



# How nexo standards maturity helps addressing concrete businesses and internal structuring

# STANDARDS **Emmanuel CHAUDRON**

AMADIS / Business Architect



CARD PAYMENT STANDARDIZATION ISO 20022

PAYMENT SERVICE PROVIDERS CARD PAYMENT STANDARDIZATION ISO 20022

nexo



пехо



nexo

VENDORS

ACCEPTORS



nexo

anadis



### **AGENDA**

- 1. AMADIS presentation
- 2. Nexo challenges from our software editor perspective
- 3. Concrete use cases implemented using nexo standards:
  - Retailer » use case
  - « In Transit » use case
- 4. Software engineering vision around nexo standards





## AMADIS PRESENTATION



### **AMADIS** presentation

- AMADIS is a canadian software editor company founded in 2005 in Montréal
- Amadis business is focused on promoting the adoption of standards, the global apprehension of local requirements and the alignment on state of the art software practices.

"Our promise is to provide Retailers with Agnostic (non binding), Open & Universal **Payment Solutions**"

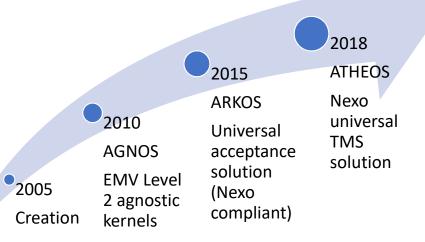




# Amadis Joined Nexo in 2010

Amadis Mission is to participate to the structuring of the payment industry, by providing standard and full-agnostic interoperable payment solutions

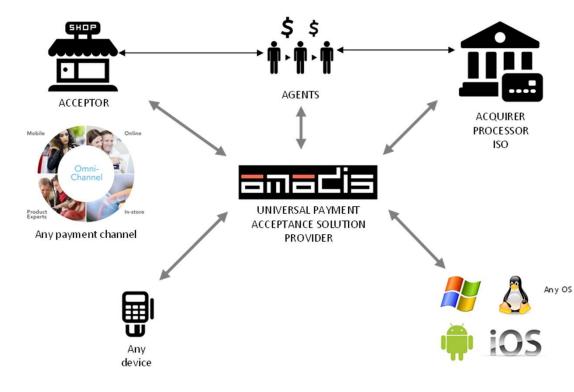








### AMADIS position in the payment acceptance market



Secure Payment OS (PCI) Card Processing (EMV Level2) **Payment Acceptance Solutions Terminal management Systems** 





Yet another payment company?? Let's see...

- AMADIS is not a terminal vendor (and is fully platform agnostic)
- AMADIS has started on card based payment (not e-commerce)
- AMADIS is a payment & software expert





### NEXO CHALLENGES FROM A SOFTWARE EDITOR PERSPECTIVE



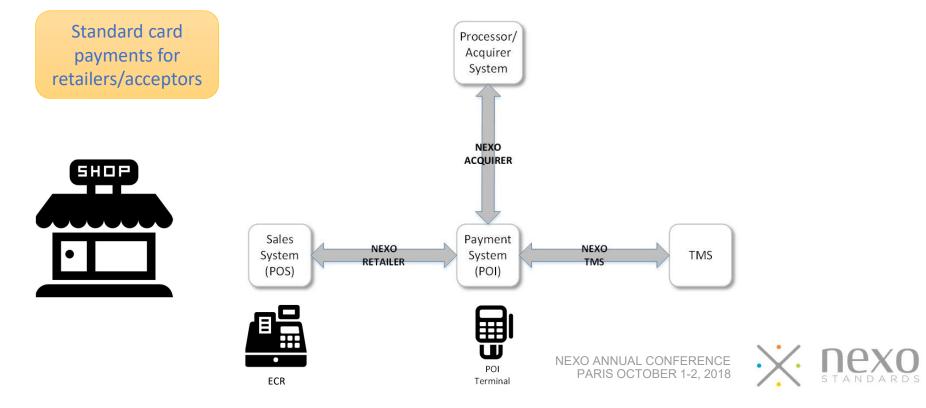
NEXO challenges from our software editor perspective

