

FHI – SMITTESTOPP

T0130 – TEST REPORT

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netcompany

Document history

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0.1	17-02-2022	Albert Jakob Fredshavn	02 - Under development	Test report for Release 3.3 initiated
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References

Reference	Title	Author

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1 Introduction

This test report documents the results of the testing done for the release 3.3 and 3.4 of the Smittestopp application.

The test scope for Release 3.3 covered changes that are required to add new functionality to the Smittestopp to allow reporting infecting and sharing of Temporary Exposure Keys based on the result of conducted COVID-19 self-test. The test was executed from the 7th until the 11th of February and covers the test cases and test suite shown in Figure 1.

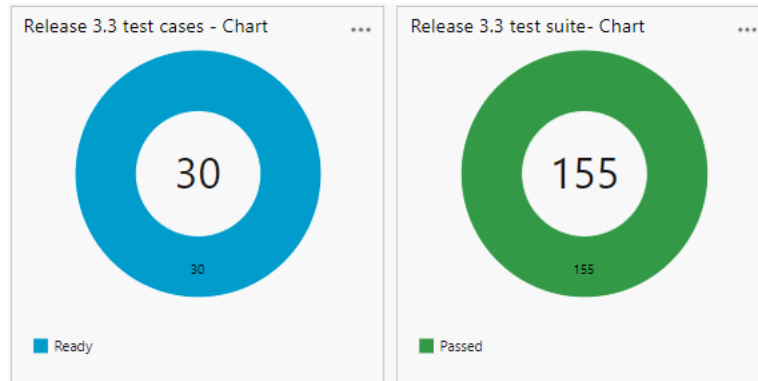


Figure 1 Overall test view of Release 3.3

Furthermore, the acceptance criteria for Release 3.3 are shown in Table 1.

ID	Title
1	User is able to report themselves infected by selftest
2	The user is given the choice to report testresults based on PCR test or to register a selftest on a new page
2.1	The user must log-in via ID porten and is given options to choose symptoms date
2.1.1	The use must consent on a separate page before they sign in with ID porten, in order to register selftest results
2.1.1.1	If the user decides not to put in a date, despite selecting the date option, the date of reporting with be set as the symptom date
2.2	The self-test reporting will not contain a lookup in MSIS
2.3	User will not see a consent page for niether MSIS nor EU, nor a countries selection page when reporting using self-test
2.4	The self-test reporting will not contain a step for sending the keys to European Federation Gateway Server
3	User is able to switch to registering themselves infected using a self-test after previously selecting to register tested at test facility
3.1	Selecting "OK" on the "Test result not found page" aborts the flow and returns the user to the home page

4	User must be older than 16 to report themselves infected by any means
4.1	If the user is under 16, an error is shown after log-in with ID porten [Update: the user will be shown to the "Du er ikke gammel nok til å varsle om smitte i Smittestopp" page after log in]
4.1.1	If the user gets this screen after lookup in MSIS, then the user will see the "Test result not found" screen where the button to continue to self test will not be shown [Update: the user will be shown to the "Du er ikke gammel nok til å varsle om smitte i Smittestopp" page after log in]
4.1.2	If the user gets this screen after choosing self-test option, the user will see a new screen informing that you cannot register infected when younger than 16yo [Update: the user will be shown to the "Du er ikke gammel nok til å varsle om smitte i Smittestopp" page after log in]
5	User should not be able to register infected neither with self test nor with MSIS lookup if the user has already registered infected in the previous X days.

Table 1 Acceptance Criteria for Release 3.3

The test scope for Release 3.4 covered changes that needs to be implemented in Smittestopp (mobile app and backend) to allow FHI to quickly deliver some important information to the users of Smittestopp regarding recommendations about use of Smittestopp from health authorities. The test was executed from the 24th of February until the 2nd of March and covers the test cases and test suite shown in Figure 2.

