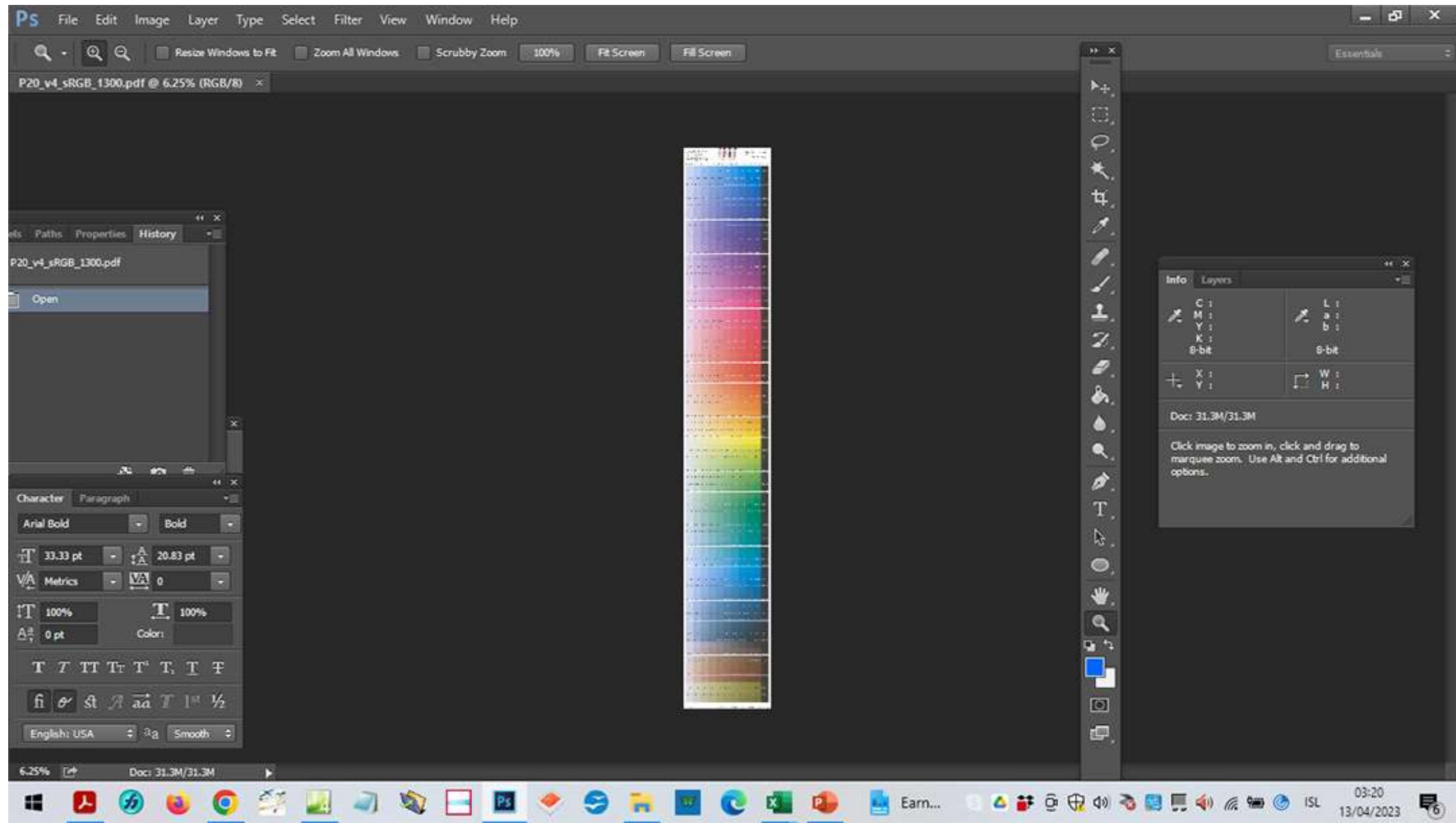


RGB to sRGB
CMYK to PSO Coated v3
NOTE: Intent: **Absolute Colorimetric**



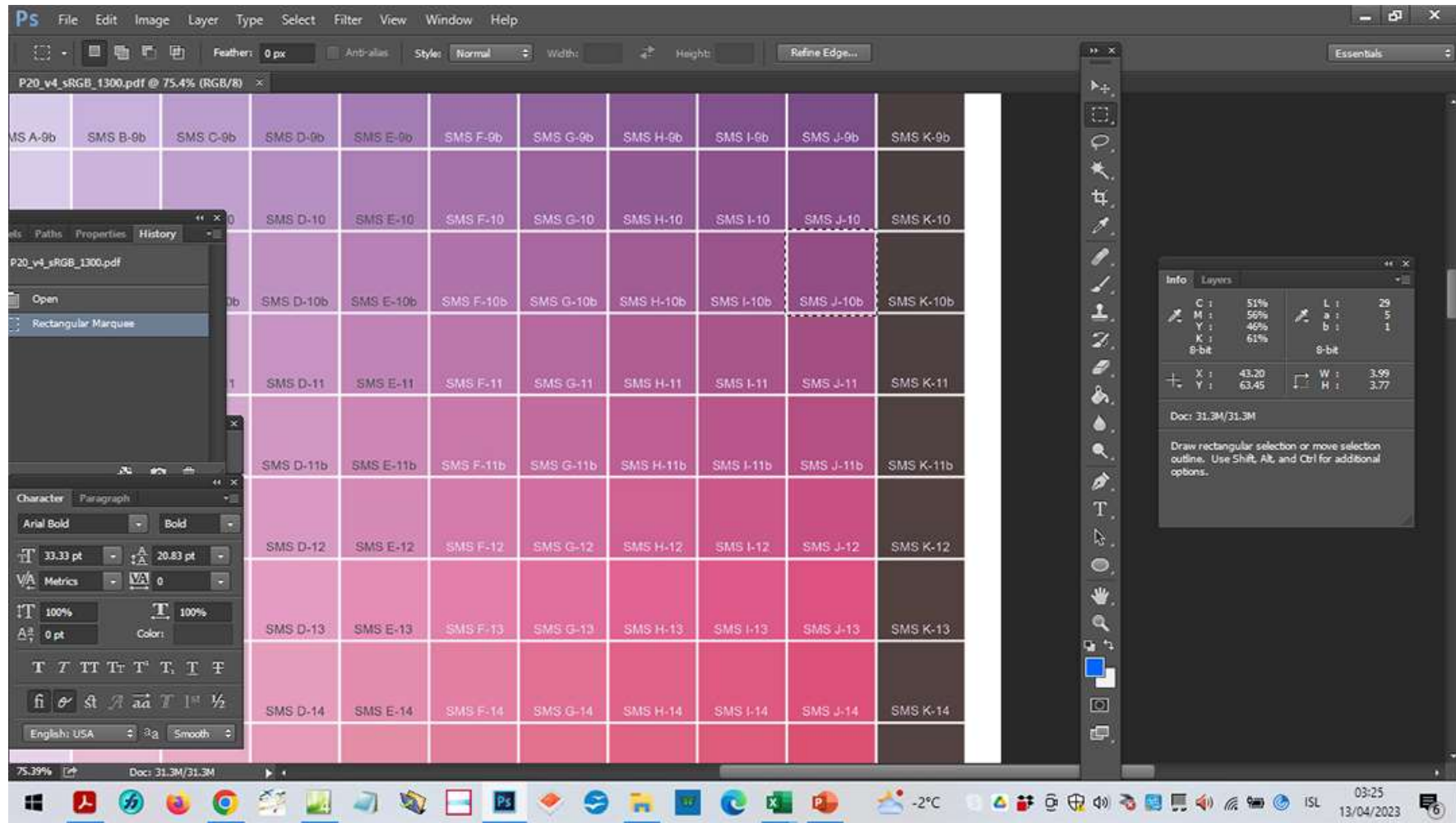


Open your SMS colour palette -
In this case P20 in sRGB format - containing 869 colours,
suited for web design for example.