- Beyond our nexo participation, we chose nexo standards because :
  - 1. They remove dependencies which block innovation & competition
  - They are mature from business, functional and technical perspectives 2.
  - 3. They allow us to offer universal on the shelf solutions (and reduce TTM, risks and costs)



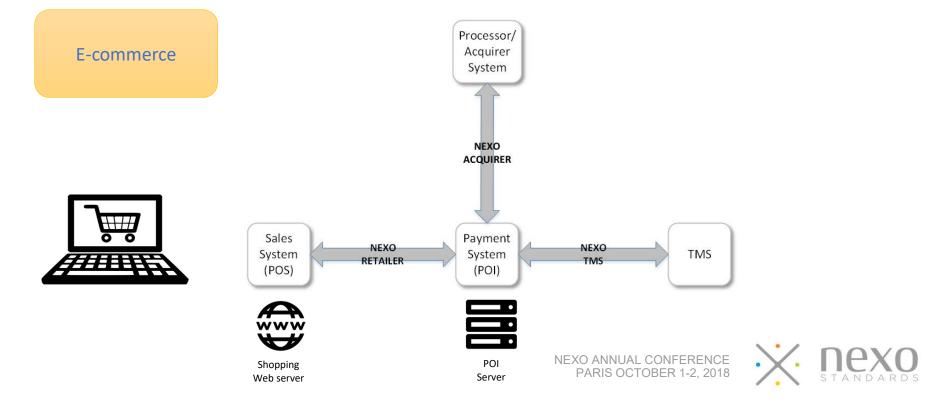


### 1- The most important: business maturity (WHAT we can achieve)





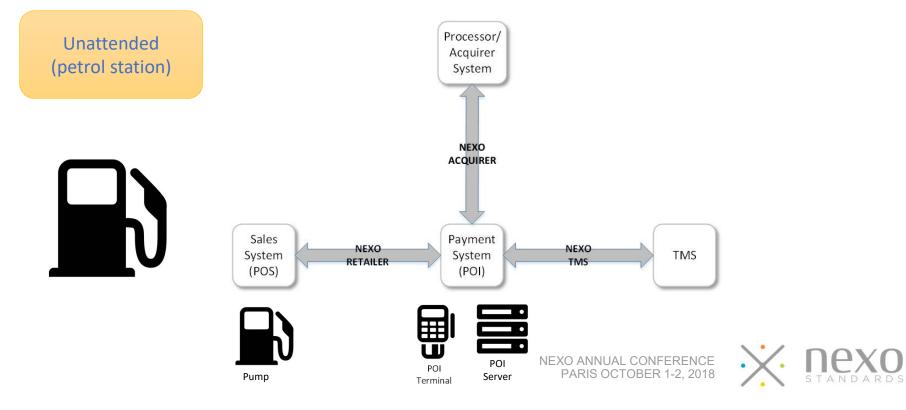
### 1- The most important: business maturity (WHAT we can achieve)



