

GBIC Approval Scheme

Payment Scheme: girocard

Detailed Approval Requirements for digital girocard/ girocard HCE (with CDCVM)

| Version | Date | Valid from - to | Publication |
|---------|------------|-----------------|-------------|
| V1.0 | 16.02.2021 | 16.02.2021 | 16.02.2021 |

Content

| | |
|---|----------|
| Content | 1 |
| 1 GBIC Agreements | 2 |
| 2 Mapping of Roles to Institutions | 2 |
| 3 Approval Object | 3 |
| 4 GBIC Technical Interface Specifications and Security Requirements (according to [gc_HCE1_VT]) | 3 |
| 5 Component "HCE Server" | 4 |
| 5.1 Sub Component "HCE HSM" | 4 |
| 5.1.1 GBIC Technical Interface Specifications | 4 |
| 5.1.2 GBIC Security Requirements | 4 |
| 5.2 Sub Component "operational environment of the HCE HSM" | 4 |
| 5.2.1 GBIC Technical Interface Specifications | 4 |
| 5.2.2 GBIC Security Requirements ⁴ | 4 |
| 5.3 Migration Dates | 4 |
| 6 Component „HCE SDK“ | 5 |
| 6.1 GBIC Technical Interface Specifications | 5 |
| 6.2 GBIC Security Requirements | 5 |
| 6.3 Confirmation Letter for a digital card by the security evaluator | 5 |
| 6.4 Interfaces to be tested | 5 |
| 6.5 Migration Dates | 5 |

1 GBIC Agreements

| Nr. | Subject | Document Title | Status ¹ | Approval Period |
|--------------|----------------------------|---|---------------------|--|
| [gc_VB] | girocard banks agreement | Vereinbarung über ein institutsübergreifendes System zur bargeldlosen Zahlung an automatisierten Kassen (girocard-System), Stand: Juli 2019 | V _{GBIV} | From: 16.02.2021 Up to ² : unlimited |
| [gc_HCE1_VT] | girocard provider contract | Vertrag über die Zulassung als Betreiber digitaler Karten im girocard-System der Deutschen Kreditwirtschaft, Stand: 29.07.2019 | V _{GBIC} | From: 16.02.2021 Up to: unlimited |

2 Mapping of Roles to Institutions

The following table shows the mapping of the roles to institutions for the approval process of the approval object "girocard HCE" within the payment scheme girocard.

| Role | Institution |
|---------------------|--|
| Payment scheme | girocard |
| Approval Council | GBIC Arbeitsstab "Kartengestützte Zahlungssysteme" |
| Approval Office | VÖB |
| Technical Committee | GBIC Arbeitskreis "Zulassung" |
| Security Committee | GBIC Arbeitsstab "Sicherheitsfragen" |
| Testing Laboratory | DSV |
| Security Evaluators | BrightSight, SRC, T-Systems, TÜVIT, UL |

Table 1: Mapping of Roles to Institutions

¹ V = Verified/effective (verabschiedet); A = Draft (in Arbeit); O = Open (offen); I = Info

² The approval (for example first approval or renewal of the existing approval) of the approval object according to the referenced agreement/ specification is possible until a specific date "X" or, if no specific date "X" is mentioned, the approval period is "unlimited". Then "unlimited" is set for "Up to". Please pay attention to the information of further migration dates.

3 Approval Object

The approval object within the girocard-system to use mobile devices for girocard contactless transactions based on Host Card Emulation (HCE) is the "girocard HCE" (s. chapter 5.4.3 "GBIC Approval Scheme").

The approval object "girocard HCE" represents a system consisting of

- the component "HCE server" as a system, including
 - o the hardware and software of the sub component "HCE HSM" as part of the component "HCE server",
 - o the operational environment of the sub component "HCE HSM" and
- the component "HCE SDK" as a software library, which can be integrated in Mobile Payment Apps,

covering the appendixes of the contract between GBIC and the provider for digital cards to carry out girocard contactless transactions supported by mobile devices based on Host Card Emulation (HCE). The operation of digital cards depends on the signed contract (s. above, chapter 1 "GBIC Agreement", [gc_HCE1_VT]).

According to the provider contract, the digital card provider has to be approved in order to start his operation.

The approval of the provider is issued as a provider personal approval to personalise and operate the approved type of digital cards for "girocard HCE".

The approval cannot be transferred to third parties.