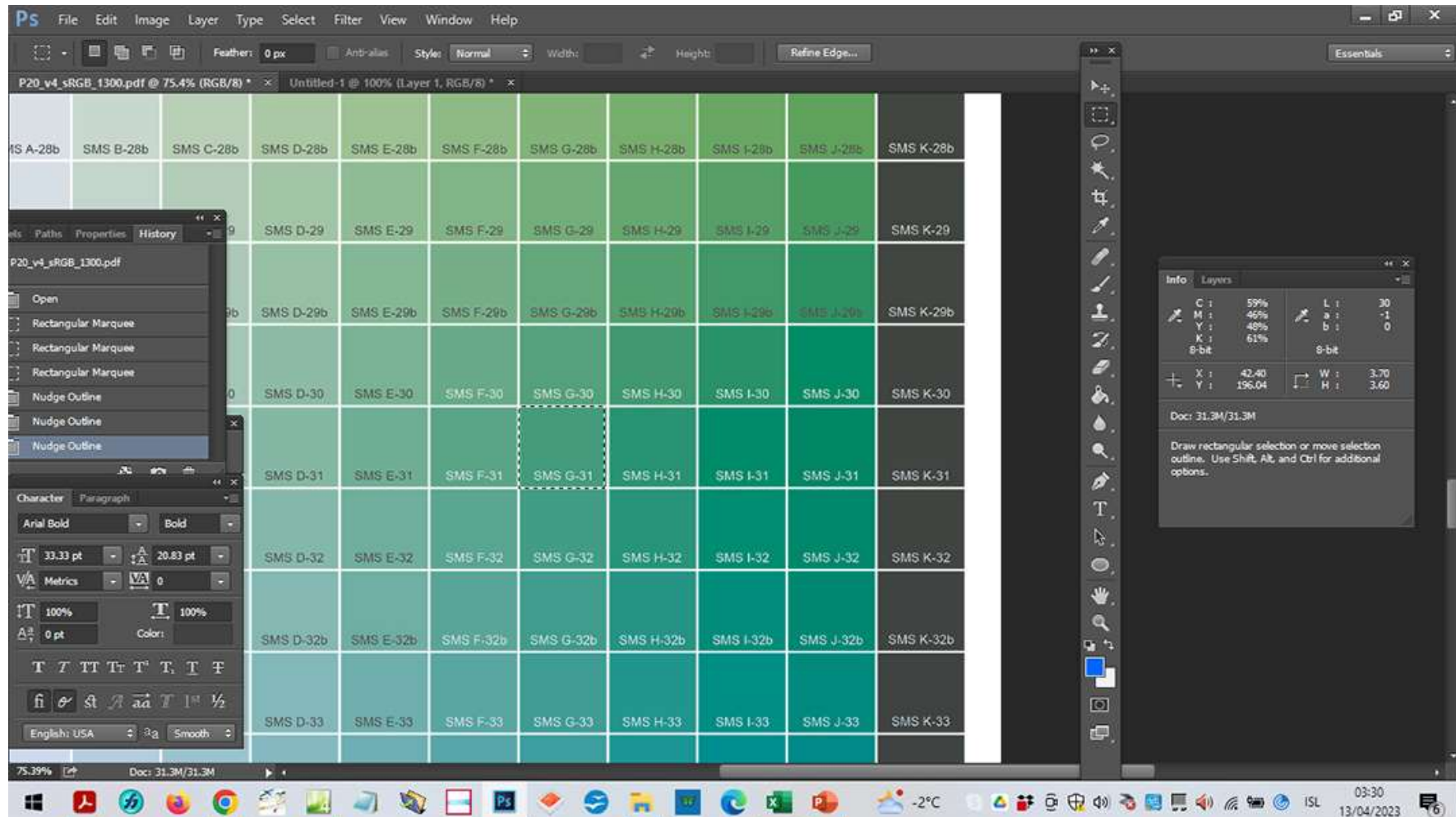


Pick out your first colour



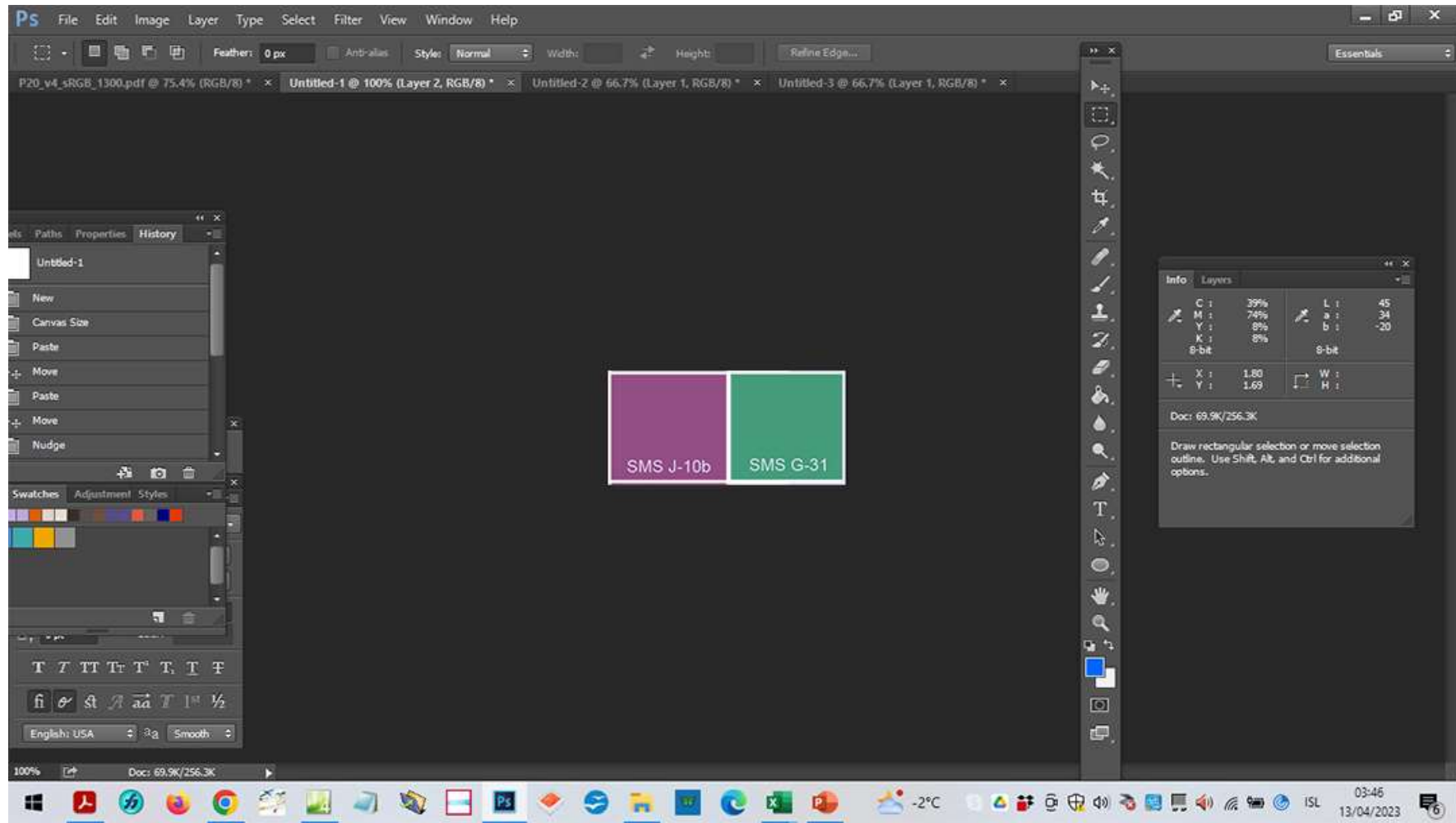


Pick out your second colour – as many colours you want to use for your customer.
In our example we just pick these two colours.