licensed by CC BY 3.0

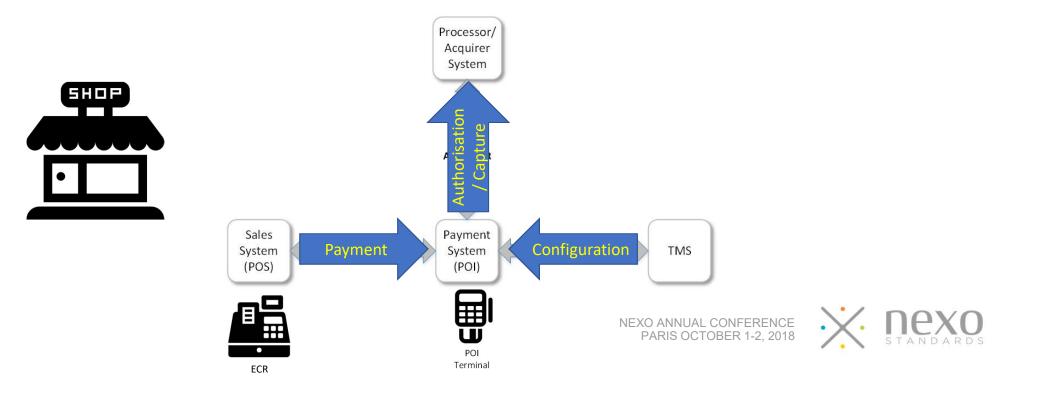


### 1- The most important: business maturity (WHAT we can achieve)



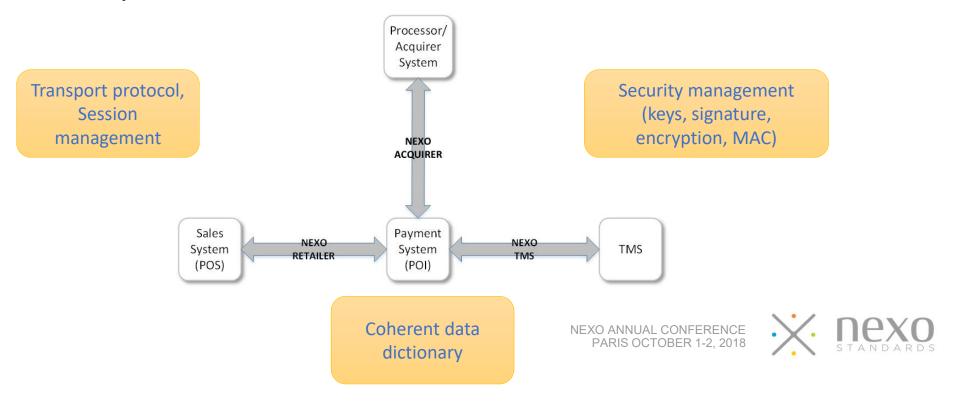


2: functional maturity. Business requirements are supported end-to-end





3: technical maturity. Functional requirements are supported by unambiguous technical requirements





### CONCRETE USE CASES IMPLEMENTED WITH NEXO STANDARDS

# Use case 1: Retail payment





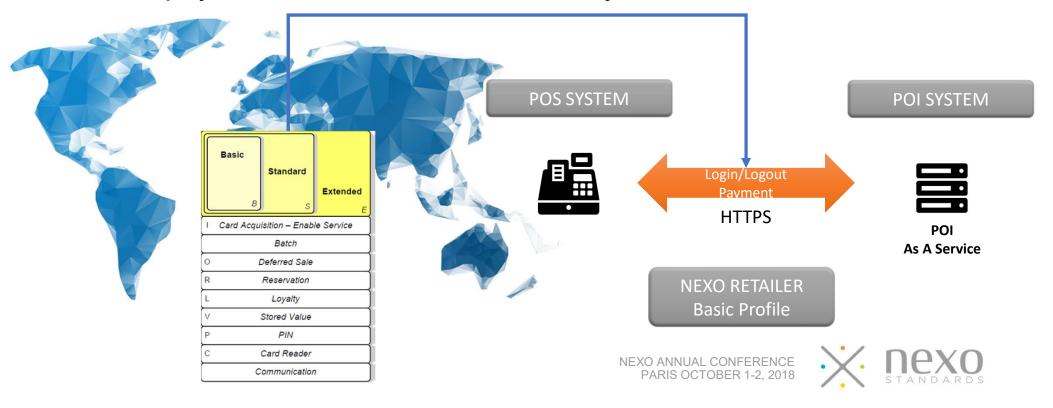
### Retail payment: build a universal POS system

The requirement: to help a worldwide retailer building a universal POS system, and be sure it will comply with any Ht nexo retailer basic POI POS System NEXO ANNUAL CONFERENCE PARIS OCTOBER 1-2, 2018





