

Central Bank of Albania
5 December 2024

Odisseo Di Michele



deda.bit

AMPLIFY YOUR BUSINESS IMPACT

Why Today?

We are here, TAS and Deda. Bit, to show you how we can help you on your journey to enter the SEPA circuit

deda.bit



Our expertise



Banking & Finance

We are the strategic business partner to develop innovative solutions that improve efficiency and enhance the customer experience.



Insurance

We support insurance companies in the digitalization process to ensure an increasingly efficient and customeroriented service.



Large Corporate

We support large companies in the Manufacturing, Life Science & Pharma, Retail and Telco sectors to guide the digital transition.

deda. HUB FINANCE & DATA



A finance hub on both sides of the Atlantic Ocean



ITALY

20 Medium-large banks

100 Cooperative banks

10+ Financial Intermediaries

5 Outsourcing Centers

20+ Insurance



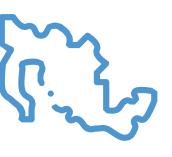
<u>USA</u>

120 Customers

230 Projects related to

Add-Ons Solutions

2 Data Centers



MEXICO

6 Financial institutions

250+ Medium Small

Businesses

2 Data Centers



Digital Finance Experts



TAS is a Fintech specialising in **innovative software solutions** for **payments** and **financial services**.

Nowadays, all types of businesses need to quickly adapt to **digital transformation** and the demands of **Open Finance**.

Our mission

We design, integrate and customize digital payment solutions and services to help you compete in the ever-changing ecosystem.





40+

years of experience

750+

experts

Top 100

fintechs in the IDC Fintech Ranking

Global presence with customers in

20+

countries

100+ Min

payment cards managed

75%

market share in the Italian banking sector

Supporting

90%

of all PSD2 systems operating in Italy

Supporting

30%+

of all credit card transactions in Germany



With customers in over 20 countries, TAS speaks your language, understands your challenges and brings experience to your local market, helping you to quickly achieve your business goals

Headquarter

TAS SpA MILANO

Offices in Italy

Roma Bologna Parma Prato Siena

Lecce

Subsidiaries

TAS International Lugano Switzerland

TAS France SASU Sophia Antipolis

TAS Iberia S.L.U

Madrid

TAS Germany GmbH

Monaco

TAS Eastern Europe d.o.o

Belgrado

Infraxis AG – Infraxis UK

Lugano - Leeds

TAS USA Inc New York

TAS Brasil LTDA

San Paolo

TAS SOUTH AFRICA (Pty) Ltd

Pretoria



For over 25 years, TAS has assisted Commercial and Central Banks in harmonizing the Eurosystem infrastructures, from the domestic RTGS and TARGET migrations, to the messaging infrastructures of TIPS, T2/T2S Consolidation and the upcoming ECMS.

- Today, our mission critical solutions are trusted by major Financial Industry customers
- They sit at the heart of the financial messaging layer of T2 and T2S at Bank of Italy and Deutsche Bundesbank, managing over 1 million payment messages per day*
- Run in the card management infrastructure of the largest pre-paid issuer in EU
- Provide a trusted liquidity management framework for Banking Treasurers, ready to support Target Participants in the upcoming Consolidated T2/T2S/ECMS migrations
- Are the chosen technological framework offered by the first EU Instant Payments CSMs to their participants to access the schemes