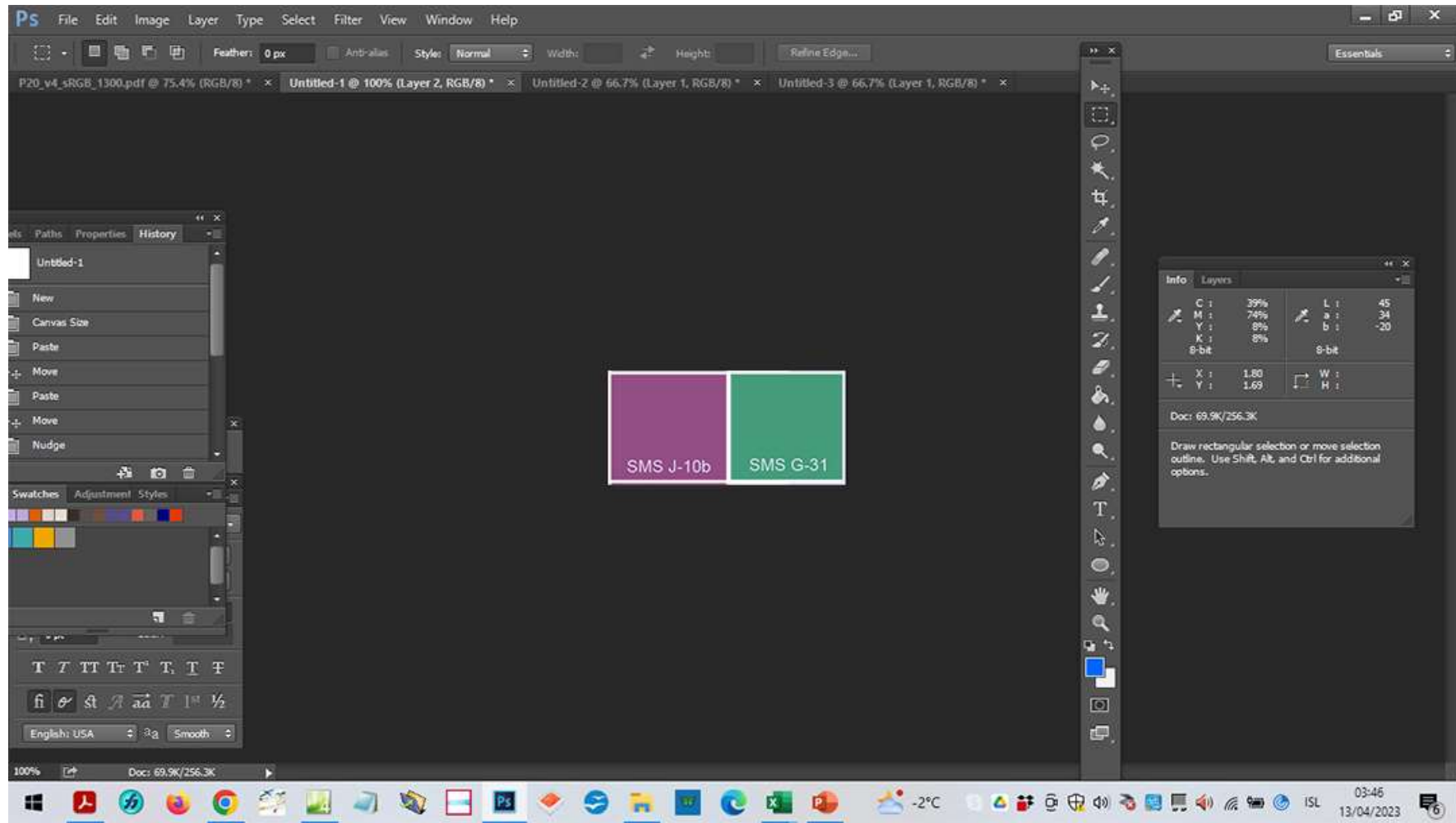


Copy your colours to a new document.
Save in your customer's folder as
Name of your choice_web version_sRGB_colours.jpg



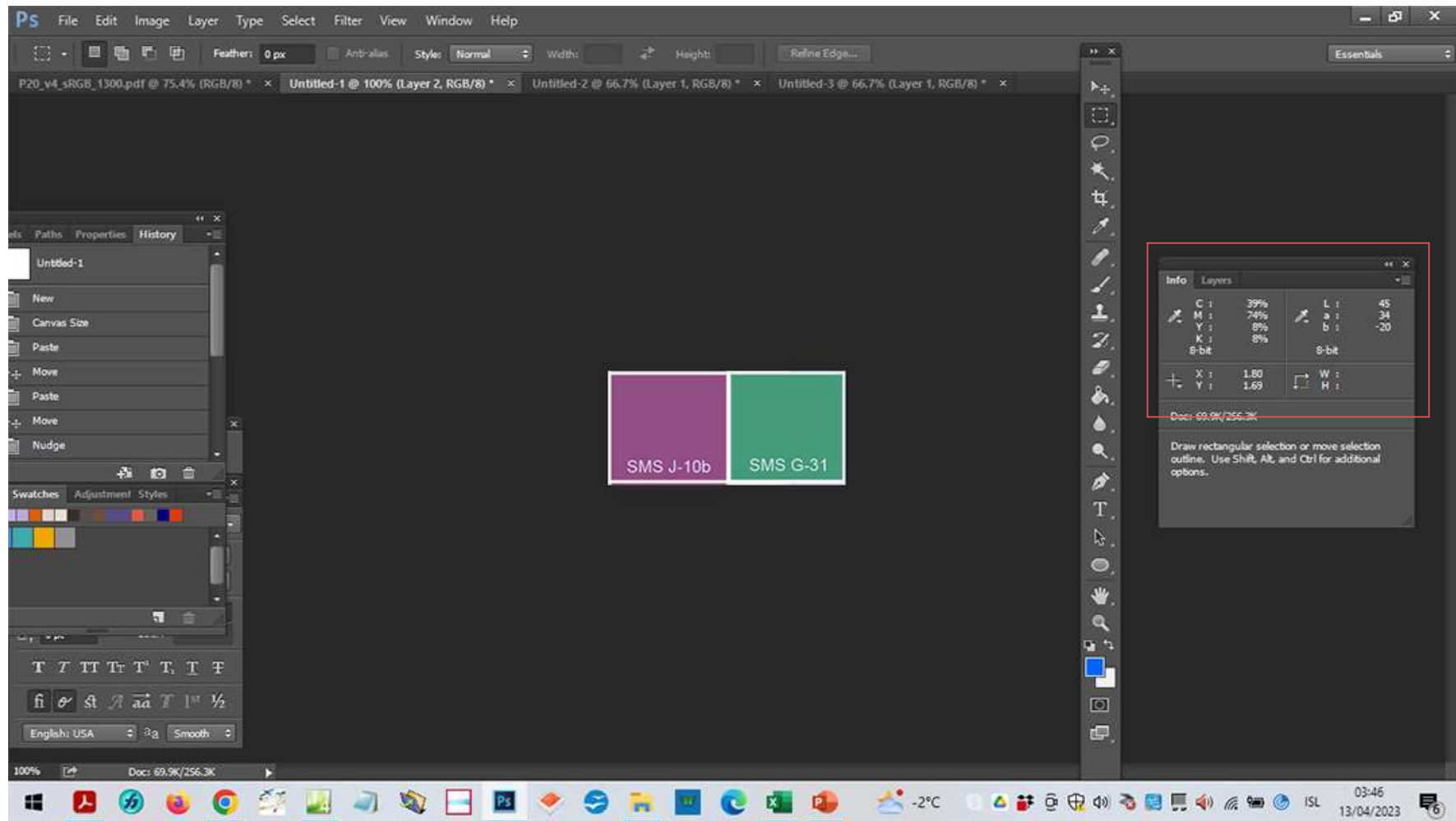


Make sure that you embed the sRGB icc profile with the file when you save it - in maximum quality.



