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European Cards Stakeholders Group

Report

Annual Stock Taking Exercise

25 November 2021



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1 Executive Summary

The European Cards Stakeholders Group (ECSG) welcomes the opportunity to report to the ERPB, the status of the last 12 months work on SEPA Cards standardisation.

Cards Standardisation, and collaboration across the payments industry generally, remains critical to ensuring timely adoption of a consistent payment experience across the region. Therefore it should be noted that the fact that all ECSG work in the last year was performed in remote meetings because of the Covid-19 pandemic has not impacted its efficiency and quality. All tasks could progress in good time; other assignments like the cooperation with the ERPB could even be enhanced.

After having published v9 of the Volume in November 2020 the ECSG mainly collected and assessed new contents to keep the Volume up to date and to support the market for all relevant standardisation efforts in the domain of card based payments. Out of the new contents included in the next Volume version the integration of ATICA v2 in Book 3, the integration of the new state of the art industry security standards for POI in Book 4, the integration of Merchant Initiated Transactions MITs in Book 1,2 and 6 and EMVCo's Secure Remote Commerce must be mentioned. The intention is to publish v9.5 at the end of 2021 for public consultation.

Other promising subjects were evaluated and not integrated because they were voted as not mature enough for SEPA standardisation yet. This applies to SCTinst for card payments settlement, IoT card payments as well as to QR code payments.

The increasing collaboration with the ERPB and the EPC was already referred to as a highlight in the last report. It could be expanded in 2021. The continuing convergence of all forms of digital payments at the point of interaction lead to the successful cooperation in three ERPB and one EPC Working Groups. Further projects are being planned.

In this context, the ECSG has launched a strategic assessment of its activities and notably the possible expansion of its scope beyond card-based payments.

As part of the general effort of promoting card industry harmonisation, the ECSG is trying to enhance the dialogue with the stakeholders also through <u>social media</u> and its website, where articles and other contents related to the card sector are regularly published.

This is a small example of how, in terms of aggregating relevant actors and engaging with trending topics, the contribution that the ECSG can bring to the industry goes beyond the publication of implementation guidelines every three years.

Along the same lines goes the initiative to review the way the ECSG presents its activities and goals to those who are not familiar with the organisation - the video version is available on this webpage.



2 Update on the Card standardisation in Europe

This section presents the main changes in the last 12 months in relation to Volume conformance and card standardisation in Europe.

2.1 Release of the Volume v.9.5

In line with its three-year release schedule, the ECSG activity in 2021 has been focused on Version 9.5 of the SEPA Cards Standardisation Volume, expected to be published in January 2022 to undergo an open consultation and comment period for three months. Version 9.5, to be updated based on comments received, is the intermediate step towards the next official release of the Volume (Version 10) in 2023. A notable addition present in version 9.5 is the integration of Secure Remote Commerce (SRC) following an analysis carried out by a dedicated Task Force.

While evaluating the inclusion of Merchant Initiated Transactions (MITs) in Volume Version 10, the ECSG decided to integrate MIT references in the Volume as soon as possible, given the topical nature of the subject. Therefore, a Bulletin was published on October 2021, after a one-month public consultation.

2.2 Regulatory Updates

During the course of the last 12 months the EBA have continued to provide responses to PSD2 related questions from the industry. As a result, the ECSG PSD2 Task-force met on a regular basis to analyse the EBA responses for potential impact on the Volume.

The ECSG continues to interact with regulatory bodies such as through <u>contributing to the EC's inception impact assessment concerning the Commission's initiative on Instant Payments in the EU</u>, and the informal clarification session with the EC (DG FISMA) about the Retail Payment Strategy for the EU.

When adding new functionality to the Volume, the ECSG ensures the new functionality is in compliance with recent EU regulations such as PSD2 and GDPR.

2.3 Progress in Volume Conformance

The VCMC has continued its ongoing activity of evaluating and granting labels for implementation specifications submitted to the labelling process. As of 2019, the main pan-European Implementation Specifications had already been labelled; in 2020, however, no new applications were received.

Therefore, the VCMC decided to contact the providers of the implementation specifications currently having a Volume label and asked them for renewal against Version 9.0 of the ECSG Volume. Several specification providers quickly indicated their interest in a new label for their specification.