### Retail payment: build a universal POS system: AMADIS answer



# Use case 2: « In Transit » payment





Business and project organization

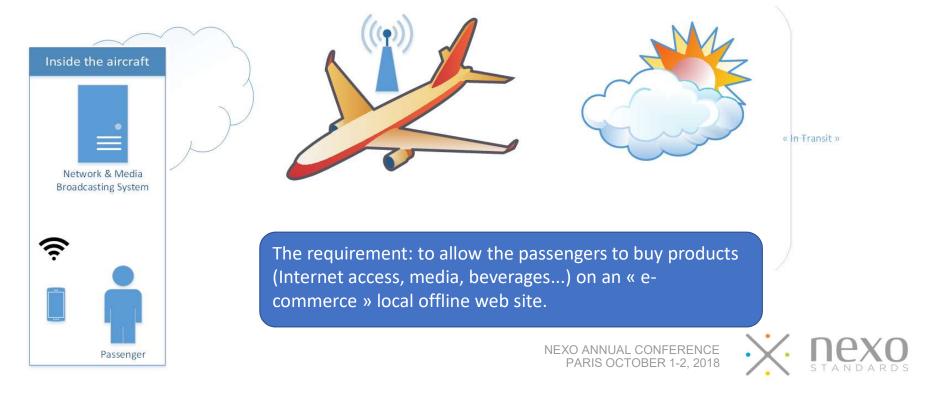






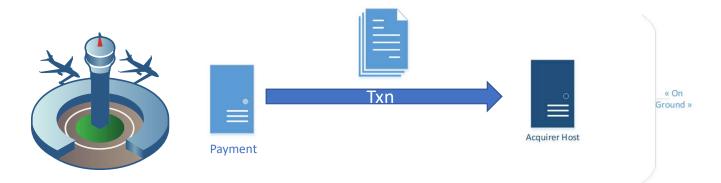


### « In Transit » use case / « offline e-commerce » (sic) in transit





### « In Transit » use case / « offline e-commerce » (sic) on ground

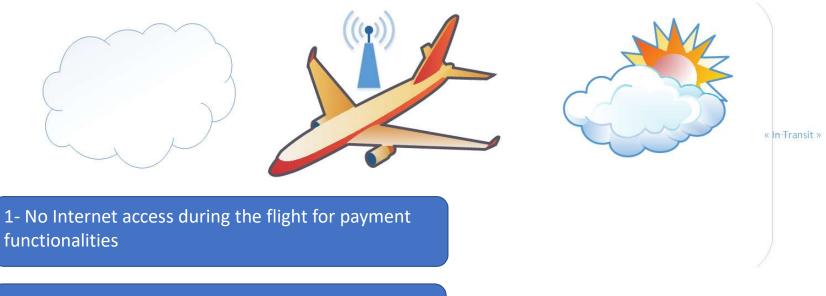


The requirement: after the trip, when Internet access available, send the transactions to the acquirer, including the products list. The passengers will receive by e-mail a sale and transaction ticket





#### « In Transit » use case: the constraints In Transit



2- No hardware can be integrated inside the aircraft
→ no HSM to protect card data encryption keys





#### « In Transit » use case: the constraints On Ground



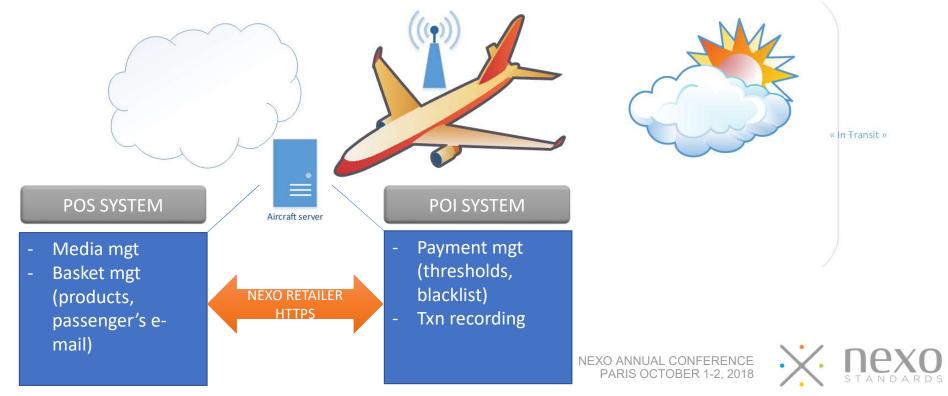
Internet access and bandwidth, on ground, is limited in time and has to be shared between:

- Payment functionalities (remote parametrization, completion)
- Sales functionalities (media content update, sales reconciliation,...)