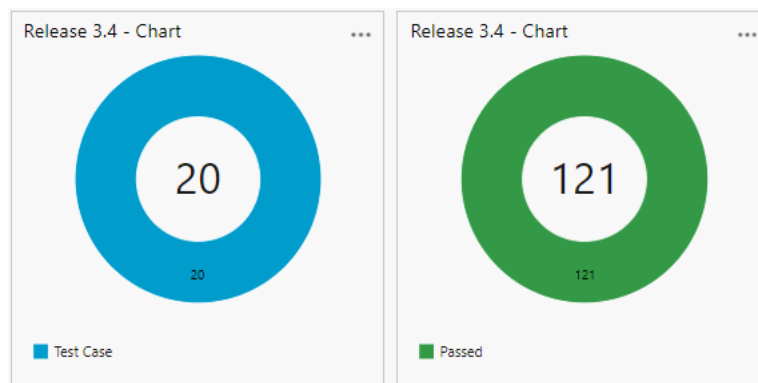


Figure 2 Overall test view of Release 3.4

Furthermore, the acceptance criteria for Release 3.3 are shown in Table 2.

ID	Title
1	The design looks according to the Figma and follows all accessibility requirements (VoiceOver, large texts, horizontal orientation)
2	The banner should be clickable if needed (this is controlled from the backend). If the banner is clickable, when clicking it the new external page will be opened in the in-app browser. The URL for that page is set by FHI and they have full control over maintaining and publishing information on that page
3	The text in the banner is localized according to the language set in the app
4	The text in the banner is received from backend and therefore reflects what it is set to in the backend

5	The color of the banner's background is received from backend and therefore reflects what it is set to in the backend
6	The banner should only appear if the important information has been received from the backend
7	The request to get the banner will be sent no more often than 5 minutes. If the app is force closed and opened, the request will be sent again ignoring 5 minutes interval
8	Given that the messages in different language is provided by FHI to NC, the JSON file with the messages can be quickly (within 24h) on the server. The file should contain all translations
9	Once the JSON file is deployed it is available on /importantinfo endpoint
10	If the file is not present or remove, the endpoint will return 204 No Content
11	The banner link should show the user to the Norwegian FHI site for users using Bokmål and Nynorsk. Every other language should be shown to the English site

Table 2 Acceptance Criteria for Release 3.4

The following people have been involved in the test:

Albert Jakob Fredshavn, Netcompany, Test Manager

Jakob Plesner Steenstrup, Netcompany, Test Specialist

Julie Højris Petersen, Netcompany, Consultant

Christine Lunde, FHI, FHI Test lead

1.1 Test execution

For the 3.3 release of the Smittestopp application, 30 test cases were designed to cover all the identified test scenarios. The test cases were written to cover all the new features. 4 test cases from previous versions of the app were selected for rerun to test for regressions in old functionality. An overview of the different type of test cases can be seen in Table 3.

ID	Type	Title	Status
65450	Functional Test case	User is able to report themselves infected by selftest	Ready
65458	Functional Test case	User should not be able to log-in with ID porten more than three times within 12 hours	Ready
65461	Functional Test case	If the user is under 16, an error is shown after log-in with ID porten	Ready
65462	Functional Test case	If the user gets this screen after lookup in MSIS, then the user will see the "Test result not found" screen where the button to continue to self test will not be shown	Ready
65463	Functional Test case	If the user gets this screen after choosing self-test option, the user will see a new screen informing that you cannot register infected when younger than 16yo	Ready

65464	Functional Test case	User is able to switch to registering themselves infected using a self-test after previously selecting to register tested at test facility	Ready
65465	Functional Test case	Selecting "OK" on the "Test result not found page" aborts the flow and returns the user to the home page	Ready
65467	Functional Test case	The user must log-in via ID porten and is given options to choose symptoms date	Ready
65468	Functional Test case	If the user decides not to put in a date, despite selecting the date option, the date of reporting will be set as the symptom date	Ready
65469	Functional Test case	The self-test reporting will not contain a lookup in MSIS	Ready
65470	Functional Test case	User will not see a consent page, nor a countries selection page when reporting using self-test	Ready
65471	Functional Test case	The self-test reporting will not contain a step for sending the keys to European Federation Gateway Server	Ready
65501	Functional Test case	User should not be able to register infected with MSIS lookup if the user has already registered infected in the previous 60 days	Ready
65844	Functional Test case	User should not be able to log-in with ID porten more than three times within 12 hours	Ready
65693	UI Test case	"Velg ett alternativ for å fortsette" page	Ready
65694	UI Test case	"Del at du er testet positiv" page	Ready
65695	UI Test case	"For å kunne varsle" page	Ready
65696	UI Test case	"Tak, fordi du nu har delt, at du er testet positiv i smittestopp"	Ready
65697	UI Test case	"Testresultatet ditt ble ikke funnet" - confirming a positive result	Ready
65722	UI Test case	"Du er ikke gammel nok til å varsle om smitte i Smittestopp" page	Ready
65752	UI Test case	Teststasjon flow	Ready
65861	UI Test case	Horizontal flows	Ready
65549	Accessibility Test case	Accessibility on page "Har du testet positivt"	Ready
65550	Accessibility Test case	Accessibility: "Jeg fikk positivt testresultat på test utført på teststasjon" flow	Ready
65551	Accessibility Test case	Accessibility "Jeg fikk positivt resultat på selvtest" flow	Ready
65553	Accessibility Test case	Accessibility - Textsize "Har du testet positivt" page	Ready

