Gemalto Mobile ID
MOBILE CONNECT ACCELERATOR PARTNER
GSMA MCX
Your Identity on Mobile

Responding to the GSMA recommendation, Mobile ID allows mobile operators to become identity providers. Mobile phone users can securely authenticate and confirm any transactions using their mobile phone as an identity verification mean.

Gemalto is now proposing MNO to use its cloud based service and be part of the Mobile Connect Accelerator Program from GSMA
A Global Framework
- Mobile Connect, a secure universal log-in solution
- Led by GSMA following Personal Data Group recommendations

An active contributor
Gemalto highly involved in the specifications’ work done for MC

A Mobile Connect Accelerator Partner
Gemalto, official MC Vendor thanks to Mobile ID offering
A key partner for MN0s in all MC steps, providing technologies with limitless potential of use cases bridging with the need of commercial & business enablement support.
Gemalto creates the TRUST for the eco-system

**SECURITY**
- Ensure solid user authentication
- Allow mobile Digital Identity
- Digital signature

**CONVENIENCE**
- Convenience = Adoption
- Ease enrolment and usage with best user experience

**REACH**
- Address fragmented market: multiple devices
- To all: consumers, citizens, employees
- Funnel GSMA Mobile Connect initiative
Benefits for online service providers

Fulfill their main needs with our answer with Mobile ID

More transactions thanks to a simpler user journey
- Increase conversion rate
- Customer Service costs saving
- Better knowledge of the customer journey

Enhance the promotion of online and mobile sales channels
- Enhanced security
- Financial transactions validation
- Costs saving (token...)
- Strong and inexpensive authentication means

Match employees’ mobility and data security
- Leverage Cloud Services
- Make workforce Mobile
- Trusted remote access to working tools (VPN, etc)
- Secured access to Cloud
- Costs savings

Enabling secured dematerialization e-Gov
- Reduce administration costs and time frame
- Simple access to a wide range of eGov services
- Costs & time saving
- Online ID theft avoided
All-in-One Mobile ID service by Gemalto

**PERSONAL IDENTITY SERVICES**

- **Identity Gateway**
  - Mobile Connect Access & Discovery
  - Enable access to Mobile Connect service for all service providers and users with registration and discovery

- **Data Sharing**
  - Personal Identity Data Brokerage & Share
  - Share and control identity information with user consent to service providers

**AUTHENTICATION SERVICES**

- **Strong Authentication**
  - Strong authentication & transaction validation
  - LoA 2, 3
  - Relied authentication with 2nd factor for all online services and transactions

- **Digital Signature**
  - Digital signature & qualified digital signature
  - LoA 4
  - Digital signature based authentication and information signing with non repudiation for all online services
Convenient user journey for all

**USER JOURNEY FOR MNO PORTAL & SERVICE PROVIDER**

**USER JOURNEY WITH EASY MOBILE EXPERIENCES**

**SMS OTP/URL**

Please enter your OTP online or click the link below to validate your purchase of $16.95 on Jumia.com (B26):

- **OTP**: 360755
- **Link**: http://jumia.com/buy/?v=Jne97Xsl7pUc

**Click OK**

Please validate your purchase of $16.95 on Jumia.com (B26):

- **OK**
- **Cancel**

**PIN check**

Please enter your personal code to validate your purchase of $16.95 on Jumia.com (B26):

- **Code**: *******
- **Cancel**
Start on the fly Mobile ID service with SMS

The Mobile ID entry level SMS OTP/HTTP allows MNO to quickly start Mobile Connect services with no client deployment constraints.

**SMS CHANNEL ONLY**

User receive an SMS which contain an OTC to be entered manually by the user on the web site to access it.

**SMS & DATA CONNECTION**

User receive an SMS which contain an http header. By clicking the link you get access through the service.

**SMS & DATA CONNECTION**

User receive an SMS which contain an http header. By clicking the link you are requested to enter PIN.

