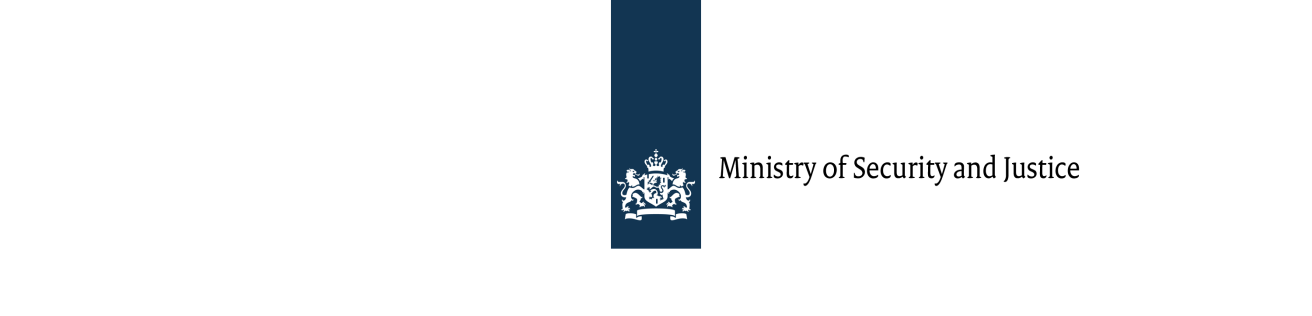
****

**Multi-Aspect Initiative to Improve**

**Cross-Border Videoconferencing**

**WS2 – Practical Testing of VC-connections**

**D2.2 Test Plan**

The views expressed in this report are the sole responsibility of the author(s) and do not necessarily reflect the views of the European Commission.

Permission to make digital or hard copies of part or all of this report is granted.



**Table of Contents**

[1. ON THIS DOCUMENT 3](#_Toc473308607)

[2. TEST SESSIONS PLANNED FOR EXECUTION 4](#_Toc473308608)

[2.1. Context of the Tests 4](#_Toc473308609)

[2.2. Test Objectives 4](#_Toc473308610)

[2.2.1. Objects to be Tested 4](#_Toc473308611)

[2.2.2. Features to be Tested 4](#_Toc473308612)

[2.3. Participants 5](#_Toc473308613)

[2.4. Set of test sessions 6](#_Toc473308614)

[APPENDIX A – Template for Connectivity Details of VC Facility (example) 7](#_Toc473308615)

[APPENDIX B – Test Procedure and Test Log 8](#_Toc473308616)

[APPENDIX C – Template for the Test Result and Relevant Events 10](#_Toc473308617)

[END OF DOCUMENT 11](#_Toc473308618)

# ON THIS DOCUMENT

This document is the Test Plan to execute ‘Practical Testing of VC-connections’, being the 2nd work-stream (WS2) of the action ‘Multi-Aspect Initiative to Improve Cross-Border Videoconferencing’ (short name ‘Handshake’) as described in the Grant Agreement with number JUST/2014/JACC/AG/E-JU/6961.

This Test Plan specifies the set of test sessions to be executed and the set-up of the:

* Test Procedure: procedures to be followed for all tests including test cases to be used;
* Test Organization: date and time, locations and staff to execute the test.

Details of Test Organization will be specified in a separate sheet.

This Test Plan also contains templates to be used for all test sessions for the:

* Test Connectivity Details of VC Facility; these details are to be exchanged in advance of (the execution of) each test session;
* Test Procedure/Log; this provides the steps of the test ‘to be done’; Test Log is the Test Procedure, completed with a chronological record of details of the test ‘as done’;
* Test Result; the test result as such and for documenting any event that occurs during the testing process that is relevant to report.

The set of all results of all test sessions will be summarized in the Overall Test Report.

As such test documents from WS2 ‘Practical Testing of VC-connections’ are structured along the 829 Standard for Software and System Test Documentation (IEEE 829-2008). The content of this Test Plan is based on (1) discussions and data from participants of the Handshake project and (2) Test Documents used in other projects on Videoconferencing for Justice (2006-2013).