65754	Regression Test case	New user	Ready
65755	Regression Test case	Messages and Entry-consent2 page	Ready
65756	Regression Test case	Main flow: Push and pull keys	Ready
66038	Regression Test case	Meny options	Ready

Table 3 Test case overview, Release 3.3

For the 3.4 release of the Smittestopp application, 20 test cases were designed to cover all the identified test scenarios. The test cases were written to cover all the new features. 2 test cases from previous versions of the app were selected for rerun to test for regressions in old functionality.

An overview of the different type of test cases can be seen in Table 4.

ID	Type	Title	Status
66180	Functional Test case	When the user access the main page, the banner message will be visible when the app is set to inactive	Ready
66182	Functional Test case	When the user access the main page, the banner message will be visible when the app is set to active	Ready
66184	Functional Test case	It is possible to access a link in the banner to a web page, for further and more detailed information.	Ready
66188	Functional Test case	The link in a banner message is still accessible in the app despite the user having no internet access	Ready
66195	Functional Test case	The banner is displayed in the app within 24h delivery of important information to the users	Ready
66196	Functional Test case	Creating and delivering messages in the app does not require a redeploy of the app and backend	Ready
66197	Functional Test case	The banner should only appear if the important information has been received from the backend	Ready
66295	Functional Test case	Func test. Removal of messages	Ready
66296	Functional Test case	Func. Test New message, one after the other	Ready
66199	UI Test case	A yellow banner is displayed in the top of the main page, with the important information written in 2-3 sentences.	Ready
66200	UI Test case	The message can contain letters, numbers, and symbols	Ready
66201	UI Test case	The max size of a message is [X] characters	Ready

66225	UI Test case	The banner message supports different languages	Ready
66268	UI Test case	The banner message links supports different language settings	Ready
66335	UI Test case	When no banner message is shown, front page should not show banner	Ready
66202	Accessibility Test case	The message banner can be read out loud using Talkback	Ready
66203	Accessibility Test case	The message banner supports Large Text	Ready
66294	Accessibility Test case	The message banner supports horizontal view	Ready
66333	Regression Test case	Regression test: User is able to report themselves infected by selftest	Ready
66334	Regression Test case	[Smoke test] - Messages and Entry-consent2 page	Ready

Table 4 Test case overview, Release 3.4

1.1.1 Test Areas

The test cases have been divided into 4 different categories, depending on which area/functionality they cover as follows:

- Functional Test Cases
- Accessibility Test Cases
- UI Test
- Regression Test

The test devices used for testing Release 3.3 and Release 3.4 are shown in Table 5.

Operating System	Device
iOS 15.2	iPhone 11 Pro Max
iOS 14.2	iPhone 7
iOS 12.5	iPhone 5s
Android 12	Samsung Galaxy S21
Android 11	OnePlus Nord N100
Android 10	Samsung Galaxy A20e

Android 7	HTC ONE M9
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Table 5 Device list for test of Release 3.3 and 3.4

1.1.2 Start criteria for Release 3.3

All start criteria were met the 7th of February.

- Test data was identified and created with FHI.
- A test plan was created by Netcompany and approved by FHI.
 - Netcompany Test Sprint ran from 7th to the 11th of February
- All new functionalities were deployed, and integrations were working.