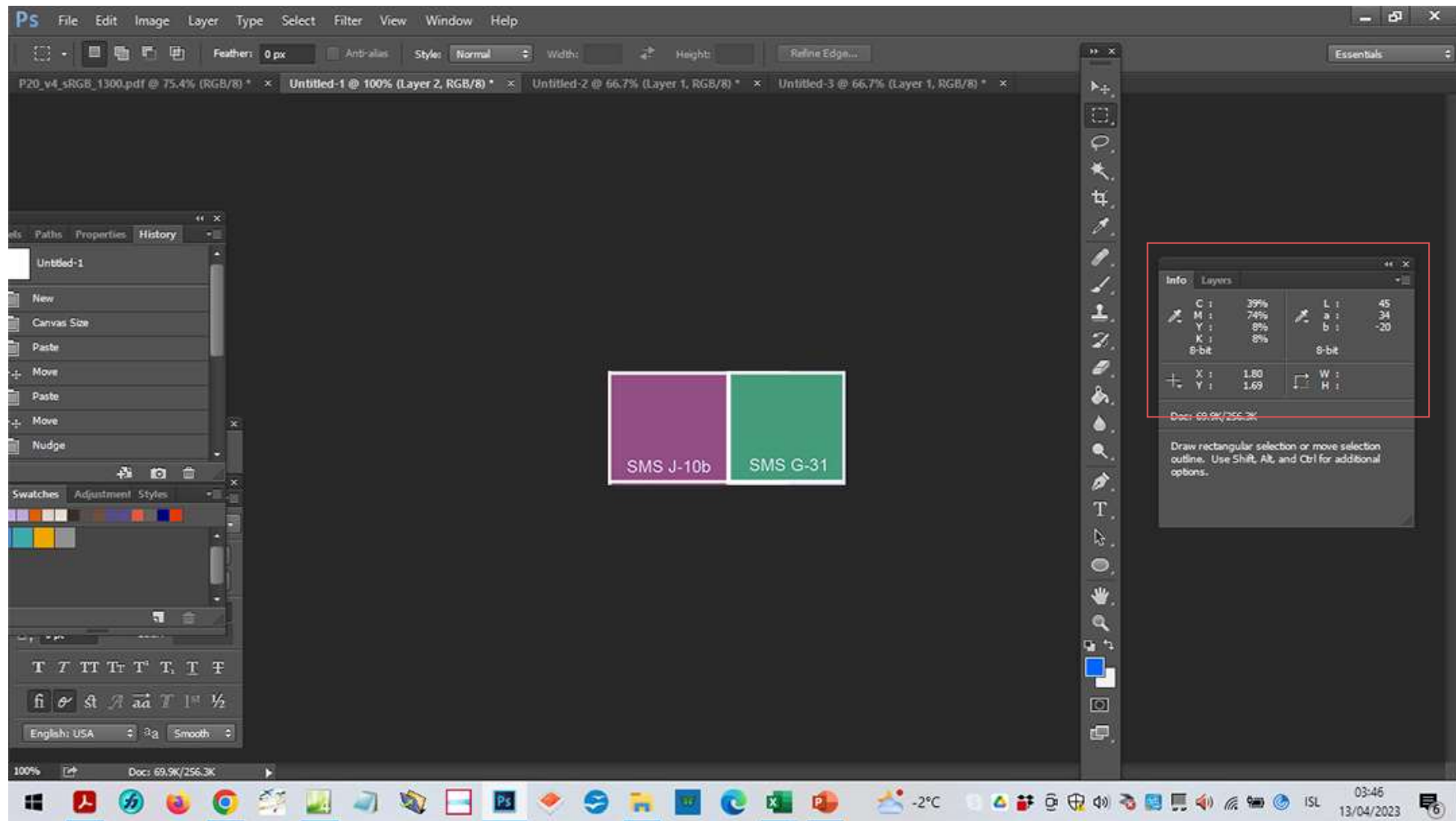


What we see here is the current **CMYK** and **LAB** value of the violet colour. Remember that this is the **ABSOLUTE** value (including paper in the case of CMYK).

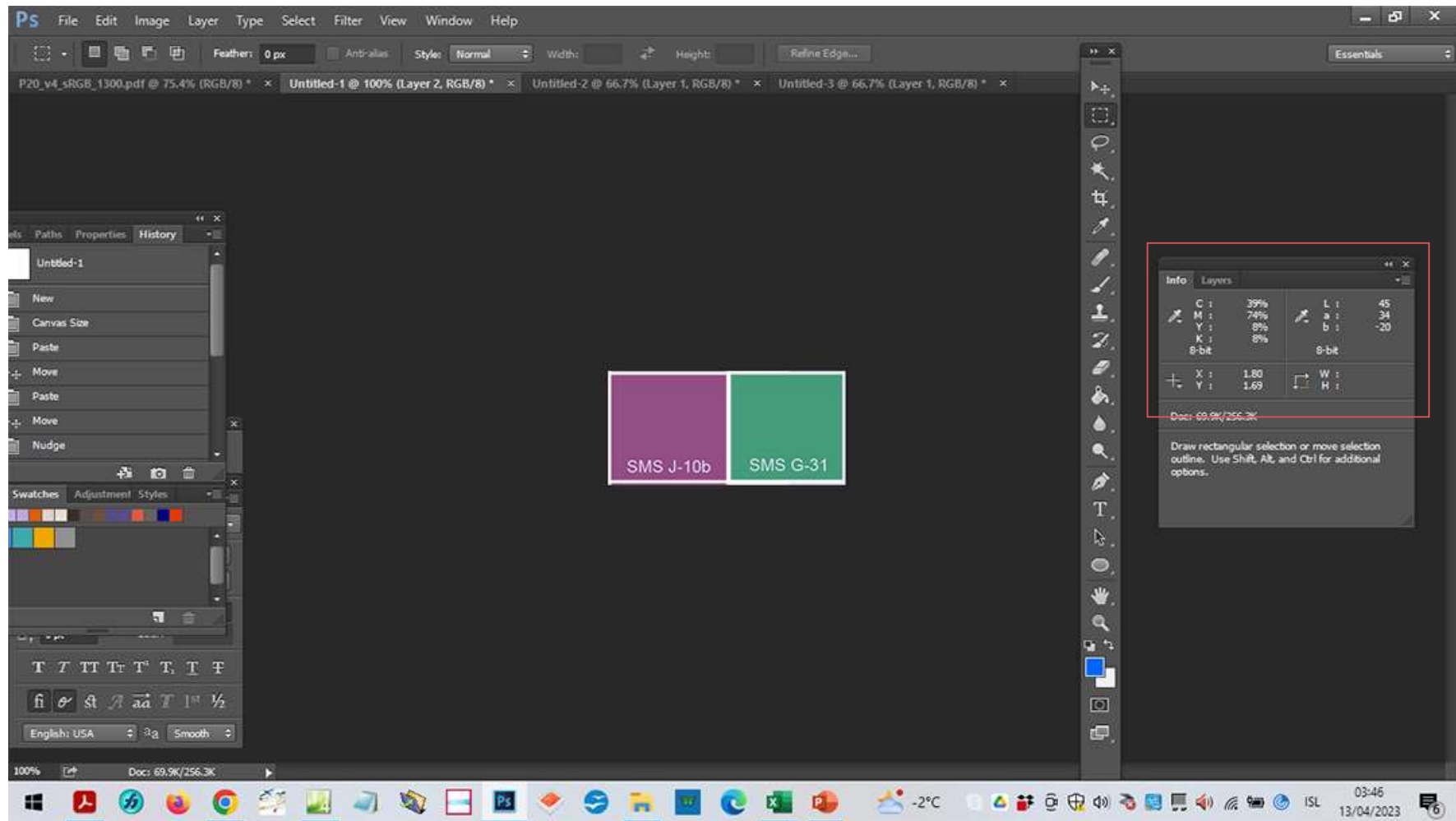




At this stage it would be appropriate to begin work on your project, present it to your customer and get his or her approval. Some customers might want to approve the colours first.



If you prefer to do the job using either the Fogra 51 or Fogra 52 Print version of the colours, you can of course do that. In that case skip the next 2 slides and return to them later.





Use the application(s) of your choice to do the job.

Make sure to use sRGB as the RGB colourspace.

See instructions at www.spotmatchingsystem.com/gettingstarted

In short: Import your SMS colours in sRGB format to your application and use the Eyedropper tool to add your chosen SMS colours to your swatches.

Name them SMSnumber_sRGB

Begin work on your job.

If you happen to be using an application that does not have an Eyedropper Tool, feel free to use the HEX values of your SMS colours to create the colours within the application.

Contact sms@spot-nordic.com if you need assistance getting started.