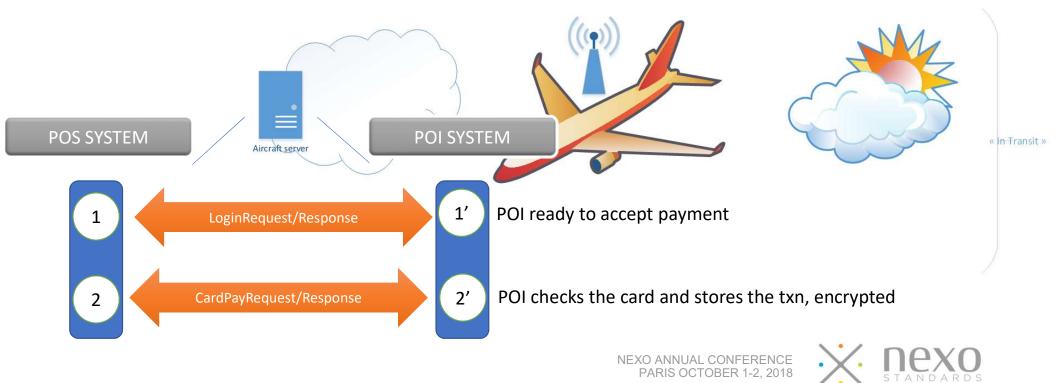


« In Transit » use case: how nexo helped integrating payment



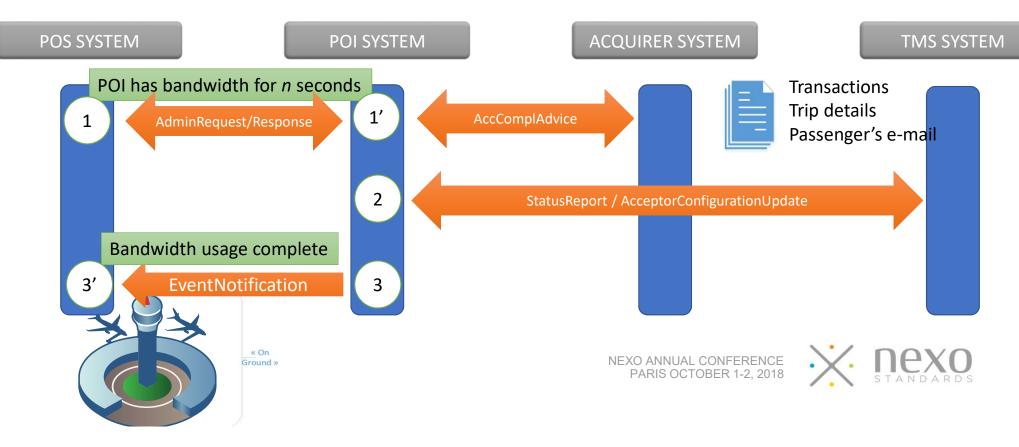


« In Transit » use case: how nexo helped integrating payment In Transit





« In Transit » use case: how nexo helped integrating payment On Ground





### SOFTWARE ENGINEERING VISION AROUND NEXO STANDARDS

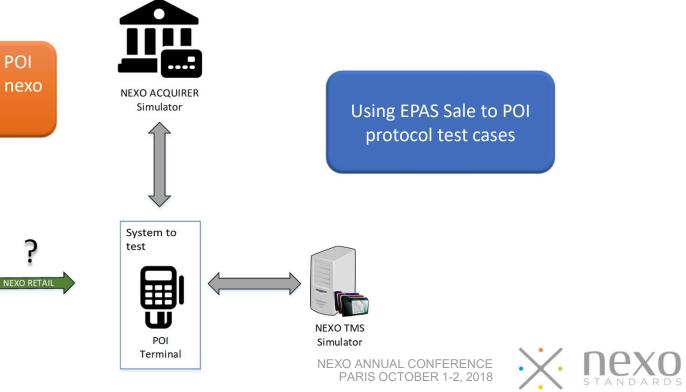


### A few use cases

As a merchant, I want to buy a POI and be sure it can run with my nexo sales system