^{*} Source: ECB Annual Report

Main references related to payments services



CENTRAL BANKS











SOUTH AFRICAN RESERVE BANK



COMEMRCIAL BANKS



















BANKING SERVICE PROVIDERS









IMEL













PSD₂



OMNICHANNEL PAYMENTS
ACCEPTANCE

BRANCH TRANSFORMATION

REAL-TIME PAYMENTS

BILLS PRESENTMENT & PAYMENT

FRAUD MANAGEMENT

DIGITAL TREASURY
INTRADAY LIQUIDITY
MANAGEMENT
COLLATERAL
MANAGEMENT
BCBS 248 STRESS TESTING
SECURITIES SETTLEMENT

GATEWAYS TO PAYMENT
SCHEMES AND COMMUNITIES
SWIFT CERTIFIED SERVICE
BUREAU
ISO 20022 MIGRATIONS
LAST-MILE CONNECTIVITY

OPEN BANKGING &
EMBEDDED FINANCE
TPP ENABLEMENT
SCA/TRA
MANAGEMENT
PAYMENT
INTELLIGENCE

DERIVATIVES
BACK OFFICE
REGULATORY
REPORTING



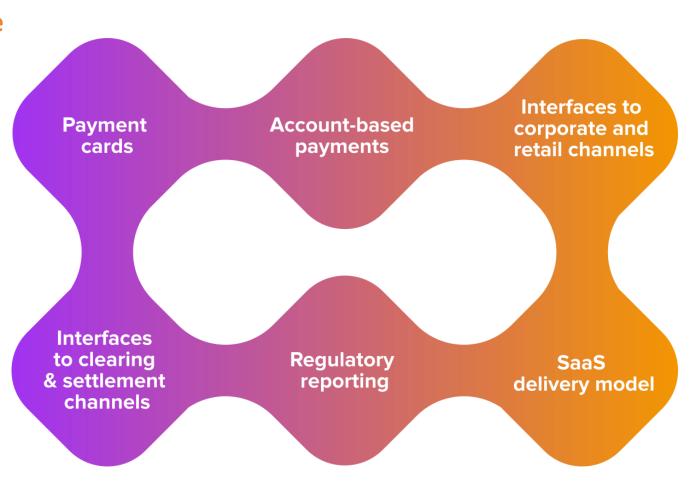
End-to-end Payment Processing in Real-time

TAS Global Payment Platform (GPP) responds to new market needs with a **modular end-to-end coverage** of all **traditional and innovative payment processes**, with an **API-first** and rich **omni-channel approach**.

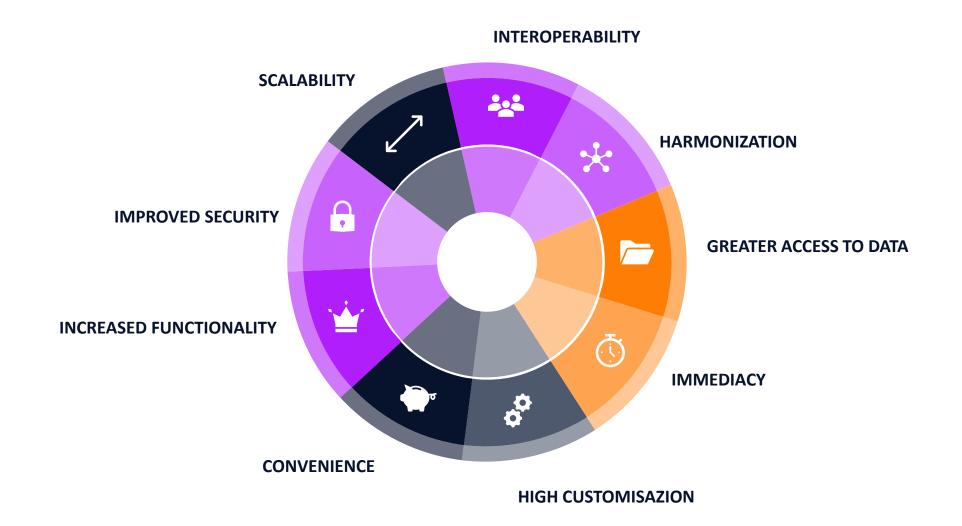
GPP is highly configurable and suited to **any ecosystem operator**, be it a Bank, e-Money Institution, Payment Institution, Fintech or Corporate.

GPP is **cloud-native**, designed as a turnkey offer for **24×7 real-time operations**. The design also allows **hybrid deployment models**, **tailored to customer-specific requirements**.

Based on a state-of-the-art architecture and inspired by the *composable banking* paradigm, GPP ensures **easy integration** with customer core systems and third party applications.