4 GBIC Technical Interface Specifications and Security Requirements

(according to [gc_HCE1_VT])

| Nr. | Subject | Document Title | Status | Approval Period ³ |
|----------------------------------|--------------------------|--|-------------------|--------------------------------------|
| [girocard mobile HCE_CPA CE_1_0] | Functional Specification | Common Payment Application Contactless Extension, CPACE, Functional Specification, CPACE for Host Card Emulation (HCE) in a Consumer Device, Version 1.0, 15.03.2019 | V _{GBIC} | From: 16.02.2021 Up to: unlimited |
| [GC_EMV_HCE_2_2] | Data for HCE Application | Common Payment Application Contactless Extension for Host Card Emulation (HCE) in a Consumer Device, girocard mobile HCE, Data for the girocard EMV HCE Application, Version 2.2, 03.09.2019 | V _{GBIC} | From: 16.02.2021 Up to: unlimited |
| [PERS_FF_abs_1_2] | Protection Data | Absicherung der Kartendaten zur Personalisierung von anderen Formfaktoren für das girocard-System, Version 1.2, 28.02.2019 | V _{GBIC} | From: 16.02.2021 Up to: unlimited |
| [SI_KRI_2_1] | Security Criteria | Kriterien für die Konstruktion und Bewertung von Kundenkomponenten im girocard-System, Version 2.1, 12.05.2020 | V _{GBIC} | From: 16.02.2021 Up to: unlimited |

³ Please pay attention to the information of the migration date in chapter 5.3 and 6.5.

5 Component “HCE Server”

5.1 Sub Component “HCE HSM”

5.1.1 GBIC Technical Interface Specifications

No functional test is required.

5.1.2 GBIC Security Requirements⁴

| Nr. | Subject | Document Title | Status | Approval Period |
|--------------|-------------------|--|-------------------|--------------------------------------|
| [SI_KRI_2_1] | Security Criteria | Kriterien für die Konstruktion und Bewertung von Kundenkomponenten im girocard-System, Version 2.1, 12.05.2020 | V _{GBIC} | From: 16.02.2021 Up to: unlimited |

5.2 Sub Component “operational environment of the HCE HSM”

5.2.1 GBIC Technical Interface Specifications

No functional test is required.

5.2.2 GBIC Security Requirements⁴

| Nr. | Subject | Document Title | Status | Approval Period |
|--------------|-------------------|--|-------------------|--------------------------------------|
| [SI_KRI_2_1] | Security Criteria | Kriterien für die Konstruktion und Bewertung von Kundenkomponenten im girocard-System, Version 2.1, 12.05.2020 | V _{GBIC} | From: 16.02.2021 Up to: unlimited |

5.3 Migration Dates

16.02.2021: Start of approval process according to girocard HCE (with CDCVM).

30.06.2021: End of approval process for first approval, approval change and/ or approval extension according to girocard HCE (without CDCVM).

Approval prolongation for digital cards according to girocard HCE (without CDCVM) will be granted until further notice.

01.07.2021: Approval process only according to girocard HCE (with CDCVM).

Exception as described above: Approval prolongation for digital cards according to girocard HCE (without CDCVM) will be granted until further notice.

⁴ Please pay attention to the information of the migration date in chapter 5.3.

6 Component „HCE SDK“

6.1 GBIC Technical Interface Specifications

| Nr. | Subject | Document Title | Status | Approval Period ⁵ |
|----------------------------------|--------------------------|--|-------------------|--------------------------------------|
| [girocard mobile HCE_CPAC E_1_0] | Functional Specification | Common Payment Application Contactless Extension, CPACE, Functional Specification, CPACE for Host Card Emulation (HCE) in a Consumer Device, Version 1.0, 15.03.2019 | V _{GBIC} | From: 16.02.2021 Up to: unlimited |
| [GC_EMV_HCE_2_2] | Data for HCE Application | Common Payment Application Contactless Extension for Host Card Emulation (HCE) in a Consumer Device, girocard mobile HCE, Data for the girocard EMV HCE Application, Version 2.2, 03.09.2019 | V _{GBIC} | From: 16.02.2021 Up to: unlimited |

Functional test is required.

6.2 GBIC Security Requirements

| Nr. | Subject | Document Title | Status | Approval Period ⁵ |
|--------------|-------------------|--|-------------------|--------------------------------------|
| [SI_KRI_2_1] | Security Criteria | Kriterien für die Konstruktion und Bewertung von Kundenkomponenten im girocard-System, Version 2.1, 12.05.2020 | V _{GBIC} | From: 16.02.2021 Up to: unlimited |

6.3 Confirmation Letter for a digital card by the security evaluator

| Nr. | Subject | Document Title | Status | Approval Period ⁵ |
|---------|---------------------|---|-------------------|--------------------------------------|
| [SI_CL] | Confirmation Letter | girocard HCE Confirmation Letter, Stand: 04.02.2020 | V _{GBIC} | From: 16.02.2021 Up to: unlimited |

6.4 Interfaces to be tested

Interfaces to be tested in the functional test for the HCE SDK supporting girocard contactless transactions based on Host Card Emulation (HCE) according to chapter 5.4.5.2. “GBIC Approval Scheme”.

6.5 Migration Dates

16.02.2021: Start of approval process according to girocard HCE (with CDCVM).

30.06.2021: End of approval process for first approval, approval change and/ or approval extension according to girocard HCE (without CDCVM).

Approval prolongation for digital cards according to girocard HCE (without CDCVM) will be granted until further notice.

01.07.2021: Approval process only according to girocard HCE (with CDCVM).

Exception as described above: Approval prolongation for digital cards according to girocard HCE (without CDCVM) will be granted until further notice.

⁵ Please pay attention to the information of the migration date in chapter 6.5.