Merchant sales

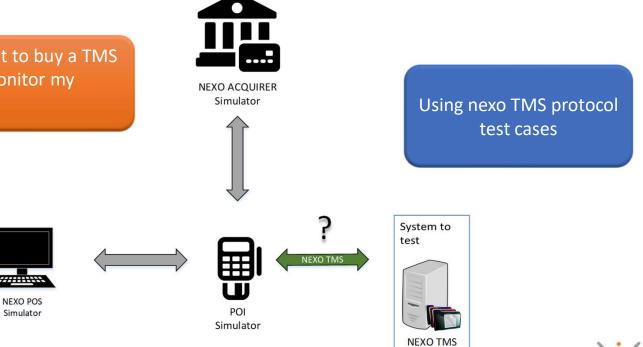
system





### A few use cases

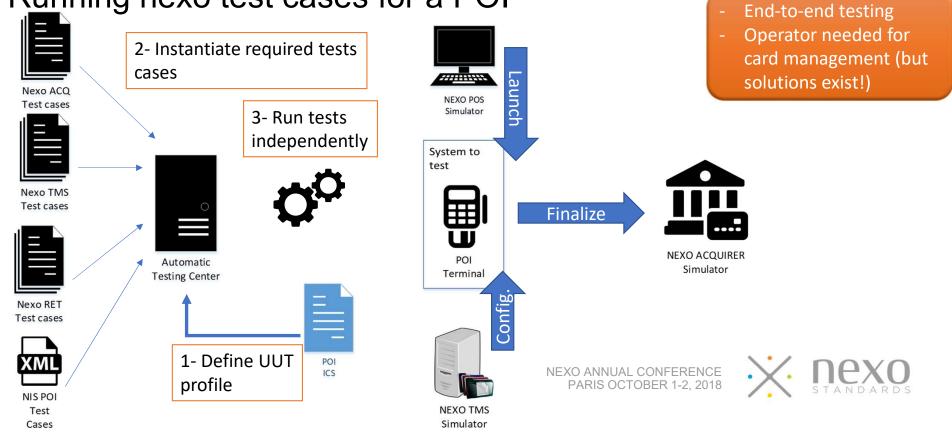
As a merchant, I want to buy a TMS and be sure it can monitor my entire POI estate