The final version of this Test Plan is one of the deliverables from WS2 ‘Practical Testing of VC-connections’. It is, like all deliverables of the action, to be submitted by the Federal Ministry of Justice of the Republic of Austria (the action’s applicant) to the European Commission, DG Justice, Directorate B: Criminal Justice.



Version History

|  |  |
| --- | --- |
| A(1) | For 1st review by WW |
| A(2) | For review by WW and JK |
| A(3) | For final comment |
| A(4) | For approval by JK |
| A(5) | Again for approval by JK |
| A | Final; to be submitted to EC (if not modified in a later stage) |

# TEST SESSIONS PLANNED FOR EXECUTION

This section summarises the context, objectives and participants[[1]](#footnote-1) of WS2 ‘Practical Testing of VC-connections’ and specifies all test sessions to be executed.

## Context of the Tests

The context of all test sessions is the action ‘Multi-Aspect Initiative to Improve Cross-Border Videoconferencing’ (Handshake); in this action all test activities are organized in the so-called 2nd work-stream: WS2 - ‘Practical Testing of VC-connections’.

## Test Objectives

The over-all objective of WS2 ‘Practical Testing of VC-connections is to ’enhance the technical interoperability for videoconferencing’; this objective is to be achieved by (1) doing practical VC connection tests between the participating Member States and (2) documenting the test-results, especially working parameters[[2]](#footnote-2) to make a successful VC-connection between the points and practical hints and tips to prevent failures and make the connection work.

## Objects to be Tested

Objects to be tested are rooms where (1) judicial activities can take place and where (2) videoconferencing equipment is available; examples are court rooms and prison studios.

## Features to be Tested

Features to be tested are:

* Connectivity (ability to make a connection between two or more points in a network)
* Interoperability (capability of item to interact and function with others reciprocally)

Features also to be tested, but NOT in detail, are:

* Quality of Image
* Quality of Sound

The tests shall be executed in different configurations depending on the technical capabilities of the objects to be tested, e.g. IP or ISDN, Point-to-point and Multi-point. Further details will be specified in the Test Procedures.

## Participants

The participants of the test sessions are judicial authorities and/or technical staff from (and physically located in)

1. AT Austria Ministry of Justice,
2. CZ Czech Republic Ministry of Justice;
3. EE Estonia Centre of Registers and Information Systems;
4. HR Croatia Ministry of Justice;
5. IT Italy Ministry of Justice;
6. LV Latvia Court Administration;
7. NL Netherlands Ministry of Security and Justice;
8. PL Poland Ministry of Justice;
9. SE Sweden National Courts Administration;
10. SI Slovenia Ministry of Justice;
11. UK-E&W England & Wales Ministry of Justice;
12. UK-S Scotland Scottish Government;
13. Eurojust The European Union's Judicial Cooperation Unit.

## Set of test sessions

The set of test sessions to be executed consist of:

* *Point-to-Point Tests*

Tests wil be executed between all pairs of two participating Member States; with 12 participating Member States the number of point-to-point tests is 66.[[3]](#footnote-3)

* *Multipoint Tests*

A limited set of multipoint tests will be executed:

* + Tests with Eurojust, where Member States will be connected one after another growing to up to 8 Member States simultaneously connected with Eurojust; the expected number of these tests is 2;
  + Tests with a MCU[[4]](#footnote-4) of a Member State, where Member States will be connected one after another growing to up to 6 Member States simultaneously connected with this MCU; the expected number of these tests is to be defined.[[5]](#footnote-5)