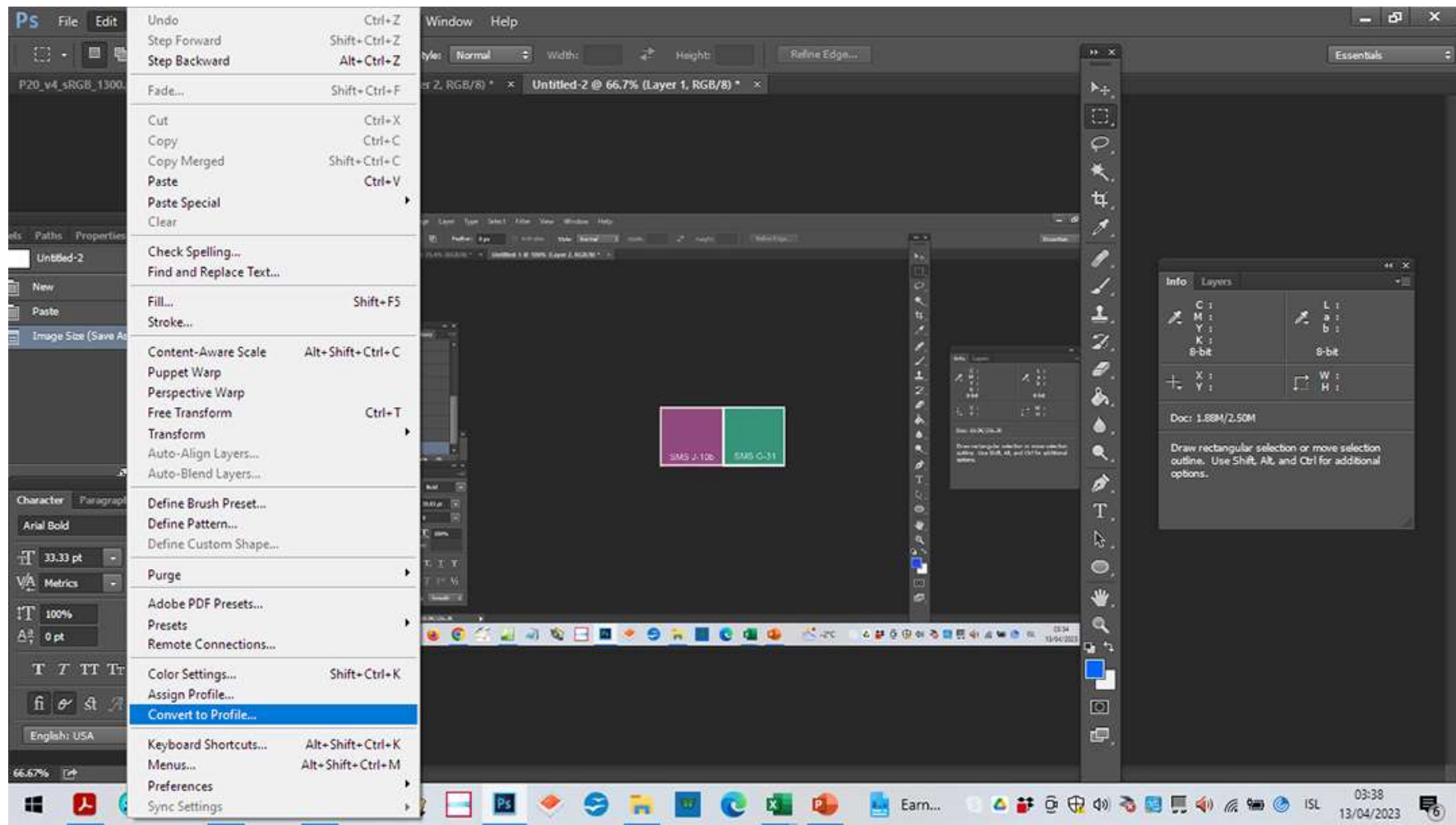
Once you have finished your job and gotten approval from your customer for the website, the letterheads/stationaries, envelopes, business cards, leaflets and whatever they need for the launch of the new brand identity:

The next step is to create your Print colours.

In our example we need to create Print colours for printing in CMYK to Fogra 51 and Fogra 52.

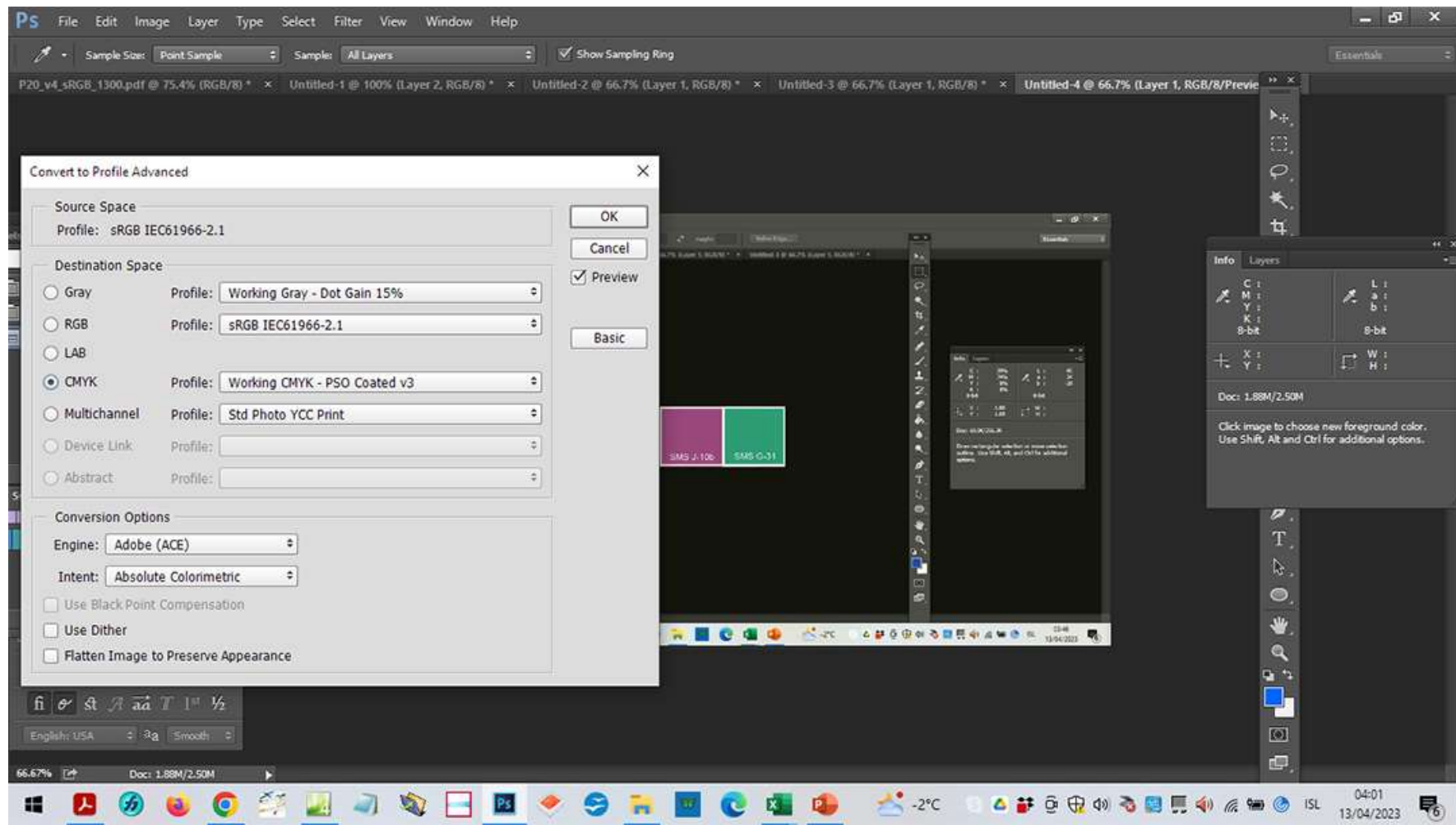


Open Name of your choice_web version_sRGB_colours.jpg
in Photoshop with the same settings as before.
Select Convert to profile