The tests were executed over the following 7 days after the criteria were met.

1.1.3 Start criteria for Release 3.4

All start criteria were met the 24th of February.

- was created by Netcompany and approved by FHI.
 - Netcompany Test Sprint ran from 24th of February to the 2nd of March
- All new functionalities were deployed, and integrations were working.
- Previous functionalities from Release 3.3 were tested with no functional bugs still open.

The tests were executed over the following 7 days after the criteria were met.

2 Test result

The following chapters describe the test results for Release 3.3 and 3.4.

2.1 Test result for Release 3.3

All test cases were executed with success. Only 3 minor defects – 1 accessibility- and 2 cosmetic UI defects – remained open after the test execution phase. All 3 defects have subsequently been closed after dialogue with FHI. The nature of each unresolved defect is further elaborated on in Section 4 and have been prioritized for future releases. In conclusion, all exit criteria are met, and the conclusion is that the test has passed.

2.2 Completed test runs (R3.3)

In total, **153** test runs were executed, and all of them were completed with status **Passed**

- **153** were completed with status **Passed**
- **0** of the test runs were completed with status of **Not applicable**, **Failed** or **Blocked**

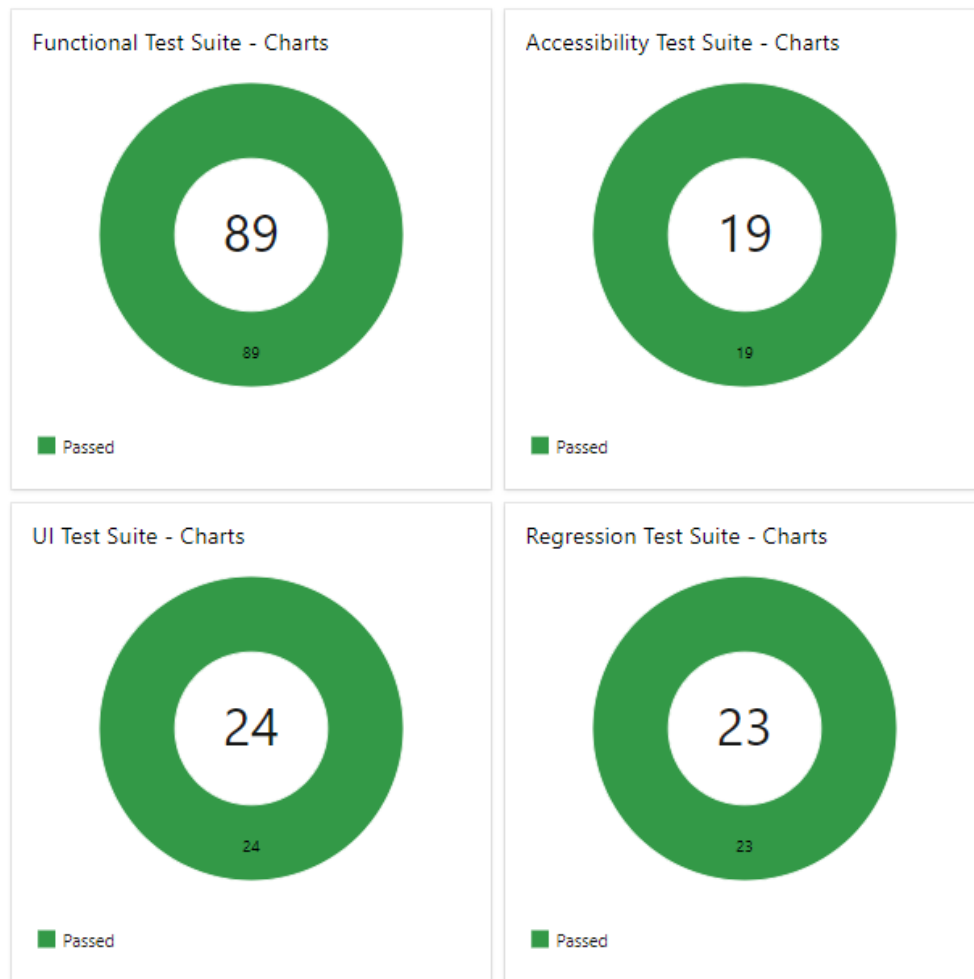


Figure 3 Overview over test suites for Release 3.3

2.3 Test result for Release 3.4

All test cases were executed with success. Therefore, all exit criteria are met, and the conclusion is that the test has passed.