# APPENDIX A – Template for Connectivity Details of VC Facility (example)

|  |  |
| --- | --- |
| **System management** | **VC Facility Dordrecht** |
| System manager name: | **Peter J.A. van Rotterdam** |
| Phone: | **+31-6-37170157** |
| Mobile: | **+31-6-37170157** |
| Fax: | **n/a** |
| E-mail: | [**pjavanrotterdam@quicknet.nl**](mailto:pjavanrotterdam@quicknet.nl) |
| Authority: | **Regional Court of Dordrecht** |
| Department: | **Facilities / IT** |
| Address: | **Steegoversloot 36** |
| City: | **Dordrecht** |
| Postal code: | **3311 PP** |
| Country: | **The Netherlands** |

|  |  |
| --- | --- |
| **Site information** |  |
| Location of hearing room: | **Court Room Wantijzaal** |
| Local time zone: | **Central European Time** |
| Phone in/near hearing room: | **+31 ?????????** |
| Fax in/near hearing room: | **+31 ?????????** |

|  |  |
| --- | --- |
| **Technical information** |  |
| Video system: | **Cisco** |
| Model/type: | **TB3000** |
| Software version: | **n/a** |
| IP address: | **n/a (via central unit in NL)** |
| Maximum transmission rate (IP): | **2 Mb/s SDSL** |
| ISDN number(s): | **n/a** |
| Maximum transmission rate (ISDN): | **n/a** |

|  |  |
| --- | --- |
| **Meeting test session** |  |
| Preferred date: | **Friday 18 December 2016 at 09.15-09.45 (NL time) = 08.15-08.45 (UK time)** |
| Alternative: | **n/a** |

|  |  |
| --- | --- |
| **Remarks:** |  |
|  | **Purpose: Connectivity Test with …** |

APPENDIX B – Test Procedure and Test Log

This appendix contains the steps of the Test Procedure and by that the Test Log to be completed with the chronological record of relevant details about the execution of the test

(\*) use tick-boxes for remarks that are relevant to copy into the Test Report.

|  |  |  |  |
| --- | --- | --- | --- |
| **TimeStamp** | **Steps in Test Procedure** | **Remark** | **(\*)** |
|  | MS1 connects to MS2  (choose IP or ISDN as appropriate) |  |  |
| *Welcoming Step* | | | |
|  | One by one all participants specify their name and function and talk a bit to get familiar with this VC session. Please write down remarks you wish. |  |  |
| *Operation – Steps to be done by VC Facility of MS1* | | | |
|  | Mute Microphone(s) |  |  |
|  | Unmute Microphone(s) |  |  |
|  | Pan, Tilt and Zoom Camera(s) |  |  |
|  | Show Object on Doc.Camera(s) |  |  |
|  | Show Document from PC(s) |  |  |
|  | Switch light(s) off and on |  |  |
|  | Dim light(s) |  |  |
|  | Close/open blind(s) and/or curtain(s) |  |  |
|  | Move papers near microphone(s) |  |  |
|  | Place papers over microphone(s) |  |  |
|  | Make noise away from microphone(s) |  |  |
|  | Open/close door(s) / window(s) |  |  |
|  | Clap hands |  |  |
|  | .. |  |  |
|  | .. |  |  |
|  | .. |  |  |
| *Closing Step - Measure Working Parameters* | | | |
|  | IP or ISDN  H.263 or H.264  Type of CODEC  Bandwidth (kbit/s or Mbit/s)  Latency (msec)  Jitter (yes/no)  Package loss (percentage)  Encryption (yes/no; type of encr.)  ..  .. |  |  |
|  | MS1 disconnects from MS2 |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **TimeStamp** | **Steps in Test Procedure** | **Remark** | **(\*)** |
|  | MS2 connects to MS1  (choose IP or ISDN as appropriate) |  |  |
| *Welcoming Step* | | | |
|  | One by one all participants specify their name and function and talk a bit to get familiar with this VC session. Please write down remarks you wish. |  |  |
| *Operation – Steps to be done by VC Facility of MS2* | | | |
|  | Mute Microphone(s) |  |  |
|  | Unmute Microphone(s) |  |  |
|  | Pan, Tilt and Zoom Camera(s) |  |  |
|  | Show Object on Doc.Camera(s) |  |  |
|  | Show Document from PC(s) |  |  |
|  | Switch light(s) off and on |  |  |
|  | Dim light(s) |  |  |
|  | Close/open blind(s) and/or curtain(s) |  |  |
|  | Move papers near microphone(s) |  |  |
|  | Place papers over microphone(s) |  |  |
|  | Make noise away from microphone(s) |  |  |
|  | Open/close door(s) / window(s) |  |  |
|  | Clap hands |  |  |
|  | .. |  |  |
|  | .. |  |  |
|  | .. |  |  |
| *Closing Step - Measure Working Parameters* | | | |
|  | IP or ISDN  H.263 or H.264  Type of CODEC  Bandwidth (kbit/s or Mbit/s)  Latency (msec)  Jitter (yes/no)  Package loss (percentage)  Encryption (yes/no; type of encr.)  ..  .. |  |  |
|  | MS2 disconnects from MS1 |  |  |