The PIN is verified at server backend, to grant access to the service.
Mobile ID, a Single & Secure Digital Identity for all

One-click to access all digital services

Mobile ID enables secure & simple online authentication & transactions for end-users
Including citizens, consumers, employees, patients...

But not only...
Mobile ID, a Single & Secure Digital Identity for all

One-click to access all digital services

Mobile ID allows also to share & control identity information, with user consent, with the service providers.
Gemalto proposed Mobile Connect MCX scheme

1. **Easy Access for SP**

2. **Convenient Enrollment & Usage**

3. **MNO as the First SP, Simultaneous Launch & Unique Brand**

**Gemalto Mobile ID Hub**

**MCX Cloud**
Mobile ID MCX global architecture
Mobile Connect MCX Service Description

- MCX Identity Gateway service management with routing capabilities and authentication services
- Data sharing with subscriber consent management
- Highest security, privacy and scalability for strong authentication services
- Digital identities supported with qualified signature
- End-user subscriber self-service registration
- Service Provider self-service portal for registration, lifecycle management
- Robust cloud services and strong SLA with proven mass launch track records
- Support OneAPI integration, SDK for API
- Support standard protocols: OIDC, ETSI, SAML
- Compliant with the Mobile Connect Service Mark
- Authenticators: SMS, IP, OATH, 3DES, PKI, eSE, TEE
Mobile ID for Smartphone

Create trust with your users: mobile ID applications are protected by advanced software tools

Enhance service discovery and usage with simple rich smartphone interface

Avoid identity usurpation with secure element options (SIM, TEE, eSE)

ADVANCED SECURITY SOFTWARE

- Secure Storage with device fingerprinting to prevent cloning
- Jailbreak/rooted-phone detection
- Secure keypad with scrambled PIN pad avoiding key logging captures
- Code obfuscation
- Debugger detection
- Application encryption on top of TLS network security
Gemalto Mobile ID
An all in one simple and universal solution

- **SMS OTP / URL**
- **2nd FACTOR AUTHENTICATION**
- **DIGITAL SIGNATURE**

**Technology used**

**Level of Assurance**

**Market**

- **LoA 2**
  - e-Commerce
- **LoA 3**
  - Corporate
  - e-Banking
- **LoA 4**
  - e-Government

- “Enter your PIN”
- “Click OK”
- “Here is your one time code”
- “Here is your url”
Gemalto to simplify the ecosystem
Why choose an aggregator?

A successful launch involves a solid & future proof development of the Mobile Connect Ecosystem

Threats to a successful MC Launch

× Low SP engagement. Efforts done by the acquirer in charge (including any deployment scenario)

× Complex implementation for SP. Many integration points, several billing systems, different pricings,…

× No unique interacting service: how to manage service outage?

Attracting key SPs for fast users’ adoption, & then continuous SP engagement

Smooth & simple SP integration

Dedicated National entity to ensure a consistent service
Mobile ID ease deployment with universal approach

**GEMALTO MOBILE ID HUB in the cloud**

- **SERVICE PROVIDERS**
  - SP on boarding
  - Service discovery portal

- **SALES CHANNELS**
  - Routing Services
  - User registration

**MOBILE ID ECO-SYSTEM ENABLEMENT**

- SMS OTP/HTTP for easy step in with legacy market
- SIM applet for higher security to new profile
- Smartphone application available to download
- OTA download of SIM applet to deploy mass market
- Mobile Marketing campaigns to boost registration & usage

**YOUR MNO**

Do you want to login to wow.com?
Gemalto Enabling Businesses

Gemalto can support direct sales and promotion of Mobile ID services through its existing sales channels to help MNO accelerate service take off by service providers.
### AGGREGATOR ROLES