2.4 Completed test runs (R3.4)

In total, **121** test runs were executed, and all of them were completed with status **Passed**

- **121** were completed with status **Passed**
- **0** of the test runs were completed with status of **Not applicable**, **Failed** or **Blocked**

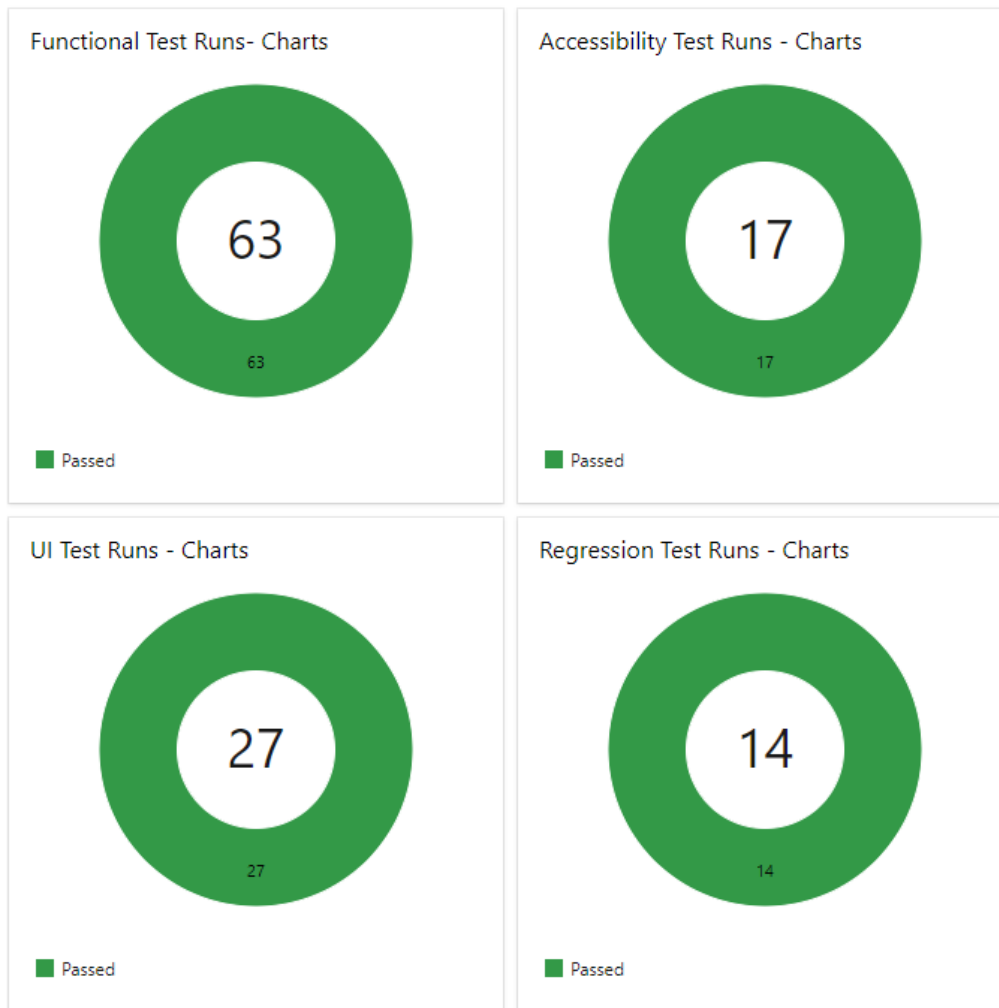


Figure 4 Overview of test cases for Release 3.4

3 Defect statistics

3.1 Defect statistics (R3.3)

This section lists the defects found and resolved during the test period. In total, 17 defects were found during the test of release 3.3

14 defects were resolved, and 3 defects are unresolved, although having Cosmetic or Low severity. Furthermore, the unresolved defects all have Netcompany as supplier.