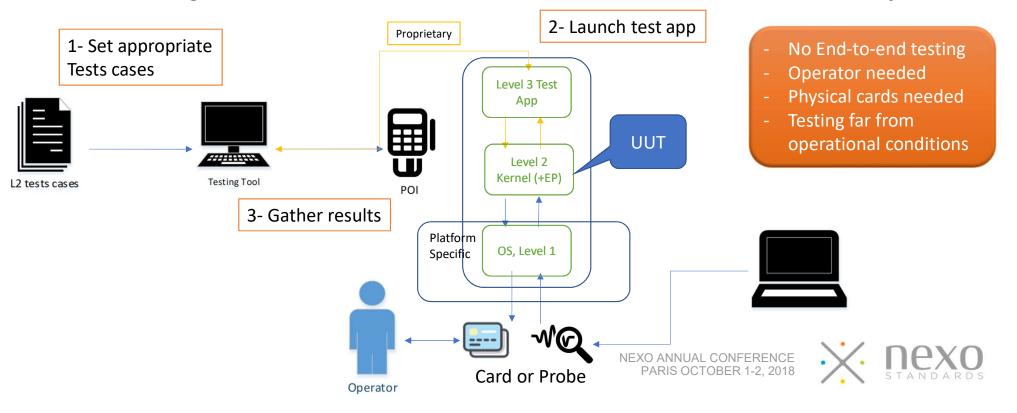


### Running nexo test cases for a POI



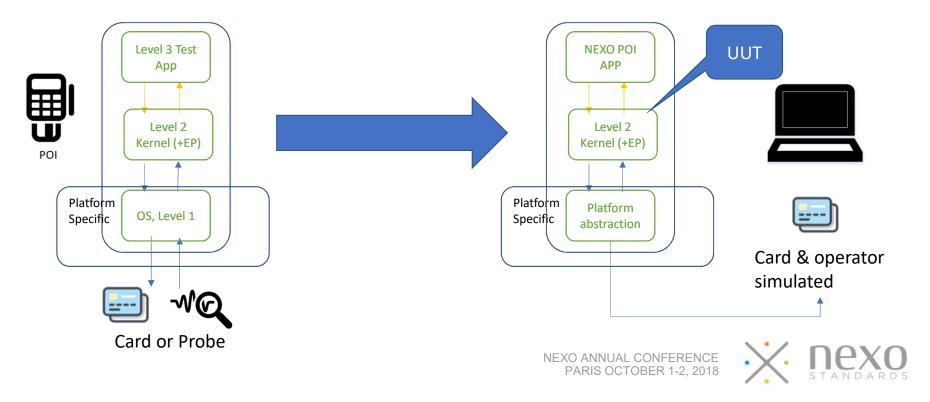


### Running Level 2 test cases for a POI: the situation today



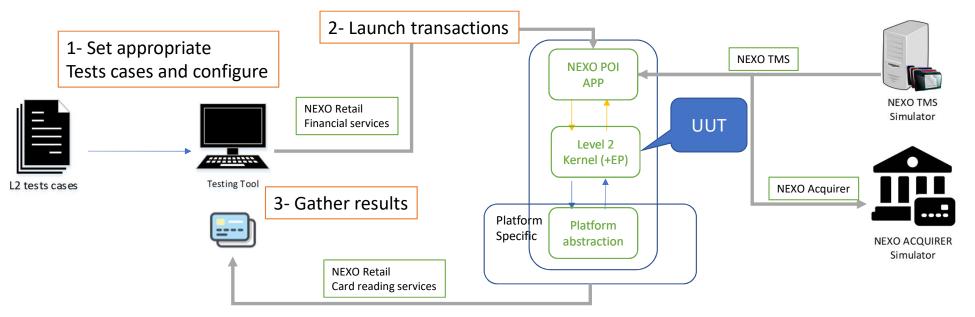


### Running (some) Level 2 test cases for a POI: how nexo helps (AMADIS)





### Running (some) Level 2 test cases for a POI: how nexo helps (AMADIS)



- End-to-end testing
- No more operator
- Testing as close as possible to operational conditions





#### For a software company in payment acceptance industry, nexo

POI

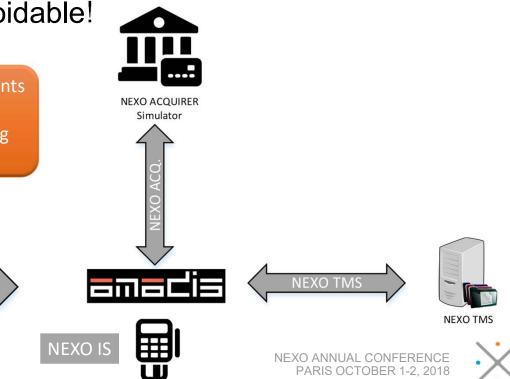
standards are unavoidable!

NEXO RETAILER

- Answers to all business requirements
- Coherent functional system

NEXO POS Simulator

- Allows standard end-to-end testing for Level 2 and Level 3



# STANDARDS **Emmanuel CHAUDRON**

AMADIS / Business Architect



CARD PAYMENT STANDARDIZATION ISO 20022

PAYMENT SERVICE PROVIDERS CARD PAYMENT STANDARDIZATION ISO 20022

nexo



пехо



nexo

VENDORS

ACCEPTORS



nexo

anadis