<table>
<thead>
<tr>
<th>Role</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales &amp; Marketing</td>
<td>• Educate &amp; Recruit service providers</td>
</tr>
<tr>
<td>Contractual</td>
<td>• Contract for service provider covering the whole services</td>
</tr>
<tr>
<td></td>
<td>• Reseller: Contract with all MNOs providing the services</td>
</tr>
<tr>
<td>Business Model</td>
<td>• Reseller: Adapts the business model of each operator to a single proposal for service providers</td>
</tr>
<tr>
<td>Payment</td>
<td>• Generates a invoice for service provider</td>
</tr>
<tr>
<td>API</td>
<td>• Provide API for service provider covering his Mobile ID services</td>
</tr>
<tr>
<td>SP Onboarding</td>
<td>• Uses its B2B customer care / support center to help each Service Providers to connect and validate their Mobile ID integration</td>
</tr>
<tr>
<td>Supports</td>
<td>• Provides B2B customer care / support for service providers</td>
</tr>
<tr>
<td></td>
<td>• Reseller: Provides B2B customer care / support for service providers and MNOs</td>
</tr>
<tr>
<td>MNO Connection</td>
<td>• Takes care of the GSMA identification</td>
</tr>
<tr>
<td></td>
<td>• Reseller: Integrates its platform to all operators</td>
</tr>
</tbody>
</table>
Mobile ID is full of potential...

...putting a single mean in users’ hands...

For
Anonymous Login

For
Strong Authentication

For
Payment validation

For
Identity validation

For
Mobile Signature

For
Sign-up

For
Attribute brokerage

...for all market segments.

eServices

CRM Cie

Utilities

Financial

Medias

Retail

And many more others...
Gemalto Mobile ID around the world

The world is getting mobile connected

Official launches
Pilots
Upcoming projects
Other launches

18 references reached by Gemalto
Why choose Gemalto?

Consulting: advanced consulting mission to help MNO and service providers to set the eco-system for having one Mobile Connect service

A solution provided on SaaS mode for easy, fast & cost effective deployment

Registration fast track for service providers and users

True reach: works for all mobile devices with field proven best user convenience

Gemalto sales channel to support commercial deployment and service providers on boarding

Gemalto’s experience & expertise: 10 years of experience on mobile security and millions active users on mobile identity

Ease Service providers and eco-system with discovery portal services

Future proof solution: extend to other technologies and services: attribute management services, fingerprint, browsing, standardizations (eIDAS)
MCX Business Models

Identity Gateways or Authentication services can be sold independently depending on the existing legacy system in place.

Pilot Out of the Box

- 100’s users
- 3 months
- MCX ID GW
- Mobile ID authentication services

SAAS MODEL
SETUP & YEARLY FEE
MONTHLY FEE

- Standard Setup
- License per users /year
- Monthly operation fee

SAAS MODEL
TRANSACTION FEE

- Business case agreement
- Revenue Share models if Gemalto Channel brings Service Providers contract