ID	Area	Title	Severity	Status	Condition
65584	Functional	The user returns to "Choose and option screen" instead of Main page	2 – High	Done	Resolved
65643	Functional	Not able to log in with MinID on android 12 or 11	2 – High	Done	Resolved
65644	Functional	If the user decides not to put in a date, despite selecting the date option, the flow is aborted, and the user is sent back to the start page	2 – High	Done	Resolved

65686	UI	Text on "I want to report infected with self test"-button aligned badly	3 -Medium	Done	Resolved
65743	UI	Teststasjon text is too big for the box	3 -Medium	Done	Resolved
65744	UI	Date is not aligned with box and is missing the calendar symbol	5 – Cosmetic	Removed	Unresolved
65753	UI	The "Jeg ønsker alikevel å melde meg selv smittet" box is not big enough for the page	3 -Medium	Removed	Resolved
65765	Accessibility	ARGETEXT on: Text is outside the button. Button text "Jeg fikk positivt testresultat på test utført på teststasjon"	3 -Medium	Done	Resolved
65767	Accessibility	Registration of selftest page. The "X" button is read aloud incorrectly	3 -Medium	Done	Unresolved
65773	Accessibility	Talkbalk: It is not possible to access the exit button on "consent page" after registration of self test.	3 -Medium	Removed	Resolved
65774	Accessibility	Large text is outside the button text on iPhone 5S	5 - Cosmetic	Done	Resolved
65778	Accessibility	text is outside buttonARGETEXT on iPhone 7	3 -Medium	Done	Resolved
65790	UI	The text on the "velg ett alternativ for å fortsette" page is too big on iOS 14.4 and 12.5	04 – Low	Done	Resolved
65804	UI	Register selftest button UI is wrong	3 -Medium	Done	Resolved
65814	UI	X button is located on the wrong side in Urdu and Arabic on Android	04 – Low	Done	Resolved
65885	UI	Velg ett alternativ in landscape view UI bug	3 -Medium	Done	Resolved
66048	UI	Error underage page – urdu text not showing RTL	04 – Low	Removed	Unresolved

3.2 Defect statistics (R3.4)

This section lists the defects found and resolved during the test period. In total, 5 defects were found during the test of release 3.4

All 5 defects were resolved, and no defects are unresolved.

ID	Area	Title	Severity	Status	Condition
66336	UI	Front page leaves room for banner, when banner not shown	3 – Medium	Done	Resolved
66343	UI	Tingrinja banner is in English	4 - Low	Done	Resolved
66346	Functional	Banner link is not clickable	2 - High	Done	Resolved
66413	Functional	Reporting infected is not available	2 - High	Done	Resolved
66475	UI	Text is outside of box	4 - Low	Done	Resolved

4 Unresolved defects

Below you will find the defects for Release 3.3 that have not been resolved.

ID	Status	Description	Severity	Resolution
65744	UI	Date is not aligned with box and is missing the calendar symbol	05 – Cosmetic	Defect has been acknowledged and agreed with client to not fix with this release.
65767	Accessibility	Registration of selftest page. The "X" button is read aloud incorrectly	04 – Low	Defect has been acknowledged.
66048	UI	Error underage page – urdu text not showing RTL	04 – Low	Defect has been acknowledged.

- Bug 65744: A consensus was reached with FHI Test Lead Christine Lunde, that since the defects only has cosmetic impact, it would not be fixed during this release, due to the risk of creating new and more severe defects.
- Bug 65767: It was decided, as the bug was of low severity and inconsistent in nature, that a fix would not be feasible during this release. During future releases testers will be aware of this potential defect, as it could reappear. Our assessment is that reoccurrence is unlikely. It was found on two different test devices, and later disappear from one.
- Bug 66048: As it only impacts **iOS** users **under 16 yo** that have **Urdu** as main language it has been agreed with FHI that this bug is not being prioritized during this release.

5 Lessons Learned

This project has shown us the importance of having identified and prepared all the necessary test data before beginning the test execution stage. During a large portion of the test sprint, a lot of cases were blocked, as we did not have access to the necessary test users, and this halted the progress of the sprint. This issue appeared especially for Release 3.3 but was also present in Release 3.4 when doing regression testing. In coming releases it will be made sure that all necessary test data is available before testing begins.