

## Frontex use cases, features and specifications

This is not the product of detailed analysis, but rather an initial draft list of our needs in order to give vendors a rough idea of the possible applications and functionalities of the system we require.

It is arranged as user stories within the following four use cases: Interactive presentations during meetings, Document expert collaboration, Operation support via the 24/7 forgery desk and Training.

Also below is a list of possible specifications and features we may be interested in.

### 1. Interactive presentations during meetings

*Experts and staff at Frontex will use a multi touch screen to present ideas and collaborate simultaneously during meetings and conferences.*

- **As a** Frontex user, **I would like** to use Microsoft office suite **so that** I can present PowerPoint presentation files (ppt.) to the group or meeting.
- **As a** Frontex user, I would like other participants' devices/tablets to connect to the MT screen, **so that** members of the audience can use their touch screens to comment on the content presented.
- **As a** Frontex user, **I would like** to have both the presentation session from the screen and the meeting itself video recorded, **so that** I can distribute the meeting as minutes to the participants.
- **As a** Frontex user, **I would like** to zoom in and out, rotate, mark up, draw and redact things on pictures and files and keep the annotated versions separate from the original files, **so that** I can note and record participants' comments throughout the meeting and refer to them later.
- **As a** Frontex user, **I would like** to have connection to internet, **so that** I can present a live internet site during the meeting.
- **As a** Frontex user, **I would like** to make sure that a laser pen is visible on the MTS **so that** I can indicate certain points on the screen to the audience.

### 2. Document expert collaboration

*Advanced level document experts may analyse fraudulent documents simultaneously and collaborate to produce files that assist in the identification of fraudulent documents (e.g. QCC production).*

- **As a** coordinator of an expert group meeting, **I would like** to have a whiteboard on the MTS, **so that** I can display pictures, draw on them and save the final result.
- **As a** coordinator of an expert group meeting, **I would like** to be able to use Microsoft Publisher and Microsoft Word **so that** I can insert multiple pictures into a document and produce a file.
- **As a** coordinator of an expert group meeting, **I would like** to consult different resources (sites or databases) on the internet or private network and share their content with experts **so that** we can make a decision about a specific case.
- **As an** expert participating in the group, **I would like** to easily transfer my USB data to the MTS, **so that** I can share it with the team.
- **As an** expert, **I would like** to have multiple USB outlets, **so that** multiple people can share their files.
- **As an** expert, **I would like** to use the MTS as an extended collaboration workspace display, **so that** I can drag files or pictures from my own workspace on to the MTS and share them with other users.

- **As an expert, I would like** the MTS to be both an active and passive screen, **so that** I can use both the inbuilt computer or connect an external computer/laptop and utilise its software.
- **As an administrator of the system, I would like** to have the capability to run different virtual machines (sessions) on my computer, **so that** I can connect to different networks.

### 3. Operation support via the 24/7 Forgery Desk

*Experts will be establishing a 24/7 forgery desk where they will respond to frontline officer queries and requests for assistance in identifying fraudulent documents.*

- **As a forgery desk officer, I would like** to have audio/video conference with the person requesting my expert opinion.
- **As a forgery desk officer, I would like** to consult different resources (databases) on the internet and share their content with other operational support officers **so that** we can make a decision about a specific case.
- **As a forgery desk officer, I would like** to have MTS with high resolution to see enough details of the document that the first line officer shares with me **so that** I can express an opinion about its authenticity.
- **As a forgery desk officer, I would like** to have the possibility to send and receive pictures from the person requesting my expert opinion.
- **As a forgery desk officer, I would like** to have the possibility to share real time video of the document I am examining with the Forgery Desk's equipment (VSC, microscope, etc.) with the person requesting my opinion.
- **As a forgery desk officer, I would like** to save the work which I have done for a particular case and keep it separate from other cases.
- **As a forgery desk officer, I would like** to have the possibility to adjust the height of the multi touch screen, **so that** I can choose to either sit or stand while working on documents.
- **As a forgery desk officer, I would like** to be able to connect our Regula passport readers to the MTS **so that** we can scan in identity documents and establish their authenticity.

### 4. Training

*Advanced level document experts will train first and second line border guard officers in how to identify fraudulent documents.*

- **As a Trainer, I would like** to scan a document and manipulate the image on the MTS **so that** I can explain the examination process to the training participants.
- **As a Trainer, I would like** to open files in Adobe products and other Microsoft Office products **so that** I can use team work files in the training session.
- **As a Trainer, I would like** to record the training session **so that** it can be used as training material.
- **As a Trainer, I would like** to have the possibility to share real time video of the document I am examining with the Forgery Desk's equipment (VSC, microscope, etc.) **so that** I can explain particular security features to the training participants.