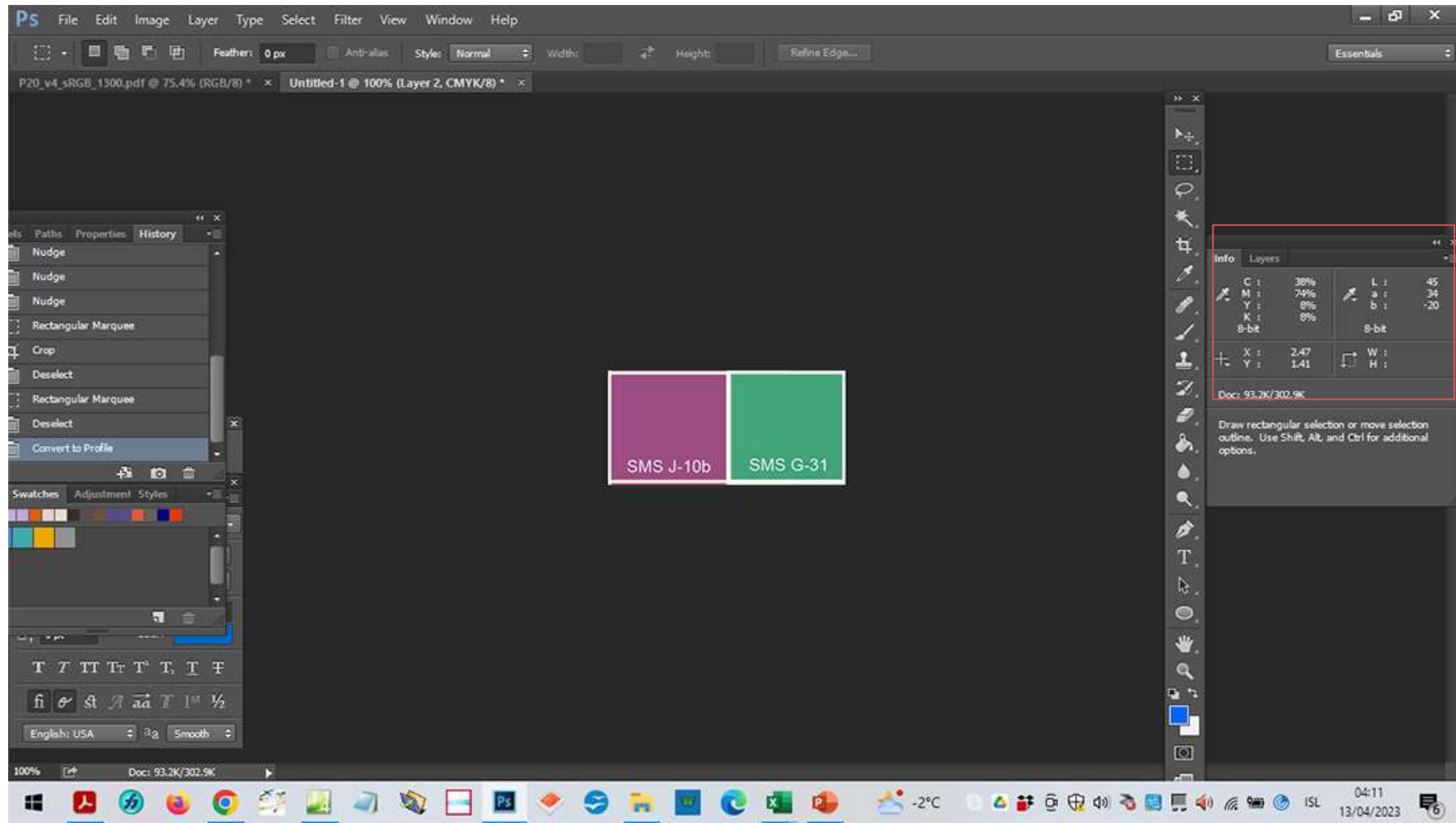


Select CMYK - Working CMYK
Intent: Absolute Colorimetric
Uncheck Use Dither as shown



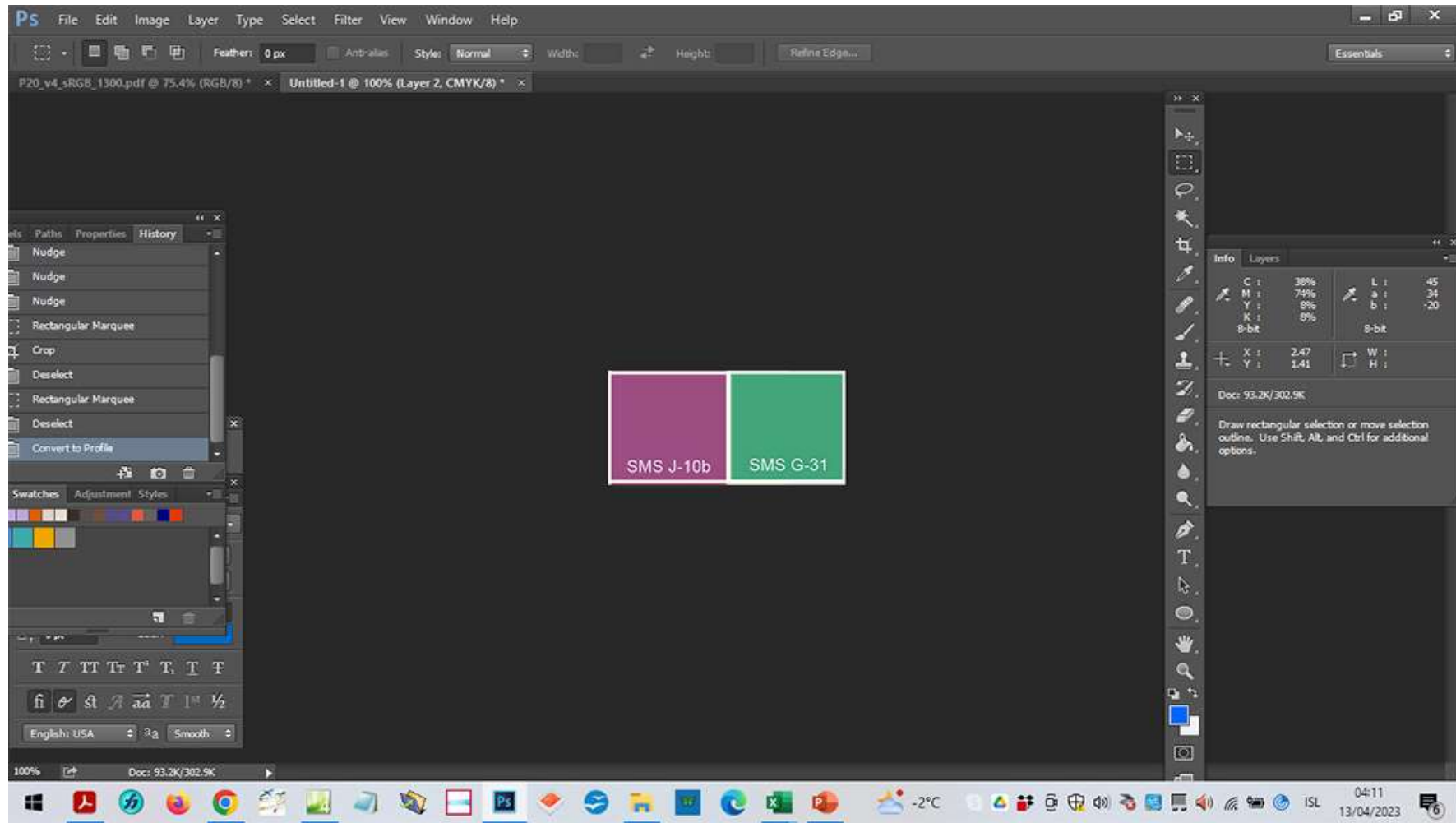


Now notice that the CMYK value has changed slightly but the LAB value remains the same.