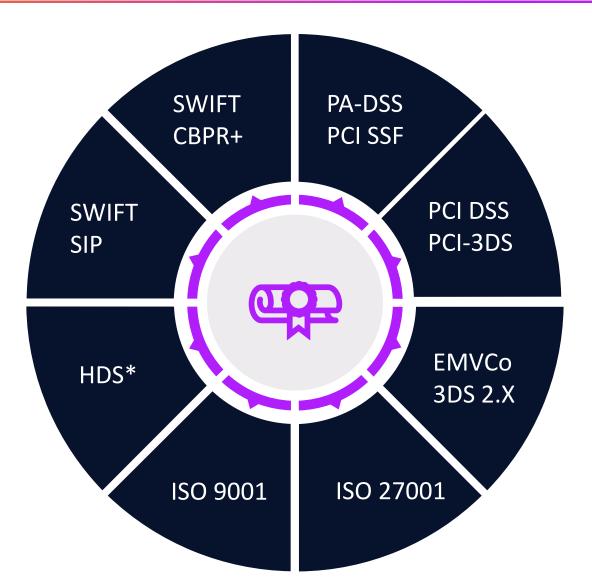
















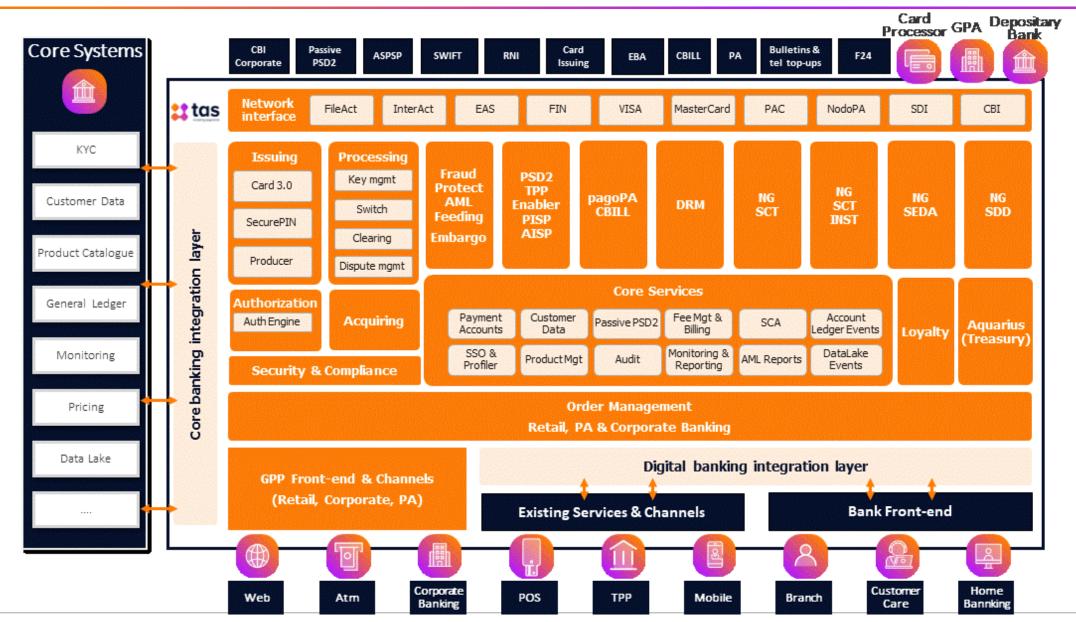




^{*} Health Data Hosting (HDS), TAS France data center

TAS Global Payment Platform





GPP Technical Architecture



Main architectural features

- √ TAS Global Payment Platform responds to new market needs and offers a modular end2end coverage of all processes related to traditional and innovative payments, with an API-first approach and a rich omnichannel.
- ✓ GPP is a cloud-native platform for a turnkey offer with 24 × 7 real-time operations, but also enables hybrid deployment methods, tailored to the customer.
- √ The architecture, designed according to the composable banking paradigm, guarantees easy integration with other partners and the customer's core systems, and hyper-customization to differentiate the offer
- The solution complies with international quality and information security standards.