## Possible Specifications

Active and Passive screen

Screen Size: MT Table (large enough to sit 6 people around it comfortably) MT Wall Screen (at least  
 At least 2m in length, large enough to present to 15 people)  
 Possible inbuilt scanner  
 Touch Inputs - 80 simultaneous touches with palm rejection  
 Pixels HD (1920x1080) or UHD (3840x2160)  
 Led display  
 Tough glass and anti-reflective  
 Response time 8ms  
 Brightness 390 cd/m2 – 630 cd/m2  
 Touch objects – finger, thin glove, active pen, passive stylus  
 Windows, Android, Linux, MAC OS  
 RAM  
 CPU  
 HDMI, USB, DVI-D

### Possible Features

Feature/Application	Definition
<b>Accounts</b>	Organize your content into categories, which can be optionally protected by PIN codes.
<b>Ambient Light Performance</b>	Visible even in direct sunlight or environments that are extremely bright.
<b>Annotate now, read later</b>	Allows you to store your annotations in the <i>original</i> document format.
<b>Bezel-free Design</b>	Completely flush surface enabling true edge-to-edge designs with no bezel.
<b>Content Import</b>	Imports yours files from various content sources on the fly (USB, folder, network, Dropbox)
<b>Fast Response Time</b>	Response to touch within 6-8ms, regardless of the number of touches
<b>File Type Support</b>	Support for multiple file types
<b>Flip Content</b>	Special feature designed for touch tables which allows you to rotate the overall interface by 180°.
<b>Grid View</b>	Algorithm that optimizes the viewing ability of on-screen content, enabling a quick overview.
<b>Hotspots</b>	Add multimedia information to invidually definable locations - so called HotSpots - on a virtual map. Users can open their own virtual terminal which appears above the complete map. Then they can navigate independently and parallely to other users. Corresponding information e.g. images, PDF documents or animated videos can be stored for every HotSpot. By composing individually definable categories you will be able to list manyfold HotSpots and navigate quickly to a chosen destination.
<b>IP Protected</b>	Waterproof surface
<b>Native Inking</b>	Writing or drawing over documents, spreadsheets, photos etc without altering the original file.
<b>Multi-User technology</b>	Where multiple users can be recognised and interact with the screen simultaneously.
<b>No Sensor Grid</b>	No sensor grid in front of the LCD screen obstructing the image quality. This ensures a superior viewing experience with maximum transparency and no image quality degradation.
<b>Object Recognition</b>	The ability to “recognise” objects and reproduce them on screen.

<b>Object size recognition</b>	The ability to “recognise” the size and spacing of an object
<b>“On-the-run Mode”</b>	The ability to explore presentations or documents from your USB flash drive without the need to first create a project to import your media files in STAGE
<b>Optical Tracking</b>	An image processing software that can create Multi-touch Technology on any Surface.
<b>Palm Rejection</b>	Avoid unintentional inputs with palm rejection. Watches, shirt cuffs or bracelets brushing against the screen won’t register any input, increasing the reliability of use.
<b>Pen Up</b>	The ability to predict pen up and pen down actions very quickly, eliminating the connected lines even when the user drags the pen close to the surface of the glass.
<b>Plug and Play</b>	No need for drivers or processor resources and is a USB HID device.
<b>Rotate</b>	
<b>Screen Duplication</b>	Duplicate your content to a secondary screen simply by swiping to the top of your primary screen to improve visualisation for larger audiences and unusually shaped auditoria.
<b>Sharing</b>	Share your pictures, videos and documents to: USB drives, local folders, mobile devices and printer.
<b>Pressure Detection</b>	Pressure detection with over 1000 levels. It can enable pressure sensitive drawing and writing without the need for an active stylus as well as new application gestures for music, gaming and smart user interfaces.
<b>Smooth Pen Strokes</b>	High frame rates ensure smooth pen strokes which results in a more natural looking of annotations and the feel of the pen and the writing if much more realistic.
<b>Snap on</b>	No more precise 0 or 90 degrees tilt required for documents. Snap-on feature allows an easy alignment of documents to horizontal or vertical axis.
<b>Unlimited Touch</b>	An “unlimited” number of touch points so ensure fluid interaction with the screen, akin to a smartphone.
<b>Touchless Interaction</b>	“Detection of movements and gestures without touching the display surface.”
<b>Web content annotations</b>	Browse through web pages and save annotations within a web resource. Then copy the bookmark of a web page to one of your project directories.
<b>Whiteboard</b>	Interactive whiteboard application to note down ideas.
<b>move and Zoom</b>	All documents can be zoomed in and zoomed out with standard pinch and zoom gestures. A single finger drag will allow you to move the document within the workspace area.
<b>smart Zoom</b>	Lets you get into the fine details your high resolution document without having to zoom into the whole document. In other words, a user can choose the area of a document to zoom in. (Smart zoom gestures: zoom in => single finger double tap; zoom out => double finger double tab)