Standard SLA from 99.5% to 99.8%
## Gemalto – A Key MCX partner

<table>
<thead>
<tr>
<th>Mobile Connect MCX Service Description Support</th>
<th>Gemalto MCX</th>
</tr>
</thead>
<tbody>
<tr>
<td>End-user subscriber self-service registration portal</td>
<td>yes</td>
</tr>
<tr>
<td>Security, privacy and authentication</td>
<td>strong to very strong</td>
</tr>
<tr>
<td>Subscriber consent</td>
<td>yes</td>
</tr>
<tr>
<td>Identification and application of preferred Authenticator</td>
<td>yes</td>
</tr>
<tr>
<td>Interface for subscriber lifecycle events</td>
<td>yes</td>
</tr>
<tr>
<td>User journeys and self service flow definition</td>
<td>yes</td>
</tr>
<tr>
<td>Compliance with the Mobile Connect Service Mark Communication Guidelines</td>
<td>yes</td>
</tr>
<tr>
<td>Service Provider self-service portal for Service Provider registration, lifecycle mgt</td>
<td>yes</td>
</tr>
<tr>
<td>Service provider support for on-boarding</td>
<td>yes</td>
</tr>
<tr>
<td>Sales channel to promote MC services /resale MC services through direct channels</td>
<td>yes (Netsize)</td>
</tr>
<tr>
<td>Standard support for SP integration</td>
<td>yes</td>
</tr>
<tr>
<td>SDK with Mobile Connect API and the relevant API Exchange APIs</td>
<td>yes (third parties)</td>
</tr>
<tr>
<td>Robust logging capability of any transactions occurring through Mobile Connect platform</td>
<td>can support 100m trans/mth</td>
</tr>
<tr>
<td>MCX Identity Gateway as an abstraction layer between SP and MNO with policy-based, configurable authenticator selection</td>
<td>yes</td>
</tr>
<tr>
<td>MC/ Mobile ID references with commercial launches</td>
<td>18 references: Norway, Finland, Iceland, Oman, Turkey, Slovakia, Lithuania, Spain, Nigeria, USA, Moldova, Belgium, Estonia</td>
</tr>
<tr>
<td>Mobile Connect MCX Service Description Support</td>
<td>Gemalto MCX</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>MCX Accelerator (cloud) accredited</td>
<td>yes</td>
</tr>
<tr>
<td>MC cloud services with track records</td>
<td>yes</td>
</tr>
<tr>
<td>MC on premises</td>
<td>yes Norway (5 MNOs), Spain, Nigeria</td>
</tr>
<tr>
<td>OpenID Connect/Mobile Connect Profile Support</td>
<td>yes</td>
</tr>
<tr>
<td>Support for ETSI 102.204 authentication/signature protocol</td>
<td>yes</td>
</tr>
<tr>
<td>Support for SAML2.0 authentication protocol</td>
<td>yes</td>
</tr>
<tr>
<td>User self service: registration and profile management</td>
<td>yes</td>
</tr>
<tr>
<td>User self service: consent management</td>
<td>yes</td>
</tr>
<tr>
<td>MNO service portal discovery</td>
<td>yes</td>
</tr>
<tr>
<td>Developer/service provider portal</td>
<td>yes (3rd parties)</td>
</tr>
<tr>
<td>Custom integration/branding implementation services</td>
<td>yes</td>
</tr>
<tr>
<td>Authenticator: SMS PIN based/OTC/OTP</td>
<td>yes</td>
</tr>
<tr>
<td>Authenticator: On-Network/Header Enrichment with PIN</td>
<td>yes</td>
</tr>
<tr>
<td>Authenticator: Mobile App (PKI)</td>
<td>yes</td>
</tr>
<tr>
<td>Authenticator: SIM applet with MASP/MSSP (LoA 2, 3, 4)</td>
<td>yes</td>
</tr>
<tr>
<td>Evolution to use other secure elements: TEE, eSE</td>
<td>yes</td>
</tr>
<tr>
<td>LOA 2, 3 &amp; 4</td>
<td>yes</td>
</tr>
<tr>
<td>Service Level Agreement</td>
<td>99.5% - 99.9%</td>
</tr>
<tr>
<td>Support</td>
<td>Gemalto standard SLA for levels 1-3</td>
</tr>
<tr>
<td>Traffic restriction</td>
<td>No restriction/per user active</td>
</tr>
<tr>
<td>Price</td>
<td>start at €50K</td>
</tr>
<tr>
<td>contract requirement</td>
<td>yes</td>
</tr>
</tbody>
</table>
Your Gemalto main point of contacts

Tomi SOININEN
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Christian MARC
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Samia HACHIR
samia.hachir@gemalto.com

www.facebook.com/mobileidgemalto
www.linkedin.com/company/valimo-wireless
We enable our clients to offer trusted and convenient digital services to billions of individuals.
We are the world leader in digital security

- 86% customer satisfaction in annual survey
- €3.1bn 2015 revenue
- +2bn end users benefit from our solutions
- 14,000+ employees
- 117 nationalities of our employees
- 180+ countries where our clients are based
- 3,000 R&D engineers
- 107 new patents filed in 2015

We’re unique. We’re global. We’re innovative.
The world of digital security has immense potential

- **28bn**
  - Mobile payment transactions in 2014
  - (Capgemini/RBS)

- **34bn**
  - E-commerce transactions
  - (Capgemini/RBS)