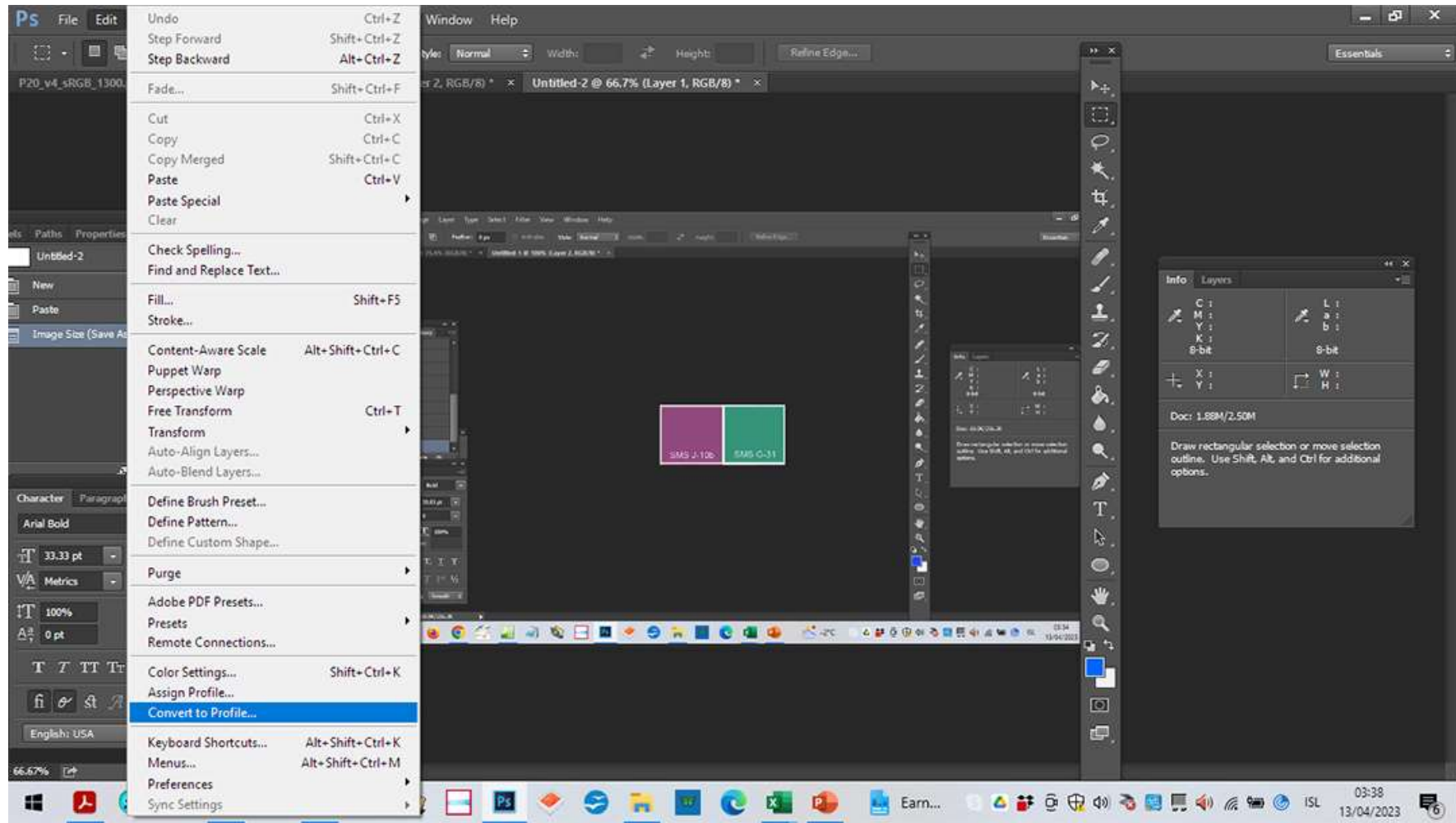


Save in your customer's folder as
Name of your choice_Fogra 51 version_Coated_paper.jpg
Remember to embed the icc profile when you save it.



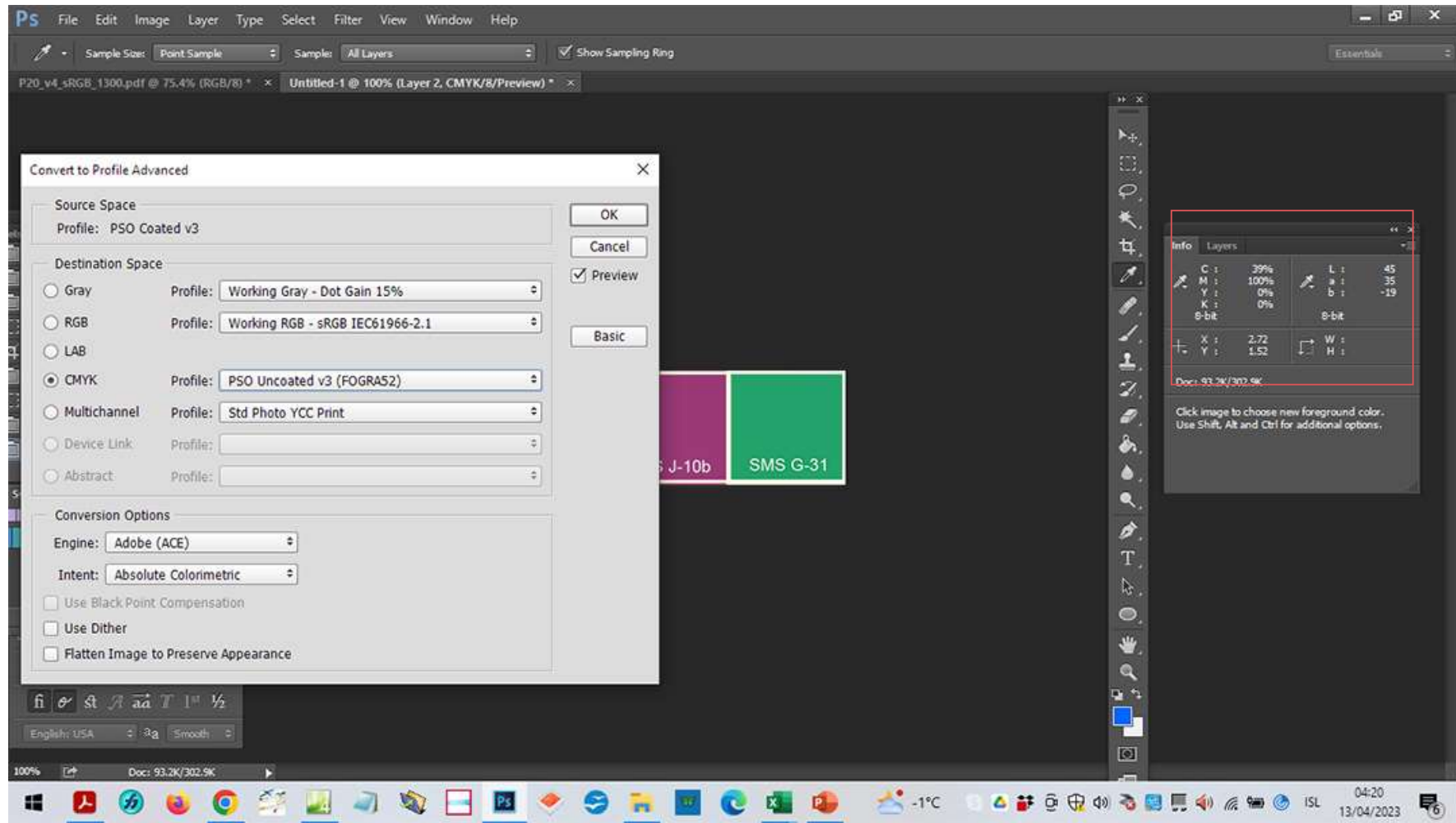


Convert to profile (again)



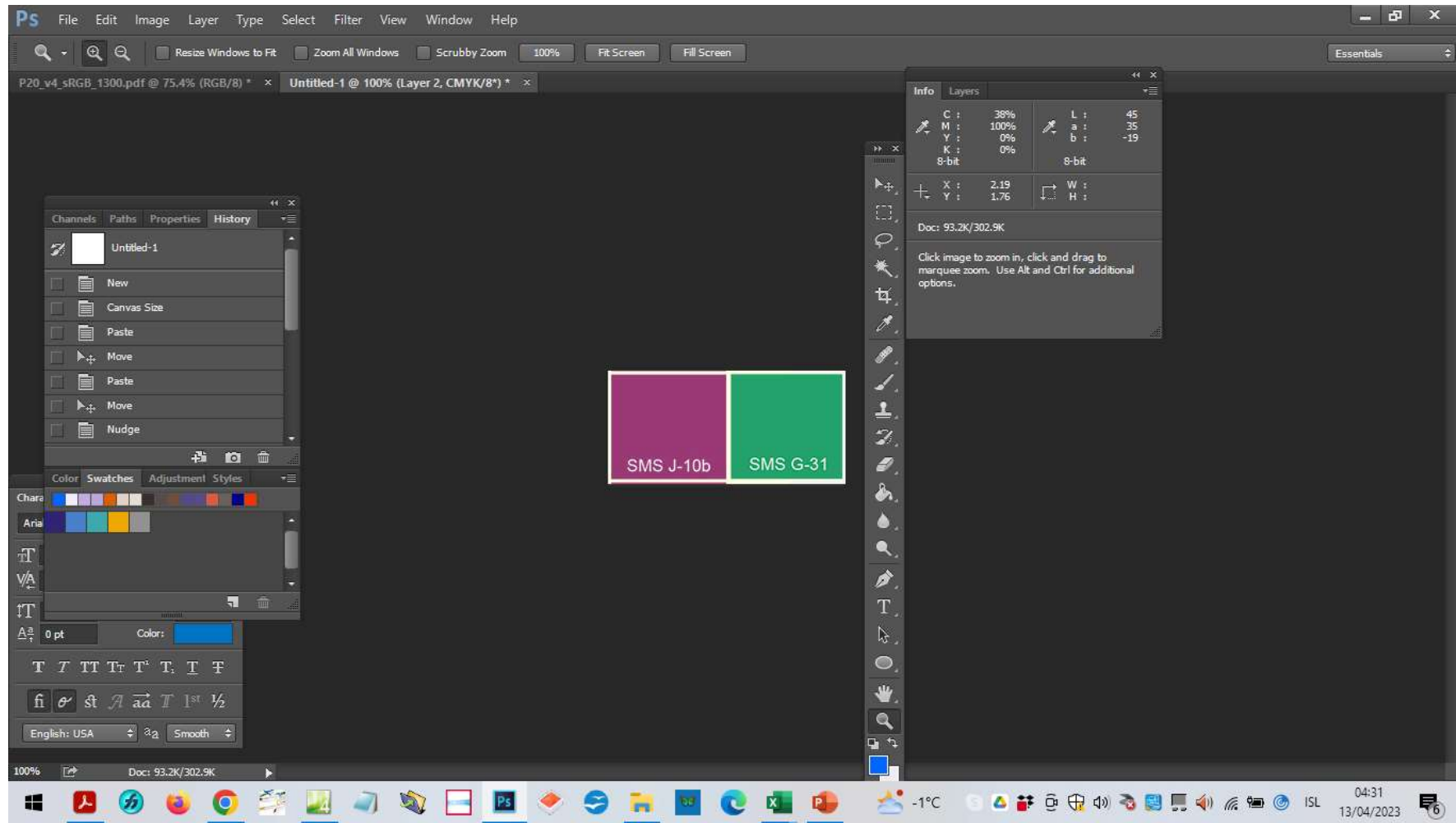


Convert to Fogra 52 (for the office material)
CMYK changes radically,
LAB value remains almost exactly the same.