The actual overview is provided on the VCMC web page.



As outlined in section 3.5 of this report, the ECSG has started a strategic discussion about its future standardisation approach in 2021. Looking at labelling as an important part of its harmonisation efforts, the ECSG decided to include the labelling process into this discussion.

2.4 Annual Report on ISO 20022 initiatives in the Acquirer to Issuer Domain

2.4.1 Context

Since 2017, the ECSG Volume Sub-Group has been monitoring the status of the initiatives to use ISO 20022 in the A2I domain in the market, in order to identify specific SEPA requirements to be taken into account, e.g. triggered by Schemes or by Regulation.

2.4.2 Current status

At the date of the report, compared to last year, no new initiative using ISO 20022 in the A2I domain has been identified in the market.

The same two initiatives as last year are using ISO 20022 in the A2I domain.

- The SEPA Card Clearing (SCC) Framework, which specifications have been labelled as conformant towards the SCS Volume Version 8.0
- ATICA provides a specification covering the full transaction life cycle (Authorisation, Clearing, Settlement and Disputes) within the Acquirer to Issuer environment. The latest version is version 2, formally adopted by ISO in May 2020.

2.5 Standardisation progress in the Card-to-Terminal, Terminal-to-Acquirer and Acquirer-to-Issuer domains

After its approval by ISO in May 2020 and subsequent publication, the ECSG has completed the integration of ATICA version 2 in Book 3 of the Volume and has submitted the new version of Book 3 (version 9) to public consultation. This will contribute to achieving a better level of interoperability for the Terminal-to-Acquirer and Acquirer-to-Issuer domains. The update took into account the Authorisation, Cancellation and Completion messages within the Terminal to Acquirer environment and the Authorisation, Reversal and Financial messages in the Acquirer to Issuer environment. Section 3 of the Book provides requirements for the implementation of the standards in terms of data elements usage.



2.6 Standardisation progress in the Terminal Security domain

The alignment process of the ECSG Book 4 high-level security requirements was continued by integrating the latest version of PCI PTS to keep the Book 4 up to date.

Based on the assessment work of its Innovation Expert Team, the ECSG also agreed to add the new COTS programmes developed by different payment industries to the Book 4 security requirements list. This enhanced the harmonisation efforts of the Volume with a different security approach using tablets or mobile phones as card payment devices in conjunction with a secure backend system comparable to the HCE approach for cards.



3 Ongoing ECSG activities for Volume v10

The ECSG has already turned its attention to the impact of technological innovation, payment-related regulations and the initiatives of other standards bodies on the development of Card payment in SEPA.

3.1 Evolution towards enhanced cryptography

The challenges to 'current generation' from advances in quantum computing are well known (for further information please see <u>this webpage</u>), and the ECSG continues to monitor developments in this field.

In order to better evaluate the constraints for migration to stronger cryptography, the ECSG is going to proceed to a detailed assessment of the ECC technology for cards, not implemented so far by the payments industry. This work is going to be made in collaboration with EMVCo once the new EMV specifications as well as the evaluation and certification processes for ECC cards and terminals are available.

Simultaneously, the ECSG will continue to evaluate the relevance for the European card payments industry of the Quantum-Resistant algorithms contest by the NIST.

3.2 Cooperation with the ERPB and EPC

The ECSG is delighted to have been given the opportunity to collaborate more with the ERPB and, as a result, to share its expertise on card payments with the ERPB and the EPC.

Following this collaboration, the ECSG has contributed to the following initiatives:

- <u>ERPB Working Group on a framework for instant payments at the POI</u>:
 10 cross-sector ECSG experts participated in the joint Task Force with the ERPB that completed its work in 2020;
- <u>ERPB Working Group on Transparency for retail payment end-users</u>: the ECSG participated in this ERPB Working Group which report was submitted to the June 2021 ERPB meeting;
- <u>ERPB Working Group on access and acceptance of cash</u>: each sector of the ECSG contributed to a survey submitted by the working group;
- <u>EPC MSG MSCT on Consumer selection of preferred payment instrument</u>:
 after completing the work with the ERPB Working Group on a framework for instant
 payments at the POI, the ECSG is participating in a joint task force with the EPC ad hoc multi-stakeholder group for Mobile Initiated SEPA Credit Transfers, which work
 is ongoing.