APPENDIX C – Template for the Test Result and Relevant Events

This two-page appendix contains for each test to be executed the template for the test result and for documenting any event during the testing process that is relevant to report.

**Test Result Operation**

Each participant expresses his/her findings on operation as below:

*OPERATION*

|  |  |
| --- | --- |
| From my perspective it is my opinion that for the room I was in, that … | Score |
| 1. I (my staff) could switch on the system within 1 minute | Y/N |
| 1. I (my staff) could set up the system according to its type of use within 1 m. | Y/N |
| 1. I (my staff) could disconnect from the other location within 1 minute | Y/N |
| 1. I (my staff) could switch off the system within 1 minute | Y/N |
| 1. I (my staff) could use the mute function | Y/N |
| 1. I (my staff) could use the volume control function | Y/N |
| 1. I (my staff) know who and how to contact in case of technical problems | Y/N |
| 1. the system is vandalism-resistant | Y/N |

**Test Result Image and Sound**

Each participant expresses his/her findings on ‘image and sound’ as below:

* Excellent – clear picture and clear audio with no problems noticed;
* Sufficient – some (minor) problems noticed, but the session could be practically used
* Poor – major problems noticed, that really affected practical usability of session
* Very Bad – problems hindered session to be established or session totally unusable.

*IMAGE AND SOUND*

I found the image and sound quality

|  |  |  |  |
| --- | --- | --- | --- |
| Very Bad | Poor | Sufficient | Excellent |
|  |  |  |  |
| Explanation | | | |

**Relevant Events**

Remarks from the Test Log that are relevant to report are further amplified below.

|  |  |  |  |
| --- | --- | --- | --- |
| **TimeStamp** | **Step in Test Procedure** | **Remark** | **(\*)** |
|  |  |  |  |
| **Amplification:** | | | |
|  |  |  |  |
| **Amplification:** | | | |
|  |  |  |  |
| **Amplification:** | | | |
|  |  |  |  |
| **Amplification:** | | | |

# END OF DOCUMENT

The final version of this document has been added to the action’s archive.

1. as specified in the Project Description of the action ‘Multi-Aspect Initiative to Improve Cross-Border Videoconferencing’ (Handshake). [↑](#footnote-ref-1)
2. The working parameters will be of a technical nature (like IP/ISDN, ITU standard H.263 or H.264, Video-mode (CODEC), bandwidth, latency, delay, jitter, package loss, encryption etc) rather than of an ergonomic nature (like eye-contact, lip sync); the final set of working parameters to be measured in the tests will be specified in the Test Procedure. [↑](#footnote-ref-2)
3. With 12 test participants the number of bilateral (point-to-point) tests is 12 x 11 / 2 = 66; each test will be split into two subtests: from point 1 to point 2 and the vice versa subtest; so the number of subtests is 132. [↑](#footnote-ref-3)
4. A multipoint control unit (MCU) is a device commonly used to bridge videoconferencing connections. [↑](#footnote-ref-4)
5. Tests with a MCU of a Member State will be done with the MCU of AT, LV, UK-E&W and ??; CZ, EE, HR, SE and ?? do not intend to have a multipoint test centred around their MCU. Replies from other MSs are yet to come. [↑](#footnote-ref-5)