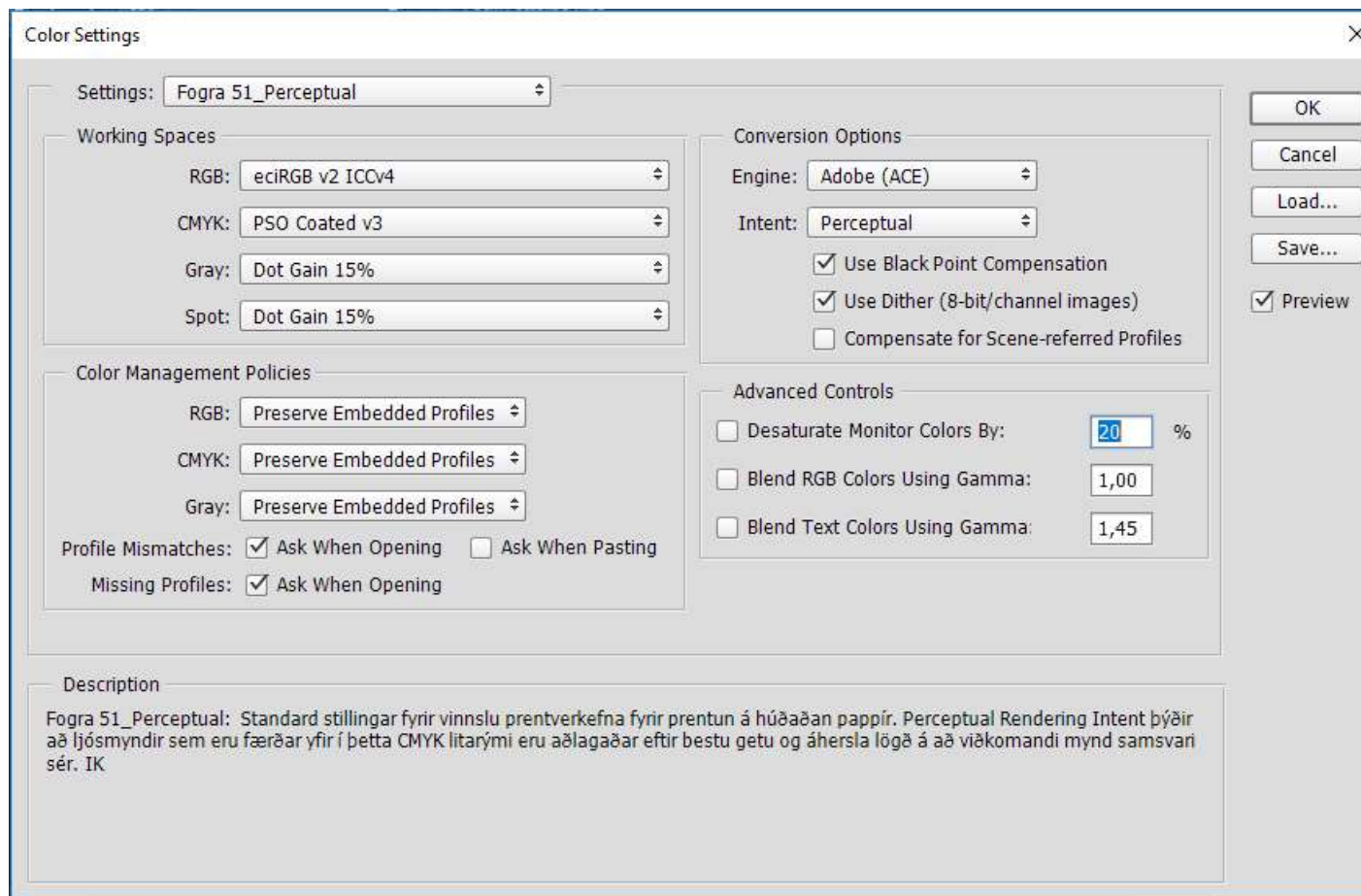


Save in your customer's folder as
Name of your choice_Fogra 52 version_Uncoated_paper.jpg
Embed the icc profile with the file.





Before you begin work on your print documents, set your workspace correctly. In our example before you begin work on the Fogra 51 document, we propose the following setup:



You may prefer using the Adobe RGB colourspace and Relative Colorimetric Rendering Intent - or perhaps your Printer prefers this. That is fine as well.



Use the application(s) of your choice to do the job.

Recommended apps are Adobe Illustrator, Adobe Indesign, Adobe Photoshop, Affinity Designer and CorelDraw. During the creation of this presentation we even found out that SMS colours can easily be used in Powerpoint, using the built-in Eyedropper tool, so all the colour of the text in here is our own SMS J-42, which is our own neutral black, - v.s. the standard Black in Powerpoint, which is

a bit overwhelming.

Open or import the files you created in sRGB format (if you prepared the print documents in sRGB format).

See instructions at www.spotmatchingsystem.com/gettingstarted

In short: Import your SMS colours in Fogra 51 format to your application and use the Eyedropper tool to replace the sRGB colours with the same colours in Fogra 51 format.

The colours of your artwork should be automatically updated to the Fogra 51 colours. Double check them in your artwork to be sure that they have been changed to your new colours. Change them manually if you have to.

Name the new colours SMSnumber_Fogra 51

Replace any low resolution pictures with high resolution pictures and any sRGB pictures with print ready pictures.

Save your document as Name of your choice_Fogra51.

Use the same method to prepare your files for printing to Fogra 52 - or any other print condition you need, - just as long as it is included as a print condition for your SMS colour palette (see page 3)



For bigger brands consider SMS subscription

If you are approached by a big company, brand or institution that values visual consistency in their marketing, please consider subscribing them to SMS.

Included in the SMS subscription are all 3 SMS colour palettes in sRGB format (P20, P20e and P20x) that you use when setting up your design.

As an SMS subscriber it is also optional to have ANY colour or any logo converted to the SMS colour palette you want to use.

Once your customer has approved your design, you simply order the CMYK variations of their SMS colours from sms@spot-nordic.com.

Spot-Nordic can contact Printshop(s) of SMS subscribers to find out where they stand from a technical point of view – whether they can in fact be trusted to print your SMS colours to standards – or not – see www.spotmatchingsystem.com/printers.

The cost of SMS subscription is EUR 600 pr. year pr. brand.

Contact sms@spot-nordic.com to order or for more information.



Before getting started on your first SMS colour project

Please study the difference between our Standard, ECO and MAX systems before you order your SMS system – see www.spotmatchingsystem.com/services

Follow the instructions at www.spotmatchingsystem.com/gettingstarted and make sure that you use the correct variation of your SMS colours for each occasion.

Experiment with your SMS colours, do a few conversions to different colour spaces to get used to working with SMS colours in your apps. Watch the LAB values as you do your conversions. Contact sms@spot-nordic.com if you need assistance.

If you are working with RGB images in Adobe RGB colourspace, that is fine.

For Print, the SMS colours should always be in their final CMYK version and your Printer should leave them as they are but convert the RGB part of your design to the CMYK destination.

Contact sms@spot-nordic.com to order or for more information. If your Printer has questions about SMS colours, ask them to contact us and we will be glad to assist.

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 P30-Coated v3 (51) - V1 - 10c - Epson_SCP7000_720x1440p100
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 P30-Coated v3 (51) - V1 - 10c - Epson_SCP7000_720x1440p100
 28.11.2018 16:08 P30-Coated v3 (51) - V1 - 10c - Epson_SCP7000_720x1440p100

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21st Century Graphic Design**
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Thank you for your attention!