- **1bn**
  - LTE connections by 2017
  - (Gartner)

- **2.5bn**
  - People with a national EID card by 2015
  - (Acuity)

- **26%**
  - Cloud-based security services growth rate 2013
  - (Gartner)

- **1.5bn**
  - Users already covered by TSM infrastructure

- **4.5bn**
  - Connected machines
  - (Ericsson)
We bring trust to everyday services
By securing identities

Billions of people can communicate, travel, shop, bank, work and play because they know their unique identities are secure
We secure and manage the entire trust chain

Client – protecting IDs

Embedded software & Products

End-users need to show their unique digital IDs to service providers.

Back-end – managing IDs

Platforms & Services

Service providers need to be sure end-users’ IDs are valid and properly managed throughout their lifecycle.

Innovation underpins all our activities

€143m

Investment in R&D in 2013

110+

Patents for new inventions filed in 2013
We share global expertise to answer local needs

- COUNTRIES WITH OPERATIONAL SITE: 49
- OFFICES: 118
- PERSONALIZATION & DATA CENTERS: 45
- RESEARCH & SOFTWARE DEVELOPMENT CENTERS: 27
- PRODUCTION FACILITIES: 17
- REGIONAL HQs
- HEAD OFFICE

Introducing Gemalto
We are trusted by some of the world’s biggest brands

- 30,000+ Enterprises
- 450 Mobile Operators
- 3,000+ Financial Institutions
- 100+ eGovernment Programs

Brands: 
- China Mobile
- Audi
- HSBC
- Microsoft
- Verizon Wireless
- BMW
- Banamex
- HP
- docomo
- Marelli
- Standard Chartered
- Samsung
- Telcel
- Verifone
- Santander
- Sky
- Vodafone
- Philips
- Citi Group
- Amazon Web Services
- IN
- Imprimerie Nationale
- South Africa
- Korea
- Argentina
- Spain
Our solutions are at the heart of modern life

- **ENHANCING ePASSPORT SECURITY FOR TURKEY**
- **POWERING SAMSUNG’S CONNECTED WATCH**
- **SECURING DATA FOR AMAZON WEB SERVICES**
- **SECURING ECOMMERCE IN MEXICO**
- **LICENSING AND PROTECTING SOFTWARE IN CHINA**
- **MODERNIZING ENERGY SUPPLY IN LATIN AMERICA**
- **SECURING ECOMMERCE IN MEXICO**

8 March 2016
Our clients span five sectors

<table>
<thead>
<tr>
<th>Mobile</th>
<th>Machine-to-Machine</th>
<th>Financial Services and Retail</th>
<th>Identity and Access</th>
<th>Government</th>
</tr>
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<tbody>
<tr>
<td>中国移动通信</td>
<td>Audi</td>
<td>HSBC</td>
<td>Microsoft</td>
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<td>CHINA MOBILE</td>
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<td>verizon wireless</td>
<td>BMW</td>
<td>Banamex</td>
<td>BOEING</td>
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<td>Standard Chartered</td>
<td>sky</td>
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<td>Santander</td>
<td>Shell</td>
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<td>vodafone</td>
<td>PHILIPS</td>
<td>citigroup</td>
<td>amazon web services</td>
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</tbody>
</table>

...and they trust us to secure and manage their valuable data
Gemalto assets...

95% of the authentication market covered by these players

MOBILE eBANKING
200 CUSTOMERS WW
+90M users protected by EZIO SOLUTIONS

CORPORATE
MANY CUSTOMERS FROM FORTUNE 500
+7M employees WW use our eID solutions

GOVERNMENT
+25 GOVERNMENTS ALREADY USING National eID
80 eGovernment programs to date

MN PROVIDERS
+20 NATIONAL DEPLOYMENTS of mobile ID
500 service providers already connected our platform
Wherever you are, talk to us

Stay in touch
twitter.com/gemalto
facebook.com/gemalto
linkedin.com/company/gemalto
youtube.com/gemaltovideos