Main functional features

- Routing Rules
 - Address messages to final destinations according Message Type, Country BIC, Payment Amount, Message Reference, etc.
- ✓ Message Transcode from/to legacy formats with message enrichment, default values and overriding values
- ✓ Message Traffic reconciliation
 FIN and MX messages reconciliation and correlations.
- ✓ Data Entry and RepairWith message templates, wizards and free-format editors
- ✓ Four Eyes Principle Everywhere you need it is possible to define workflows with multilevel approval processes
- Multilingual

 The solution con be configured to use the same language of the browsers

GPP Technical Architecture



TECHNOLOGICAL STACK & SECURITY

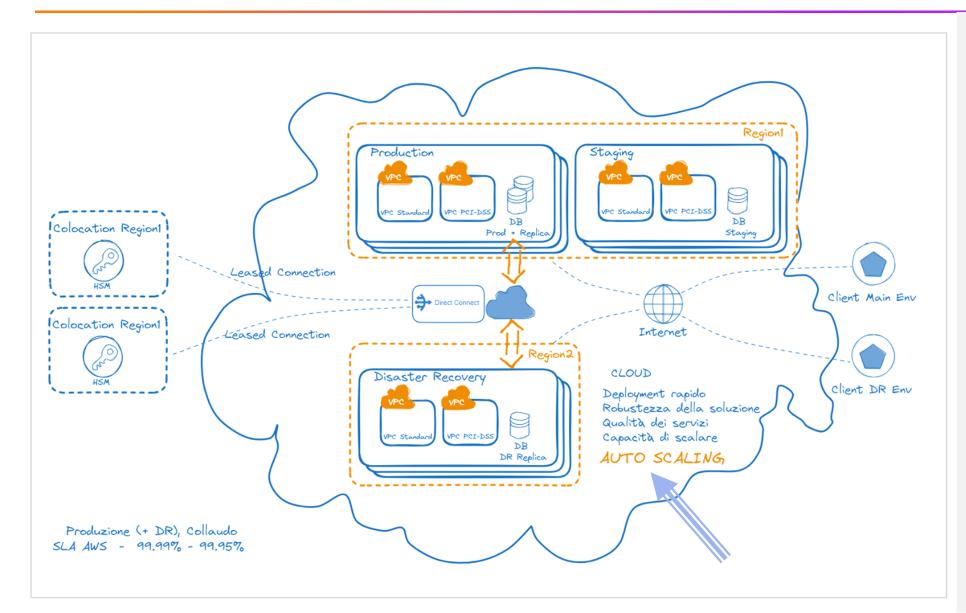
- The solution is cloud native based on a microservices architecture.
- The microservices are developed using the Spring Boot java framework or JEE on Wildfly, java version >=8.
- REST APIs / Kafka Topics are used to implement microservices and external systems communication
- Batch modules developed using Spring Batch framework. Batch processes can be scheduled either autonomously at container level, or through the use of a Spring Cloud Data Flow scheduler.
- The end user web front end interfaces are built with Angular.
- The back-office interfaces are based on TAS Raven framework, which allows the development of operational dashboards in RAD mode, using a no-code modeling system of flows and user interfaces.
- User web access security is implemented through JWT token and Identity Provider module.
- A2A security implemented through mutual authentication (Two Ways SSL) and application token.

INFRASTRUCTURE

- Container: Kubernates / Openshift
- Database: PostegreSQL
- WebServer: Apache HTPP Server/NG-INX
- Broker MQ: Kafka
- All microservices implement liveness and readyness interfaces, expose Prometheus metrics and implement opentracing interfaces (Jaeger) and trace logs formatted to be easily collectable via ELK stack and viewable on Kibana.
- The microservices also provide behavioral probes that can be viewed via the Grafana interface, which allow you to monitor the "application" status and raise alerts in the event of anomalies.