The ECSG continues to report on the implementation of standards related to payment cards (the present document).



3.3 Innovations in Card Payments

The ECSG Innovation Expert Team has investigated the following topics for potential inclusion to the Volume

• Enhanced Cryptography for cards and terminals (see section 3.1)

QR-code based card payments

QR code card payments in Europe are currently based on proprietary standards, which are not appropriate for the Volume. As this type of payment matures a common standard may be developed, and the Volume updated accordingly.

Internet of Things Card Payments Environment

The Volume already supports early IOT use cases. As IOT develops further, the ECSG will continue to monitor the domain to ensure new use cases are identified and covered appropriately

• The EMVCo Secure Remote Commerce (SRC) Framework

The ECSG has made an extensive analysis of the EMV SRC specifications, and will integrate SRC into the Volume. Our investigation included the compliance of SRC with the applicable regulation for payments in the EU, including the Interchange Fee Regulation and the GDPR.

FIDO

FIDO's authentication protocols constitute an additional option for card issuer banks and merchants to comply with PSD2 requirements. Moreover FIDO is compatible with e-commerce security protocols such as 3-DS. After the ECSG investigation on the different modes to implement FIDO, it was decided to include FIDO as a recommended option in the SEPA for Cards Specifications Volume v10.

The use of SCT Inst for the Settlement of Card Payments

The ECSG has investigated the potential role of the SEPA Instant Credit Transfer for the clearing and settlement of card transactions, starting with an analysis of the EPC SCT Inst specifications. A substantial extension of the SCT Inst specifications would be required to support this new use case. Moreover, our impact assessment proved a reduced interest for the SCT Inst as C&S solution for cards amongst ECSG members. Therefore decision was made to stop our effort on the technology that will not be referenced in the next release of the SEPA for Cards Specifications Volume v10. In future and depending on the availability of SCT Inst specifications including the card use case and the interest of ECSG members, our initial decision could be reconsidered.

PCI Software based PIN Entry on Commercial off-the-shelf devices (COTS) and PCI Contactless Payments on COTS (CPoC[™])

PCI-SSC have developed specifications for security requirements for COTS-based acceptance solutions to minimize the risk of fraud due to the vulnerabilities of mobile devices. COTS solutions are already available, and the ECSG has integrated COTS requirements into the Volume for the next version.



Future Work Items

The ECSG has identified innovative technologies that would will be investigated to determine whether they should be included in v11 of the Volume. An innovation program of work for 2022-2024 has therefore being approved. It will include items such as Blockchain/DLT, use cases for the card technology for Central Bank Digital Currencies, the application of Artificial Intelligence and Machine Learning algorithms to reduce fraud or friction in payments and the use cases for digital wallets as prescribed by the e-IDAS regulation. The purpose is that the Volume remains aligned with the state-of-the art technology available for cards, terminals and processing systems.

3.4 Collaboration with standardisation bodies and specification providers

The ECSG will continue to collaborate with internationally recognised Standards bodies with whom they have already established formal liaisons, such as EMVCo and PCI-SSC. In addition, the ECSG will reach out to other standards bodies such as ISO, EPC and FIDO where appropriate.

3.5 ECSG Strategic review

In 2021 the ECSG started an internal strategic assessment, with the aim of reviewing its vision, mission and objectives and evaluating applicable improvements.

The Task Force constituted for this work has identified two main strategic decisions for the future of the ECSG: the possible expansion of its scope beyond card-based payments and the evolution of the ECSG labelling (as mentioned in section 2.3 above).

Thanks to its consolidated activity, the ECSG could bring added value to improve the efficiency of the whole payment eco-system standardisation work, subject to redefining its role as the one multi-stakeholder organisation managing the necessary requirements relating to co-existence, transparency and choice across all electronic payment means present at the POI.

By the end of the year, the ECSG - provided with the conclusions and recommendations of the Task Force - is expected to adopt decisions both on the possible scope expansion and the next steps for the labelling process.



4 Conclusion

The ECSG looks back to a very specific year of SEPA standardisation.

