



# **Business Requirements**

## **Electronic Payment Server**

**March 6, 2023**

**API Version 1.0**

### **Document Summary**

This document provides the business requirements creation of the Electronic Payment Systems (EPS) API global standard.

## Contributors

Casey Brant, Conexus

Sue Chan, W. Capra

Linda Toth, Conexus

## Revision History

Revision Date	Revision Number	Revision Editor(s)	Revision Changes
March 6, 2023	Version 1.0	Kim Seufer, Conexus	Release Final Version 1.0
October 24, 2022	Draft 1.0	Kim Seufer, Conexus	Resolved updates from legal review
September 12, 2022	Draft 0.5	Casey Brant, Conexus	Accepted changes in preparation for second legal review.
August 31, 2022	Draft 0.4	Linda Toth, Conexus	Updates after technical legal review
August 10, 2022	Draft 0.3	Casey Brant, Conexus	Accepted changes in preparation for legal review
July 12, 2022	Draft 0.2	Sue Chan, W. Capra	Updates: watermark, copyrights, formatting, clarification
June 20, 2022	Draft 0.1	Sue Chan, W. Capra	Initial version based on the XML business requirements document

# Copyright Statement

Copyright © IFSF, CONEXXUS, INC., 2023, All Rights Reserved

The content (content being images, text or any other medium contained within this document which is eligible of copyright protection) are jointly copyrighted by Conexxus and IFSF. All rights are expressly reserved.

## **IF YOU ACQUIRE THIS DOCUMENT FROM IFSF. THE FOLLOWING STATEMENT ON THE USE OF COPYRIGHTED MATERIAL APPLIES:**

You may print or download to a local hard disk extracts for your own business use. Any other redistribution or reproduction of part or all of the contents in any form is prohibited.

You may not, except with our express written permission, distribute to any third party. Where permission to distribute is granted by IFSF, the material must be acknowledged as IFSF copyright and the document title specified. Where third party material has been identified, permission from the respective copyright holder must be sought.

You agree to abide by all copyright notices and restrictions attached to the content and not to remove or alter any such notice or restriction.

Subject to the following paragraph, you may design, develop and offer for sale products which embody the functionality described in this document.

No part of the content of this document may be claimed as the Intellectual property of any organisation other than IFSF Ltd and Conexxus, Inc, and you specifically agree not to claim patent rights or other IPR protection that relates to:

- a) the content of this document; or
- b) any design or part thereof that embodies the content of this document whether in whole or part.

For further copies and amendments to this document please contact: IFSF Technical Services via the IFSF Web Site ([www.ifsf.org](http://www.ifsf.org)).

## **IF YOU ACQUIRE THIS DOCUMENT FROM CONEXXUS, THE FOLLOWING STATEMENT ON THE USE OF COPYRIGHTED MATERIAL APPLIES:**

Conexxus members may use this document for purposes consistent with the adoption of the Conexxus Standard (and/or the related documentation), as detailed in the Implementation Guide; however, Conexxus must pre-approve any inconsistent uses in writing.

Except in the limited case set forth explicitly in this Copyright Statement, the Member shall not modify, adapt, merge, transform, copy, or create derivative works of the Conexus Standard, including the documentation suite and the application programming interface (“API”). Conexus recognizes that the API may include multiple Definition Files, and accordingly recognizes and agrees that the Member may implement one, some, or all Definition Files within the API, unless otherwise specified in the Implementation Guide, provided that each Definition File implemented is implemented in full. Here implementing a Definition File in full means that all functionality defined by the Conexus Standard for the Definition File is implemented. Regardless of whether the Member implements one, some, or all Definition Files, the Member agrees to abide by all requirements under this Copyright Statement for each of the Definition Files implemented.

Note that some functionality within a Definition File is specified for predefined error or non-implementation codes to be returned. For functionality where such predefined codes are specified, returning such a predefined code constitutes an implementation. However, in such cases, a Member may not return codes or values different from the predefined codes, nor may the Member simply not implement the functionality, as this would create a Definition File that was not fully implemented as required under this Copyright Statement.

The Member hereby waives and agrees not to assert or take advantage of any defense based on copyright fair use. The Member, as well as any and all of the Member’s development partners who are responsible for implementing the Conexus Standard for the Member or may have access to the Conexus Standard, must be made aware of, and agree to comply with, all requirements under this Copyright Statement prior to accessing any documentation or API.