TAS Payments Hub: cloud provisioning





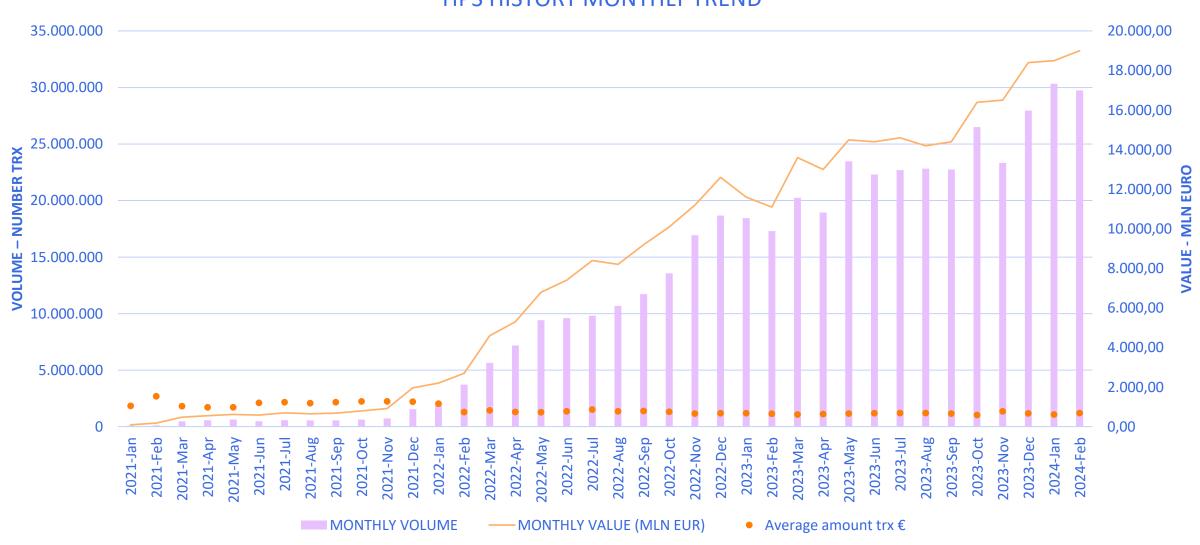
MAIN FEATURES

- Production environment with application and database components installed and running in parallel on multiple independent Availability Zones
- Staging environment that replicates the structure of the production site
- Disaster Recovery Environment in a Different Region
- Each environment has application components segregated onto different Virtual Private Clouds
- Opportunistic use of cloud services
- Adoption of Open Source components and market standards to allow simplified migration of the solution to other public clouds

Instant payments volume increase

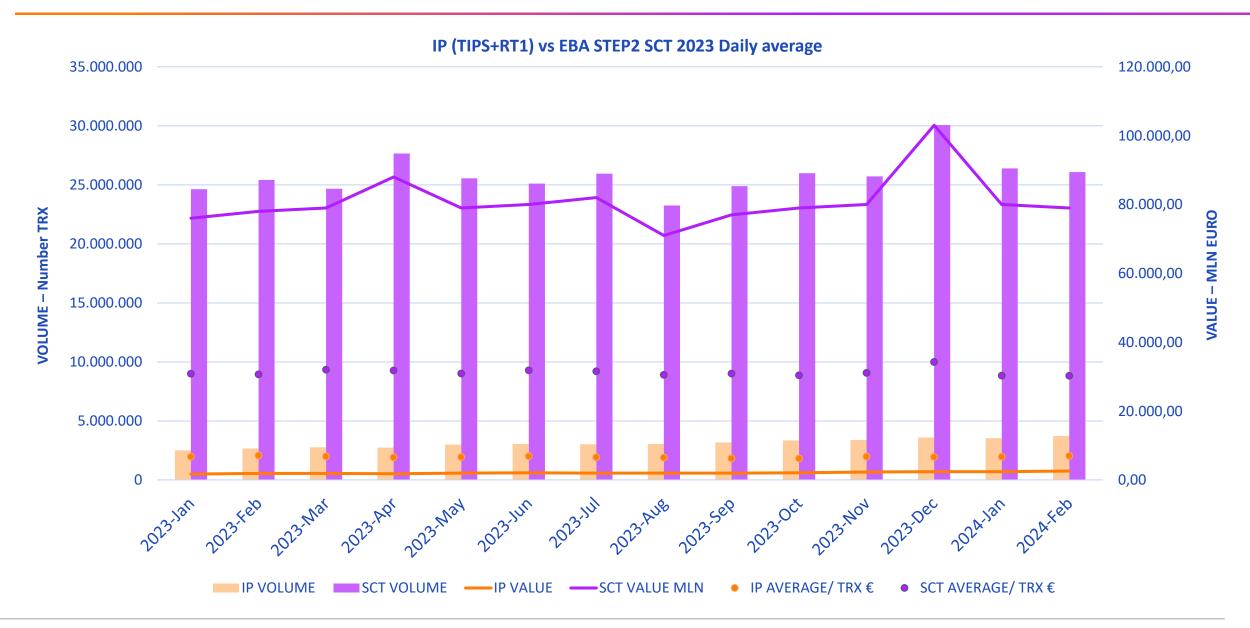






Instant payments volume increase







Thank you.

