

Annex 2: Requirements and Test Catalogue Interoperability

The following table defines the requirements for the app especially regarding the interoperability with the terminal and the payment engine. The fulfilment of these requirements is a prerequisite for the upload of an app into the CCVStore. The App Partner is generally fully responsible for quality assurance and the associated tests of the application itself. The App Partner is also responsible for testing the application with the CCV Payment Engine and for quality assurance (so-called interoperability testing) so that no negative cross-effects arise from the app on payment transactions and the use of the CCV Android terminals. **By signing Annex 2, the App Partner confirms that the App Partner has actually carried out corresponding tests and that the application meets the requirements below.** By signing Annex 2, the App Partner also accepts any liability towards CCV should problems arise in live operation with the App itself or with regard to the interoperability of the App with the Payment Engine.

CCV can, but is not obliged to, provide an additional, more detailed test catalogue as additional assistance. Such a test catalogue from CCV does not claim to be complete. The app partner remains responsible for ensuring that all necessary tests are carried out.

Before the initial upload of the app into the CCVStore and also after each update (also for minor updates) of an app, the tests associated with the requirements listed below must be carried out by the App Partner and the signed Annex 2 must be supplied. If the delivery is an update of an app that has already been published in the CCVStore, release notes will also be sent to CCV showing exactly what has been changed (functions, entities, etc.).

For a quick process regarding the security check, live signature and the upload (see chapter "app test and test procedure"), the app partner informs CCV 2 days in advance that an .apk will be submitted for the test. If the test result is positive (without need for further explanation or optimization) CCV recommends that the app partner plans 1.5-5 working days for these steps until the app is available in the CCVStore when planning a go-live (depending on public holidays, vacation, occupancy).

The confirmation about the compliance with the stated requirements relate to the following version and test objects	
version of the tested application:	
acCEPT/SECpos EVO terminal version:	
Paygear terminal version (if applicable)	
If mAPI is used, version number:	
Only for updates:	<input type="checkbox"/> release notes sent to CCV together with the .apk, <input type="checkbox"/> not sent
Representative with authorization for signature (signatures below in the checklist)	
name (block letters):	
position:	
date:	

*If not known, please ask your technical contact at CCV.

Checklist: Requirements and Test Catalogue Interoperability

group	requirements	confirmation
Usage of system resources	<p>The app is not allowed to extend the processing time of transactions with the payment engine.</p> <p>While the payment engine is processing a transaction, the application is not allowed to cause system load. Best scenario is when the application is waiting for the response of the payment engine.</p>	<p>signature:</p> <p>_____</p>
	<p>The application has to be adapted for using it on a mobile device with a battery pack. Goal is to enable a long operational time of the battery pack.</p> <p>Processes which run in the background while the app is not used, have to be reduced to a minimum.</p> <p>The app is not allowed to change the Android default standby behaviour.</p>	<p>signature:</p> <p>_____</p>
security	<p>The application is strictly not allowed to have an influence on the terminal security.</p> <p>The application is not allowed to require unnecessary authorizations.</p> <p>In an implementation definition (specification) all authorizations are listed and explained what the authorization is used for.</p>	<p>Additional/separate document: list with all authorizations and explanations why it is necessary.</p> <p>signature:</p> <p>_____</p>
	<p>The app is not allowed to communicate with external systems, if not necessary. This explicitly includes systems, which collect and save data about user behaviour and systems which transfer new functionalities into the device or app.</p> <p>Many libraries, which are commonly used by developers, contain system components which communicate with external systems.</p> <p>The app partner has made sure that the libraries which are used for the app are free of harmful components.</p> <p>It is proven by a network trace that the app does</p>	<p>Additional/separate document:</p> <p>List of systems/ communication activities with the following information:</p> <p>Which systems are used</p> <p>Why is it used</p> <p>What is the average data volume used</p> <p>signature:</p> <p>_____</p>

group	requirements	confirmation
	<p>not communicate with external systems unless it is deliberately established by the app partner.</p> <p>Versions of the Log4j library 2.0 till 2.14.1 are not allowed to be used.</p> <p>If Log4j is used, which version?</p>	<p>signature:</p> <p>_____</p> <p>Version: _____</p>
usability	<p>A GUI concept was set up for the app which explains the usability of app. The document has to be handed over to CCV upon request.</p> <p>The usability should be intuitive for the user and should be in alignment with the Android standard usability concepts.</p> <p>A consistent behaviour of the app (e.g. for Stop or Back) is ensured.</p>	<p>signature:</p> <p>_____</p>
	<p>The Neptune API or NeptuneLite API must not be used</p>	<p>signature:</p> <p>_____</p>
in operation	<p>CCV highly recommends using the mAPI although other ways of integration are possible. If you use the mAPI, it is compulsory to use the following functions which will help you in live-operation and support:</p> <ul style="list-style-type: none"> - Error recovery (recover a payment) - Logging - AutomaticTerminalDiscovery, recommended for all Payment Engines, but compulsory for SecPOS Evo <p>Documentation about these functionalities can be found on the CCV Developer Portal</p>	<p>signature:</p> <p>_____</p>
update	<p>The app needs to be updateable.</p> <p>The ability for updates was tested in the context of different scenarios with positive test results, especially if an update contains additional migration steps (e.g. update of data bases and contents).</p>	<p>signature:</p> <p>_____</p>

group	requirements	confirmation
	<p>Updates in the field are always done via the store.</p> <p>Therefore it must be ensured that the build generates a valid manifest with continuously increasing build numbers, which must also be stored in the manifest accordingly.</p> <p>After the download from the store to the device, the Android installer is addressed by the store client and the update package is installed.</p>	
<p>Android version compatibility</p>	<p>The app should be compatible with as many Android versions as possible</p> <p>List of compatible Android versions:</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>signature:</p> <p>_____</p>