Conexus recognizes the limited case where a Member wishes to create a derivative work that comments on, or otherwise explains or assists in its own implementation, including citing or referring to the standard, specification, code, protocol, schema, or guideline, in whole or in part. The Member may do so **ONLY** for the purpose of explaining or assisting in its implementation of the Conexus Standard and the Member shall acquire no right to ownership of such derivative work. Furthermore, the Member may share such derivative work **ONLY** with another Conexus Member who possesses appropriate document rights or with an entity that is a direct contractor of the Conexus Member who is responsible for implementing the standard for the Member. In so doing, a Conexus Member shall require its development partners to download Conexus documents, API, and schemas directly from the Conexus website. A Conexus Member may not furnish this document in any form, along with any derivative works, to non-members of Conexus or to Conexus Members who do not possess document rights or who are not direct contractors of the Member, including to any direct contractor of the Member who does not agree in writing to comply with the terms of this Copyright Statement. A Member may demonstrate its Conexus membership at a level that includes document rights by presenting an unexpired digitally signed Conexus membership certificate.

This document may not be modified in any way, including removal of the copyright notice or references to Conexus. However, a Member has the right to make draft changes to schema or API code for trial use, which must then be submitted to Conexus for consideration to be included in the existing standard. Translations of this document into languages other than English shall continue to reflect the Conexus copyright notice.

The limited permissions granted above are perpetual and will not be revoked by Conexus, Inc. or its successors or assigns, except in the circumstance where an entity, who is no longer a member in good standing but who rightfully obtained Conexus Standards as a former member, is acquired by a non-member entity. In such circumstances, Conexus may revoke the grant of limited permissions or require the acquiring entity to establish rightful access to Conexus Standards through membership.

## **Disclaimers**

### **IF YOU ACQUIRE THIS DOCUMENT FROM CONEXXUS, THE FOLLOWING DISCALIMER STATEMENT APPLIES:**

Conexus makes no warranty, express or implied, about, nor does it assume any legal liability or responsibility for, the accuracy, completeness, or usefulness of any information, product, or process described in these materials, even if such liability was disclosed to Conexus or was foreseeable. Although Conexus uses commercially reasonable best efforts to ensure this work product is free of any encumbrances from third-party intellectual property rights (IPR), it cannot guarantee that such IPR does not exist now or in the future. Conexus further notifies each user of this standard that its individual method of implementation may result in infringement of the IPR of others. Accordingly, each user is encouraged to seek legal advice from competent counsel to carefully review its implementation of this standard and obtain appropriate licenses where needed.

# Project

Electronic Payment Server

## Introduction

This document describes the business requirements for the Electronic Payment Server (EPS) API standard which describes the interface between the EPS and the point of sale (POS) as well as the EPS and POI (Point of Interaction) devices (i.e. Pinpad, printer).

The EPS API is a global standard.

## Purpose

New Work Item

## Project Background

The International Forecourt Standards Forum (IFSF) and Conexus agreed to form a joint Working Group to develop a single global EPS standard.

## Goals/Objectives

Develop and adopt a global standard for managing payment (credit/debit/fleet) card transaction processing from a POS through the use of an EPS as well as interfacing with POIs.

## Benefits

With the move to APIs, both organizations see an opportunity to develop a standard together that would meet the needs of both organizations. The benefits include:

1. Burden [of maintaining network-specific software] taken off of the POS, since software can be updated and downloaded more easily and cheaply, providing greater POS independence;
2. PIN pad is no longer a device of the POS;
3. The EPS can function as a standalone processor;
4. The EPS's connection to the front-end processor/host is not dependent on the interface from the POS;
5. Presentation of prompts to the customer is the same regardless of the POS;
6. Having a standard provides future support for additional devices, such as kiosk or carwash talking directly to the EPS; and
7. A standard interface facilitates introduction of functionality enhancements for financial transactions.

## Stakeholders

- EPS Vendors
- POS Vendors
- POI Vendors
- Outdoor Payment Terminal (OPT) Vendors
- Retailers

## Dependencies

For loyalty processing, this interface is required to work with the Joint Conexus-IFSF Loyalty API standard.

## Assumptions

The standard will meet the needs globally to replace the current IFSF and Conexus XML EPS standard.

## Scope

The scope includes payment processing for inside payment, prepay, outdoor payment, refunds/returns as well as settlement requests and other administration requests.

## Requirements

The EPS will support payment inside at a POS and POI device. The EPS will also support unattended payment from an outdoor payment terminal or outdoor payment point (e.g., dispenser, car wash).

The EPS will store information about each accepted card type and how to process the card (e.g., BIN range, routing, prompting) in a table that is unique for each individual merchant. Table driven processing will allow flexibility with card acceptance support, as the table may be changed to add additional card support independent of changes to the EPS software itself.

It will support known debit, credit, prepaid and fleet card processing using multiple entry methods, including, but not limited to integrated chip, magnetic stripe, contactless, keyboard entry, etc.

## Miscellaneous

N/A

## Open Issues

N/A