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deda.bit

Tirana 5 December 2024

Claudio Montarello – Deda Bit

Odisseo Di Michele - TAS



Amplify your business impact

We are the ideal business partner for designing and building IT and digital innovation projects

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Our dimension

We are a team of over 450 people who are passionate and dedicated to business innovation.

+25

years of commitment, courage and resourcefulness

+400

customers who have chosen us for their growth

+51 mln €

Of revenue in 2023

12

Branches in Italy

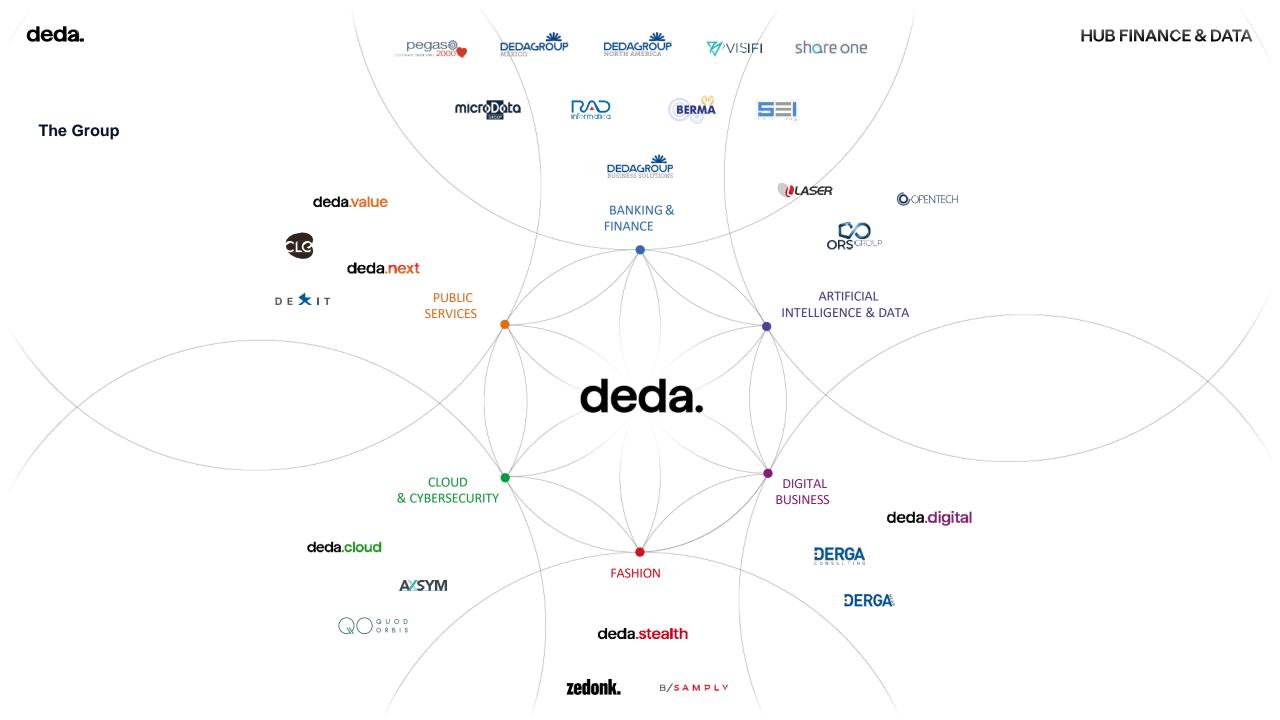
Our Group - Deda

We are part of Deda, a constantly growing technology group, part of a solid family business. And we are one of the founding companies of Deda's Finance & Data Hub, a center of excellence where we combine and integrate the skills and solutions of the Group's companies operating in the world of banking & finance, data and AI.

€342 mln
Consolidated revenues
2023

4000+ Customers 3000+ Employees

50+ Countries



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