The permanent exchange of regulatory updates and views among all stakeholders that has been established in the last years has evolved to be one of the main assets of the ECSG. It enables the ECSG to achieve a common understanding of the regulations' targets and measures and to create a sustainable perception of them in the Volume.

The Labelling process, which is still evolving, starts to benefit from lessons learnt. Better defined requirements in the Volume will provide for more transparency and attractiveness.

The list of innovative technologies analysed this year for the next Volume v10 is promising. The 2020 discussion about how to handle the major challenge of new crypto methodologies coming up within the next decade created a European view on strategies, migration aspects and special environments in this regard.

Throughout Europe 2020 has been hugely impacted by the COVID-19 outbreak. The shutdown starting in March 2020 and the pandemic conditions decided by European governments changed everyday life enormously, including in the card payment domain.

Due to the functional and security requirements defined as SEPA standards in the Volume, the fundamental changes that COVID-19 caused in payment habits could be undertaken across Europe almost seamlessly. Examples of this are the massive switch to online shopping as well as the move away from cash to the use of contactless cards, aided significantly by raising the maximum transaction value before the Cardholder needs to enter their PIN.

These clearly demonstrate that even in unforeseen circumstances the positive impact of harmonised standards achieved within the Volume enable card based payments to continue smoothly, securely and uninterrupted.

A next stage in this regard is the continuation of the cooperation with the ERPB started in 2020 in the field of "SCT Inst at the POI". The ECSG is looking forward to bringing its deep knowledge in card payments in this and other ERPB topics.



ANNEX A

ECSG Granted Conformant Labels

The following table lists the specifications that were successfully submitted. For more information on the Labelling process, please refer to this web page.

ECSG Label Number \$	Submitter (Organisation)	Submitter (Contact)÷	Labelled Specification \$	Conformant to Volume \$	Granted Date** \$	URL Link to the Specifications (Optional) \$
ECSG L 001	nexo	Arnaud Crouzet	nexo Acquirer v6.0	version 8.0	20/12/2017	N/A
ECSG L 002	nexo	Arnaud Crouzet	nexo FAST 3.1 & nexo bulletins	version 8.0	20/12/2017	N/A
ECSG L 003	nexo	Arnaud Crouzet	nexo IS v4.0	version 8.0	20/12/2017	N/A
ECSG L 004	GBIC	Matthias Hoenisch	The global girocard specifications*	version 8.0	20/12/2017	N/A
ECSG L 005	IFSF	lan Brown	IFSF POS to FEP Interface Specification Part 3-40 version 2.0	version 8.0	22/05/2018	N/A
ECSG L 006	IFSF	lan Brown	IFSF Host to Host Interface Specification Part 3-50 version 2.0	version 8.0	22/05/2018	N/A
ECSG L 007	nexo	Arnaud Crouzet	nexo FAST 3.2	version 8.0	26/10/2018	N/A
ECSG L 008	Berlin Group	Wijnand Machielse	SEPA Card Clearing (SCC) Framework	version 8.0	11/07/2019	ISO20022 SEPA Card Clearing
ECSG L 009	RedSys	Carlos Gomez	PUC (Protocolo Unificado Comercios) Version 5.6	version 8.0	26/09/2019	N/A

^{*}Technischer Anhang zum Vertrag über die Zulassung als Netzbetreiber im electronic-cash-System der deutschen Kreditwirtschaft, abbr. TA 7.2 - v. 7.2, 15.08.2016

And its annexes

- Schnittstellenspezifikation für chip-basierte EMV Debit/Credit-Anwendungen POS-Terminals, abbr. DC POS 3.0 v3.0, 15.08.2016
- Terminalmanagement für EMV-Applikationen, Fachkonzept, abbr TM DC v1.6, 15.08.2016

DISCLAIMER

The ECSG, its officers, staff and the members of the VCMC accept no responsibility for the accuracy of the information provided through self-declaration by the Submitters of the Labelled Specifications listed above. It is the responsibility of each Submitter to ensure that its Labelled Specification(s) comply with the relevant requirements set out in the Volume. The inclusion of a Labelled Specification in the above list does not imply any undertaking, warranty or representation by the ECSG, its staff or members of the VCMC as to the Volume-conformance of such specification.

^{**} These Labels are valid for three years from their granted date.